

COUNCIL OF ARCHITECTURE
An autonomous Statutory Body of Government of India
India Habitat Centre, Core 6-A, 1st Floor, Lodhi Road, N. Delhi –110003
Phone: 011-49412100 (30 Lines), Email: - establishment-coa@gov.in
Website: www.coa.gov.in

Ref.No.COA/12E(2)/Soft-ERP/2025

May 21, 2025

NOTICE

The Council invites Sealed Tenders in two bids from reputed Service Providers adequately equipped with related Software and web-based technologies for “Design Development and Implementation of ERP and Website/Web portal of Council of Architecture (COA)”. The details regarding receipt & opening of the Tender shall be as under: -

- | | | |
|---|---|------------------------|
| 1. Last date and time for receipt of Tenders | : | 20.06.2025, 17:00 Hrs. |
| 2. Date and time for opening of Technical Bid | : | 23.06.2025, 15:00 Hrs. |
| 3. Technical Presentation of Bidders qualified in
Technical Evaluation | : | _____ |

Technical Bids will be opened in the office of the Registrar, Council of Architecture at India Habitat Centre, Core-6A, First Floor, Lodhi Road, New Delhi- 110 003.

Financial Bids of only those firms will be opened/selected whose technical bids are found to be eligible/qualified after the technical evaluation of the Bid(s). The bidder may himself/herself or through his/her authorized representative be present during the opening of financial bids, which shall be intimated by the Council. In case authorized representatives of the bidders attend tender opening, they are required to bring letters of authorization from the bidders.

Registrar
Council of Architecture
New Delhi

INVITATION OF TENDERS AND INSTRUCTIONS TO THE BIDDERS FOR
“Design Development and Implementation of ERP and Website/Web portal” of Council of
Architecture (COA)

To,

The Registrar, Council of Architecture, New Delhi invites you to tender in two bid patterns for “Design Development and Implementation of ERP and Website/Web portal” of Council of Architecture

1. General Information about the tender is as follows: -

- | | | |
|---|---|----------------------------------|
| 1) Tender Reference No. | : | Ref.No.COA/12E (2)/Soft-ERP/2025 |
| 2) Last date and time for receipt of Tenders | : | 20.06.2025, 17:00 Hrs. |
| 3) Date and time for opening of Technical Bid | : | 23.06.2025, 15:00 Hrs. |
| 4) Place of Opening of Tender: - | Office of the Registrar Council of Architecture, India Habitat Centre, Core 6A, 1 st Floor, Lodhi Road, New Delhi-110003 | |

2. The details about the tender, terms, conditions and other related information are mentioned in the appropriate chapters as below: -

Chapter - 1	Instructions to Bidders
Chapter - 2	Terms and Conditions
Chapter - 3	Technical Bid Format of Bidder
Chapter - 4	Financial Bid Format of Bidder
Chapter - 5	Scope of Work / Specifications
Chapter - 6	Schedule of Payment/stages of Payment

R.K. Oberoi
Registrar
Council of Architecture

Chapter - 1

INSTRUCTIONS TO BIDDERS

1. Terms and conditions are given in Chapter -2 for Design Development and Implementation of ERP and Website/Web portal of COA.
2. The Technical Bid Form of the tender is given in Chapter- 3. Financial Bid Form is given in Chapter - 4. Specification is given in Chapter- 5. The schedule of payment/ stages of payment is given in Chapter 6.
3. The tender, complete in all respect and duly sealed, should reach the office of the **Registrar, Council of Architecture, India Habitat Centre, Core-6A, First Floor, Lodhi Road, New Delhi- 110003** up to 20.06.2025. The Technical Bid Form duly filled and signed by the bidder must be submitted in a separate sealed cover superscribing ***Technical Bid of the Tender for “Design Development and Implementation of ERP and Website/Web portal of COA”***. Another sealed cover should contain the Financial Bid Form duly filled and signed, super-scribing ***Financial Bid of the Tender for “Design Development and Implementation of ERP and Website/Web portal of COA”***. Both the Technical Bid as well as Financial Bid, sealed in separate envelopes as stated above, should then be together sealed in another envelope and sent as described in the succeeding paragraph.
4. The Tender must be addressed to the Registrar, Council of Architecture, India Habitat Centre, Core-6A, First Floor, Lodhi Road, New Delhi- 110003 and envelope should be superscribed as Tender for ***“Design Development and Implementation of ERP and Website/Web portal of COA”***.
Technical Bids will be opened in the office of the Registrar, Council of Architecture at India Habitat Centre, Core-6A, First Floor, Lodhi Road, New Delhi- on 23.06.2025. Financial Bids of only those firms will be opened, whose technical bids are found eligible after the technical evaluation. The bidder may himself/herself or through his/her authorized representative be present during the opening of financial bids, which shall be intimated by the Council. In case authorized representatives of the bidders attend tender opening, they are required to bring letters of authorization from the bidders.
5. Technical bid document and Financial Bid Document should be duly **stamped and signed** (all the pages) by the bidder(s) or by a person who is duly authorized and legally competent to do so. A person signing the forms or any other document forming part of the tender process / contract on behalf of the firm shall be deemed to have been duly authorized by the proprietor / partner of the Firm/Company and actions taken by such a person in pursuance of this tender/ contract shall be deemed to have been performed by the Proprietor/Partner/Company and shall bind them.
6. The duly filled in technical bid Document and Financial bid Document along with all the relevant enclosure (as above) should be duly signed on **all the pages** by the authorized person of the bidder. The bids without Stamp and Signature (**or with only stamp or scanned signature**) of the authorized person shall be considered invalid and the tender shall be outrightly rejected.
7. The bidder shall deposit a sum of Rs. 3,00,000/- tender as “Bid Security” (Earnest Money) in form of the Demand Draft or Banker’s Cheque from any bank, drawn in favor of **Council of Architecture** payable at New Delhi and forward the same along with the Technical Bid. **Tenders that are not accompanied by the requisite Earnest Money will not be treated as Invalid and shall be rejected.** The Earnest Money of the unsuccessful bidder will be returned before the expiry of the 30th day from the issue date of the Work Order awarded to the successful bidder. The Earnest Money shall not bear any interest.
8. The Work Order shall ordinarily be awarded to the lowest bidder, whose bid has been found to be complete in all respects.
9. The Council has a Right to reject the bid without giving any reason, thereof.

10. The Work must be carried out as per terms, conditions, and instructions given by council of Architecture, from time to time.
11. The service provider shall provide support for services/ works assigned herein without any additional charges for a period of one year, after successful launch (go live) of the application and /or web portal. The support shall include, but not limiting to fixing bugs, hanging, and other types of software glitches, even which are not anticipated

Chapter – 2

TERMS AND CONDITIONS

1. Bidders must have experience of doing similar work with proof for at least 5 years or more thereof.
2. The successful bidder shall have to complete the WORK as per the specifications given in the Tender document within the time limit prescribed by the Council.
3. If any bidder withdraws the bid after opening of the bid(s) or expresses his inability to perform the contract after the award of Work or makes any modifications in the terms and conditions of the tender which are not acceptable to the CoA, then the Council of Architecture shall without prejudice to any other right or remedy, be at liberty to forfeit the Earnest Money Deposit/ Performance Security Deposit.
4. The services provider must comply with the following:
 - a. Been in existence for a minimum of 7 years.
 - b. PAN Registration
 - c. GST registration
 - d. Key personnel heading the team must have a master's degree in computer applications/computer science/computer engineering. The list and CVs of key persons who are handling the project and are earmarked shall be enclosed with the technical bid.
5. The service provider shall identify a Coordinator / Contact Person from its side dedicated only for this Project, who will be accountable / answerable to the Council till the successful installation and commissioning of the Project as per the user requirement.
6. The Service Provider shall give the details of the Number of IT professionals working in its organization throughout India.
7. The Bidder must submit the Annual Turnover during each of the last 5 financial years (Audited), in Rs., for the financial years (2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024).
8. The Bidder must have successfully installed and commissioned at least three (3) similar projects, with at least one project in Statutory/Autonomous bodies/Public sector undertakings/Central/State Government Authorities/ Organizations/Universities, during the last five financial years (2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024).
9. Details of organizations for whom executed projects along with required copies of certificates/testimonials, letter of appointment etc. to be provided in the technical bid.
10. The Service Provider shall be required to host the application on the Council's Server after statutory audit / approvals, as may be required, for technical / service support etc. required for implementation of the project.

11. On qualifying Technical and financial bid, the Work Order shall ordinarily be awarded to the successful bidder, whose bid has been found to be complete in all respects. However, the Council is at liberty to reject any bid(s) at its discretion.
12. The successful bidder will have to complete the work as per the specifications given in the Tender document, within **six months** of the award of work. If the bidder feels that more time is required to complete the Work, the bidder may be considered for executing the Work in modules based on priority, in case the same approved by the Council
13. If any bidder withdraws his tender after opening of the Tenders or expresses his inability to perform the contract after the award of Work or makes any modifications in the terms and conditions of the tender, then the Council shall without prejudice to any other right or remedy, be at liberty to forfeit the Earnest Money Deposit / Performance Security Deposit.
14. Earnest Money deposit given by all bidders except the one, whose tender is accepted, will be refunded before expiry of **30th day** from the date of award of the work order to the successful bidder. The Earnest Money shall not bear any interest.
15. The Successful bidder within 07 days of the receipt of formal acceptance letter, shall be required to deposit the requisite Performance Security Deposit of Rs.3,00,000/-, which shall be valid till the successful completion of the work as per the terms and conditions of the Tender Document. The Successful bidder shall also execute an Agreement with the Council of Architecture in the prescribed form on a non-judicial stamp paper of Rs.100/-, as specified by the Council.
16. In the event of any ambiguity or omission in the scope of work, the interpretation and decision of the Council of Architecture shall be final, conclusive, and binding.
17. The Council of Architecture reserves its right not to accept the lowest bidding tender and shall be at liberty of rejecting any or all Tenders without assigning any reason whatsoever.
18. Submission of the bid by a bidder shall be taken to signify his acceptance of the above term and conditions. Alterations, overwriting or erasing of any terms and conditions are not permitted. In case of such overwriting/alterations, the same shall be freshly written, certified and authenticated.
19. Technical Bid Document and Commercial Bid Document should be signed by the Bidder or by a person who is duly authorized and legally competent to do so. A person signing the forms or any document forming part of the Tender process/ contract on behalf of the firm shall be deemed to have been duly authorized by the Proprietor/Partner of the Firm/Company and actions taken by such a person in pursuance of this Tender/ contract shall be deemed to have been performed by the Proprietor/ Partner/ Company and shall bind them. Unsigned Bids shall be outrightly rejected.
20. The Earnest Money deposit shall not bear any interest.
21. The service provider must undertake the oath of secrecy and not share any data / procedures related to the project with any person or organization other than authorized persons from the Council of Architecture, during the period of contract with the Council and even after termination of contract. The same shall be submitted within 7 days of the award of work order by the Council.
22. The service provider must complete the task as per the time frame prescribed by the Council i.e., within a period of 6 months from the date of the award of the work, to make it fully operational.

23. The service provider shall submit a signed copy of the entire bid Document in agreement with the conditions and clauses therein and include in the technical bid. If the signed bid document is not submitted, then the bid shall be outrightly rejected.
24. Any disputes arising out of contract / agreement shall be subject to the jurisdiction of Delhi courts.
25. The Service provider shall have adequate manpower to handle all the tasks associated with the project during the period of contract.
26. Subject to the conditions mentioned above, the Earnest Money Deposit of the successful bidder will be adjusted against as part of Performance Security Deposit. The Demand Draft (EMD) shall be returned to the unsuccessful bidders within 15 days of awarding the work order to the successful bidder.
27. Submission of the Tender by a bidder shall be taken to signify the acceptance of the above terms and conditions. Alternations, overwriting or erasure of any terms and conditions are not permitted.
28. Canvassing in any form is strictly prohibited and the bidders who are found canvassing are liable to have their tenders rejected out rightly.
29. Technical Bid (separate sealed envelope)

The shortlisted bidders after technical scrutiny shall make the Technical Presentation on the date and time as stipulated by COA.

30. Financial Bid (separate sealed envelope)
Note: The financial bid of service providers would be opened only if they are declared successful in Technical Bid and Technical Presentation.
31. Process for evaluation of Bids:
 - (i) The technical bids would be evaluated by a committee constituted by the Council which may accept or reject the same based on the eligibility criteria, terms & conditions, as specified in the tender document.
 - (ii) If deemed necessary, the committee may seek clarifications on any aspect of tender from the bidder. If a written response is requested, it must be provided within 3 days of the issue of such clarification. Response received beyond 3 days, if any, will not be accepted / considered.
 - (iii) The technical bid shall be assessed in two parts – evaluation of information & documents provided in the technical bid (50 marks) and technical presentation (50 marks).
 - (iv) The technical presentation shall be made by each bidder before the Technical Evaluation Committee highlighting their experience, capability and resources to execute the project as per the requirement in a time bound manner, along with other conditions in the tender document.
 - (v) Only the bidders which score the minimum qualifying marks, i.e. 60% in Technical Evaluation and 50% in Technical Presentation and with consolidated marks of 70/100 shall be eligible to be considered for opening financial bids.

THE DETAILS OF MARKS TO BE AWARDED WITH REGARDS TO THE TECHNICAL BID IS AS FOLLOWS: (Total 50 Marks)

S.No.	Criteria for Evaluation	Max. Marks.
1.	<p>The Average of the best 3 Annual Year Turnovers during each of the last 5 financial years (Audited), (2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024).</p> <p>Upto 30 Lakh - 5 Marks 31 lakhs to 50 Lakh - 6 Marks 51 Lakh to 1 Crore - 7 Marks More than 1 Crore to 2 Crore - 8 Marks More than 2 Crore to 3 Crore - 9 Marks Over 3 Crore - 10 Marks</p>	10
2	Has the service providers successfully installed and commissioned at least one project in Statutory/Autonomous bodies/Public sector undertakings/Central/State Government Authorities/ Organizations/Universities during the past 5 financial years.	5
2.	<p>Executed at least 3 similar types of projects (ERP Development /Web Portal of COA), each project cost of minimum value of 10 lacs, during the last 5 financial years (2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024).</p> <p>3 projects - 14 Marks 4 to 7 projects - 16 Marks 8 to 11 projects - 18 Marks 12 and above - 20 Marks.</p>	20
3.	<p>No. of IT professionals on bidder's role in India</p> <p>Upto 10 - 11 Marks 11 to 50 - 12 Marks 51 to 100 - 13 Marks 101 to 500 - 14 Marks Over 500 - 15 Marks</p>	15

Technical Presentation Evaluation by Technical Committee (Total: 50 Marks)		
Category	Criteria Description	Marks
1. Understanding of Project Requirements	Clarity in understanding the objectives, scope, and needs of the organization. Customization strategy for government-specific needs.	10 Marks
2. Solution Architecture & Technical Design	ERP & Web portal architecture, modularity, scalability, technology stack, data flow, hosting approach.	10 Marks
3. Implementation Plan & Methodology	Roadmap, milestones, resource deployment, Agile/Waterfall approach, timeline feasibility.	8 Marks
4. UI/UX & Accessibility Approach	Demonstration of user-friendly design, multi-device support, localization, accessibility (WCAG/GIGW compliance).	6 Marks
5. Innovation & Value-Addition	Any advanced features proposed (AI, dashboards, mobile apps, workflow automation, etc.) beyond the RFP.	5 Marks
6. Security, Privacy & Compliance	Data protection strategy, compliance with GIGW, CERT-IN, SSL, audit logs, access control.	5 Marks

7. Experience & Case Demonstration	Live demo or walkthrough of similar past projects with relevance to government ERP/Web.	6 Marks
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32. The financial bids of only those bidders, who would be declared technically qualified after assessment of technical bids and technical presentation to the committee, shall be opened for further analysis and action in selecting the successful bidder for award of contract.
33. The financial bids of the shortlisted bidders shall be opened, and they will be invited during the opening of financial bids.
34. Tender awarded to the successful bidder may be extended by one more year by the Council, subject to satisfactory performance of the Bidder in the “Design Development and Implementation of ERP and Website/Web portal of COA”.
35. Any disputes arising out of contract / agreement shall be subject to the jurisdiction of the Delhi courts only.
36. Interested bidders may, with prior intimation, visit the Council’s office to view the existing ERP System before submitting their bids, in order to gain a clear understanding of the requirements. The Council may conduct a Pre-bid meeting upon receiving a request from prospective bidders seeking clarification on any aspect of the Tender.

Chapter - 3
TECHNICAL BID FORMAT OF BIDDER
(Schedule to Bidder)

1. Tender to be addressed to	Registrar, Council of Architecture, New Delhi
2. Tender to be submitted to	Registrar, Council of Architecture, India Habitat Centre, Core-6A, 1st Floor, Lodhi Road, New Delhi- 110 003
3. Date and place of opening of Tender	23.06.2025, Office of the Registrar, Council of Architecture, India Habitat Centre, Core-6A, First Floor, Lodhi Road, New Delhi- 110003
4. Last date and time for receipt of Tenders	Upto 20.06.2025, 17:00 Hrs
5. Previous Experience of development of New Website Development and ERP Development	attach documentary proof
6. Has the service provider successfully installed and commissioned at least one project in Statutory/Autonomous bodies/Public sector undertakings/Central/State Government Authorities/ Organizations/Universities during the past 5 financial years.	Attach Proof
7. Executed at least 3 similar types of projects (ERP Development /Web Portal of COA), each project cost of minimum value of Rs. 10 lacs, during the last 5 financial years (2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024).	Attach Proof

8. The average of best 3 Annual Year Turnovers during each of the last 5 financial years (Audited), In Rs., for the financial Years (2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024)	Attach Proof
9. No. of IT professionals working in the organization throughout India.	Attach Undertaking / Proof
10. The Service Provider has been into existence for a minimum of 7 years.	Proof of having the same
11. GST No.	
12. PAN No.	to mention
13. Whether the Service Provider has the experience of doing similar work for with proof for at least 5 years or more thereof.	With proof
14. Earnest Money of Rs.3,00,000/- deposited in the form of DD in favor of the Council of Architecture and payable at New Delhi.	a) DD No. _____ (attached in original). b) Date _____ c) Bank _____ d) Amount _____
15. Is the Technical bid document and Financial Bid Document duly stamped and signed (all the pages) by the bidder(s) or by a person who is duly authorized and legally competent to do so. A person signing the forms or any other document forming part of the tender process / contract on behalf of the firm shall be deemed to have been duly authorized by the proprietor / partner of the Firm/Company and actions taken by such a person in pursuance of this tender/ contract shall be deemed to have been performed by the Proprietor/Partner/Company and shall bind them. The bids without Stamp and Signature (or with only stamp or scanned signature) of the authorized person shall be considered invalid and the tender shall be outrightly rejected.	Attach document
16. The Service Provider has given the details of the Number of IT professionals working in its organization throughout India.	Attach details
17. Are the Key personnel heading the team has a master's degree in computer applications/computer science/computer engineering. Is the list and CVs of key people who are handling the project and are earmarked is enclosed with the technical bid.	If yes, attach proof with documents

18. Has the service provider identified a Coordinator / Contact Person from its side dedicated only for this Project, who will be accountable / answerable to the Council till the successful installation and commissioning of the Project as per the user requirement.	If yes, then attach proof with documents
19. Has the Service Provider executed similar type of projects (ERPs Development /Web Portal of COA), having minimum value 10 lacs, during the last 5 financial years (2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024).	If yes, then attach proof with documents
20. Has the Service given the details of the organizations for whom executed projects along with required copies of certificates/testimonials, letter of appointment etc. along with the technical bid.	If yes, attach proofs

Signature of Bidder _____

Name in the Block Letters _____
(Name of Firm/Company with Seal)

Date _____

Capacity in which signed _____

Full Address _____

Tel. Nos. _____

Chapter – 4
Financial Bid of Tender
(To be submitted in sealed envelope)

1. Tender to be addressed to: Registrar, Council of Architecture, New Delhi
2. Tender to be submitted to: Registrar, Council of Architecture, New Delhi
India Habitat Centre, Core-6A, Ist Floor,
Lodhi Road, New Delhi-110 003

3. Conditions of the Tender Document: Accepted

4. Details of Quotation/ information as given below: -

S.No.	Particulars	Amount in Rs.
1	Design, Development and Implementation of Enterprise Resource Planning (ERP)	
2	GST (as applicable)	
3	Total	

S.No.	Particulars	Amount in Rs.
1	Design Development and Implementation Website/Web portal of Council of Architecture (COA)	
2	GST (as applicable)	
3	Total	

Signature of Bidder _____
Name in the Block Letters _____
(Name of Firm/Company with Seal)

Date _____

Capacity in which signed _____

Full Address _____

Tel. Nos. _____

Chapter – 5

Scope of work

The Scope of Work for Design, Development, and Implementation of ERP Modules as listed below and Website / Web Portal of the Council of Architecture

I. Overview and Scope of Work of Project (ERP and COA Website)

1. ERP & Website Development & Database Migration

- Design, develop, and implementation of **ERP Modules** i.e. Registration, Renewal, Secretariat, etc.) using the **latest PHP version** and **MySQL database**, ensuring optimized database/table structures. -
- To design, develop, and implement a website that adheres to the latest **Guidelines for Indian Government Websites (GIGW 3.0)** and follows the **Digital Brand Identity Manual (DBIM)** issued by **MeitY (Ministry of Electronics and Information Technology)**, having **Provision for creating sub domains and/or links/hyperlinks** for website(s), Newsletters, CoA Magazine, Manual of Architectural Practice (MAP) , Academics, E-Office, Samarthaya, NATA, PGETA., Universal Accessibility or any other related user defined website, along with a provision for banner at the bottom for circulation of advertisements.
- **Port and upgrade** the existing database to the latest version, incorporating necessary **structural changes, enhancements, and future-ready improvements** based on current and anticipated requirements.
- **Develop and implement new databases/tables**, ensuring smooth data migration and transition as per the latest requirements.

2. ERP & Website Functional Enhancements

- **Integrate DigiLocker** functionality with the ERP for seamless verification of Registration Card of Architects.
- Ensure that the **Council website** complies with the latest **Government of India guidelines**, including design principles from the **Digital Brand Identity Manual (DBIM)**, **MeitY's Guidelines for Indian Government Websites (GIGW 3.0)**, and directives from **NIC and/ or any other Competitive Authority**.
- **Develop functionalities** for both the **web portal and ERP application** as per the Council's evolving requirements.

3. Technical Support post implementation

- Provide **technical support** for developed ERP modules for **one-year post-implementation**.
- Arrange and **coordinate Security Audits** for the Council Website and ERP application and ensure **compliance with security standards**, including **STQC Certification** and any required **third-party hosting audits**.

4. Infrastructure & Server Management

- **Deployment:** Manage the deployment and maintenance of the application and website for **one-year post-implementation**.
- **Hosting & Infrastructure Management:** Oversee website hosting, data servers, and cloud resources hosted on Microsoft, NIC, or any other designated service provider for **one-year post-implementation**.
- **API Integration:** Develop APIs for external bodies (e.g., regulatory authorities, banks) to verify architect data in real time.
- **Video Storage & Utilization:** Integrate a system for storing videos and utilizing them as needed.

5. System Integrations & Communication Enhancements

- **Integrate Bulk SMS and Bulk Email services** for seamless communication with COA users.
- **Integrate the e-Office system and other existing modules** with the COA ERP Module

6. Documentation & Training

- Prepare **comprehensive project documentation** for the developed modules of ERP, including **design, database schema, relationships, process flow diagrams, and system architecture**.
- Submit the **source code of the application** and **Security Audit Certificates** to COA.
- Provide **training to COA staff**.

7. Specific Tasks for Modules of COA

- Complete **modules of COA Departments** as outlined in the project scope.
- Ensure **seamless integration** within the existing ERP system/modules of the organization.

II. Part 1- ERP

Project Overview

This project aims to design, develop, and implement an **Enterprise Resource Planning (ERP) system** for the Council of Architecture which includes modules such as **Renewal Department, Registration Department, Act Enforcement & Secretariat** to the **latest PHP version** (currently PHP 8.x) and **MySQL version** while incorporating structural improvements and optimizations in order to streamline and automate key business functions. The ERP system will be developed using the **latest PHP version and MySQL database**, ensuring scalability, security, and efficiency.

Objectives

- To **digitize and automate** core business processes.
- To **integrate multiple departments** within a single platform.
- To ensure **real-time data access, reporting, and decision-making**.
- To enhance **data security, accuracy, and compliance**.
- Redesign and optimize **database structures** to ensure efficiency, scalability, and maintainability.
- Implement **security enhancements** to align with best practices.
- Ensure **compatibility** with modern web standards and frameworks.
- Improve **performance, reliability, and user experience**.
- Maintain business continuity with **minimal downtime**.

ERP Module Development

The ERP system will consist of the following **key modules**:

1. Registration Module Overview

Objective

This module aims to streamline the registration process for architects being registered under the Architects Act, 1972, ensuring efficiency, accuracy, and transparency in application processing, certification, and data management. The module is designed and developed based on user requirements and after a thorough study of the present system to understand the functionalities.

Key Functionalities

i. Application Submission & Processing

Online Application Submission: Enable candidates to submit their applications through a dedicated online portal on payment of fee.

Document Upload: Allow secure submission of required documents, including degree certificates, marksheets and identity proofs.

Data Entry & Processing: Record and process applications efficiently to maintain an organized workflow.

ii. Scrutiny & Verification

Application Scrutiny: Verify submitted applications for completeness and compliance with eligibility criteria.

Deficiency Management: Identify missing documents and notify applicants via automated emails/SMS/letters.

Follow-up Mechanism: Enable systematic follow-ups for incomplete applications to expedite processing.

iii. Registration & Certification

Architect Registration: Register eligible applicants in the official database and assign a unique registration number and maintenance of digital register of architects.

Certificate Generation: Automate the issuance of digital and physical Certificates of Registration.

iv. Database Management & Tracking

Architects' Data Maintenance: Maintain a centralized, up-to-date database of registered architects.

Pending Application Tracking: Monitor and follow up on applications under processing with real-time status updates.

Application Status Updates: Provide applicants with access to track their application progress via the online portal.

v. Reporting & Analytics

Dynamic Report Generation: Generate reports on registration trends, pending applications, and issued certificates.

Graphical Data Representation: Offer dashboards for statistical insights and performance tracking.

vi. Communication & Query Handling

Query Resolution: Address and resolve online queries related to the registration process.

Automated Notifications: Send email/SMS alerts for application status updates and document requests.

Mailing List Management: Generate mailing lists for official dispatches and mass communication.

System Requirements

- **User-Friendly Interface:** Ensure intuitive navigation for both applicants and COA administrators.
- **Secure Data Management:** Implement encrypted storage and controlled access to sensitive applicant data.
- **Automated Audit Trail:** Maintain a record of application modifications and decisions for transparency.

Expected Benefits

- **Enhanced Efficiency:** Reduces manual errors and expedites the registration process.
- **Real-Time Tracking:** Provides applicants with transparent status updates on their applications.
- **Improved Compliance:** Ensures adherence to the eligibility criteria prescribed under Architects Act, 1972, through automated verification and documentation.

Desired Features:

i. Applicant Data Management

- **Provision for live Photo:** capture a live photo using a mobile camera for authentication and verification purposes.
- To Provide **photo/signature/degree modification feature**, allowing COA to update applicant details after verification.
 - To install APIs with AI features to ensure that the legible & valid photo/signature are uploaded in prescribed format.
- Enable **status updates for degrees**, ensuring that when a **Provisional Degree is upgraded to a Final Degree**, the change is reflected in the **applicant's and / or architect's profile**.
- To notify the architects registered based on provisional degree for submission of regular degree at regular intervals.

ii. User Account & Access Management

- Implement a **Forgot User ID utility**, allowing COA/ candidates to retrieve an Applicant's User ID using alternative search criteria.
- Create a **separate user ID and password generation feature** for new **IIA applicants (post-2008 admission)** who do not have a COA enrolment number.
- Create a **separate user ID and password generation feature** for new **applicants (pre-2008 admission)** who do not have a COA enrolment number.

iii. Communication & Email Utilities

- Integrate an **email utility** for COA users to send:
 - **Individual or bulk emails** to applicants/architects as needed.
 Implement an **automated email system** for responding to application deficiencies, after approval from user

iv. Application Search & Processing Improvements

- Implement a **search utility** to allow COA users to retrieve applications **submitted within a specific duration** for further processing.
- Improve **screen processing speed** by:
 - Enabling **"Select All" options** instead of individual selections where applicable.
 - Implementing **other efficiency measures** to reduce system lag.
- Add a **"Go To" button** for direct navigation to a specific page number in the **application processing screen**.

v. Eligibility & Registration Enhancements

- Dynamic provision for setting the eligibility criteria for registration an architect or chartered architect, as fixed by the Council from time to time depending on the year of admission.
- To provide for provision for amending duration/nomenclature/other relevant details of the Architecture Course/ eligibility for registration as an architect and as chartered architect.
- To place validations for checking marks and eligibility for registration while filling applications by applicants.
- To check for double/ duplicate registration of an applicant while filling up new application for registration and by the Department.
- To accept online payment from candidates after submission of application.
- Develop an **Online Digital Certificate of Registration**, allowing architects to:
 - **Generate, print, and download password-protected digital certificates** as per COA's prescribed format.

vi. Appeals & Review System

- Develop a **system for managing appeal cases**, including:
 - Constituting an appeals Committee
 - Tracking appeal statuses
 - Processing and evaluating appeals efficiently
 - To send communication to members and appellants for meetings etc.

2. Renewal Module Overview

Objective

This module has to be designed to facilitate seamless payment processing, renewal tracking, and records management for architects registered under the Council of Architecture (COA). It ensures efficient handling of payments, document follow-ups, and automated reporting. The module is designed and developed based on user requirements and also after a thorough study of the present system to understand the functionalities.

Key Functionalities

i. Payment Processing & Tracking

- **Multi-Mode Payment Acceptance:** Enable architects to pay renewal, registration, and other fees via online and offline modes. Payment should also be enabled through specifically generated bar code to accept payment made by the architects/institutions/persons in real time with provision for payment by an architect directly without login into COA website, after confirming basic details.
- **Receipt Cutting and automated Payment Acknowledgment:** Provision for receipt cutting under various heads of account and generate instant receipts and confirmations upon successful payment.
- **Updation of records:** Instant updation of payments in the respective Accounting Heads / folios of architects/institutions/persons.
- **Payment Status Tracking:** Maintain real-time records of payment status and transaction history.

ii. Fee & Document Management

- **Deficiency Follow-up:** Automatically notify architects of pending fees or missing documents via email/SMS including submission of documents such as regular degree/ affidavits etc.
- **Document Upload Portal:** Provide a secure interface for submitting required documents online.
- Provision to upload legible photo/signature with API using AI features to ensure that the same are uploaded in prescribed format.

iii. Certificate Services

- **Certificate Endorsement:** Process requests for endorsement and updates on registration certificates. After extension of validity of registration, certificates / Identity cards need to be issued and record of all the certificates and IDs to be maintained on the Architects Portal
- **Provision for architects** for adding their details such as specialization, area of interest, employment, practice and service record in some firm or institution.
- Payment history / dispatch / communication history to be maintained for each architect.
- **Issuance of Duplicate Certificate:** Facilitate the reissuance of Duplicate and / or Fresh certificates in lieu of lost or damaged certificates on payment of fee.
- **Issuance of Updated Certificate** with additional qualifications: Facilitate issuance of updated certificate with additional qualifications on payment of fee.
- Generate a **register for duplicate certificates of registration**, ensuring proper tracking and retrieval, and receipt of applications for duplicate registration alongwith Fees
- **Provision to maintain register for digital certificates / IDs issued by COA Office to avoid duplicity of issuance**

iv. Records & Subscription Management

- **Architects' Records Maintenance:** Update details such as name changes, surrendered certificates, additional qualifications, and deceased architects and other such details.

- **COA Magazine Subscription Tracking:** Maintain a database of architects subscribed to official publications.
- Regular reminders to subscribers before the end date of subscription with record of dispatch of magazine.

v. Renewal & Defaulter Tracking

- **Renewal Monitoring:** Track and manage the renewal process for registered architects. Sending automated renewal intimations before the due date.
- **Defaulters List Generation:** Identify architects who have not renewed their registrations and generate relevant reports. Automate the dispatch of dues notices at various stages. Send requests to selected or all the architects for updating their communication address. Notify defaulters to surrender certificates to prevent fines.
- **Reconciliation:** Enable tracking of all received payments with transaction IDs, DD numbers, etc., and monitor outstanding payments.
- **Refund Management:** Provide functionality for refunding duplicate payments and preventing duplicate transactions.
- **Renewal & OTP Setup:** Allow the Council to dynamically set renewal dates and OTP requirements.
- **Automated Defaulter Notification:** On April 1st, notify defaulters of their removal from the register due to non-payment, clarifying that they can no longer use the title of "Architect."
- **Overseas Architects Communication:** Notify architects settled abroad who have not surrendered their certificates.
- **NCARB Certificate Flagging:** Mark architects who have been issued NCARB certificates.
- **Misconduct Flagging:** Flag architects guilty of professional misconduct and maintain a historical record of disciplinary actions on the portal.
- **Flagging the Record, as and when the need arises, as per the future requirements,**
- **Deceased & Surrendered List:** Maintain a record of deceased architects and those who have surrendered their certificates for various reasons.
- **Certificate Surrender Utility:** Provide architects with an option to surrender their certificates and maintain a history of such actions on their individual portal.
- **Undelivered Certificate Alerts:** Automate notifications to architects regarding undelivered certificates.
- **Stage-wise Communication:** Ensure automated updates to architects at key stages, including receipt of communication, payment processing, and dispatch status.

vi. Reporting & Accounts Coordination

- **Automated Report Generation:** Generate renewal status, payment summaries, and defaulter reports for internal review.
- **Accounts Department Integration:** Ensure seamless coordination with finance teams for reconciliation and record-keeping.

vii. Communication & Query Handling

- **Online Query Resolution:** Address payment and renewal-related inquiries through an integrated helpdesk in the architects' login.
- Facilitate the transmission of important communications and broadcast messages to architects as per the Council's requirements. **Automated Email & SMS Alerts:** Send reminders for pending renewals, payment confirmations, and status updates.
- **Mailing List Management:** Generate targeted mailing lists for official communications and dispatch.

viii. Architects' Directory Management

- **Data Compilation & Maintenance:** Maintain an up-to-date database for the **Directory of Architects** with accurate professional details.

System Requirements

- **User-Friendly Interface:** Ensure ease of use for architects and COA administrators.
- **Secure Transactions:** Implement industry-standard security measures for online payments.
- **Automated Workflow:** Minimize manual intervention through automated tracking and alerts.

Expected Benefits

- **Improved Efficiency:** Streamlined processing reduces manual work and delays.
- **Better Compliance:** Ensures architects renew on time, minimizing lapses in registration.
- **Enhanced Transparency:** Real-time tracking and automated communication improve visibility and responsiveness.

Desired Features:

i. Payment Reconciliation & Online Transactions

- Develop an automated online payment reconciliation module that can reconcile online payment receipts by either uploading an Excel file from the payment gateway provider or integrating an API from the bank(s). The module should include functionality for handling duplicate transactions.)
- Eliminate the need for **manual reconciliation**, ensuring **real-time reflection** of successful or failed payments, with a provision to **prevent duplicate payments**.
Provide reports on architects availing medical insurance and EMI facilities.

ii. Automated Notifications & Architect Profile Enhancements

- Implement **auto-generated emails/SMS notifications** to Architects regarding:
 - Receipt of documents and payments
 - Endorsement updates/ID Card updates
 - Certificate generation and dispatch
 - Other relevant updates, with all communication logs stored in the **Architect's profile**.
- Maintain **email/SMS history** for all automated notifications sent by COA, accessible in the **Architect's profile**.

iii. Name & Address Change Module -

- The **Change of Name request and Address Update interface** with provision for upload of relevant documents in the architect's login.
- **Maintain history of change of name in profile**
- Enable **JPEG/JPG attachments/PDF** for name change documents (Change Name Form, Marriage Certificate, Gazette Notification, etc.).
- Ensure rejection reasons are **mandatory** and provide an **auto-generated email notification** for rejected requests.
- Provide a mechanism for resending requests after re-uploading and addressing rejection reasons, while tracking the officers handling the cases within a specified timeframe. Mandate **Aadhaar authentication** for address update requests.
- Add a new **Architect Status Flag** for architects applying to **foreign boards like NCARB**.
- To keep track of the date of surrender of the original certificate and the request date for surrender of certificates by architects.

iv. Data Management & Reports

- Enable **Excel download of inactive Architect data**, including surrender dates.
- Add a **separate tab in Architect profiles** to update international addresses (Abroad/Country field).
- Provision to view inactivated records to display:
 - Architect Name
 - Registration Number
 - Validity status during Add/Modify actions
- Maintain a **Defaulter Letter Log** reflecting emails sent to Architects, with due amounts visible in the **Dispatch History**.
- Provide a **separate register/report** (Excel format) for defaulters, tracking due notices sent via email or post.
- Enable a **comprehensive report download** of registered Architects categorized by:
 - **Total Active Architects**

- **State-wise/Country-wise distribution**
- Develop an **Endorsement Due Report Button** in the Architect Module and Search Module to generate:
 - **One-Time Payment due reports (as of a specific date)**
 - **Auto-generated letters** notifying Architects of due endorsements

v. Document & Profile Management

Enhance the photo and signature upload request tab using API and AI features to ensure authenticity, including:

- APIs to verify correct photographs
- Option to reject with reasons and re-upload instructions
- Expected features:
- **Reset Password & OTP failures for registered architects—enable a provision for architects to reset passwords.**
- **Ensure accuracy of names and details in payment confirmation screens for online transactions.** Develop an **Architects' Degree Submission Report**, identifying professionals who have not submitted their final degree.
 - Generate **automated follow-up letters** based on predefined templates.
- Generate **Dues Letters/Reports** categorized by:
 - **Year-wise breakdown**
 - **Flags: Active, Inactive, Death, Legal, Suspended, etc.**

vi. Communication & Status Tracking

- Implement **real-time SMS notifications** for every milestone in an Architect's registration process, including:
 - **Dak receiving & posting updates**
 - **Certificate of Registration (COR) progress tracking**
- Ensure that all transaction history is **visible in a Single Window in the Architect's Profile.**

vii. Digital Certificates & ID Cards

- Develop a **Forgot User ID utility** allowing COA officials to retrieve an Architect's User ID using alternative search criteria.
- Enable **batch printing of Digital Certificates and ID Cards** based on:
 - **Date range**
 - **Registration Number**
 - **Exclusions (Deceased, Legal Issues, Suspended Architects, etc.)**
- Prevent **duplicate printing** of certificates. If reprinting is necessary, require approval from an **authorized officer.**
- Implement a **reminder** for pending requests for **new or duplicate certificates.** Provision for updating of Email/ Mobile / Communication address/ area of specialisation etc, by the architect

viii. Financial Management & Fee Processing

- **Fee payment module** to accept payments under multiple heads, including:
 - **Registration & Renewal**
 - **Act Enforcement & Legal**
 - **Evaluation & Inspection**
 - **NATA Fees**
 - **Publications & Subscriptions**
- Provision for the Council to dynamically set and manage all fees and their heads.
- Generate **standardized fee reminder letters** for:
 - **Renewals with fines**

- **Additional fine calculations** based on overdue amounts
- Ensure **automatic calculation of revised fees**, including arrears and applicable fines.

ix. Defaulters & Renewal Process Automation

- Maintain a **real-time Defaulters List** on the website that automatically updates when dues are cleared.
- Automate **reminder letters, emails, and SMS notifications** for defaulters and pending renewals.
- Enable **WhatsApp Chatbot Integration/email/SMS** to handle architect queries within the ERP.
- Implement dynamic filtering for **removing/separating architects** based on:
 - **Foreign residence**
 - **Disciplinary grounds**
 - **Court cases**
 - **Death records, surrender, and certificate cancellations**

x. Reporting & Compliance

- Generate **customized reports** for:
 - Renewal of Registration
 - Up-to-date architect directories
 - Restoration trends (Architects restored within a given period)
 - Surrendered certificates due to death or voluntary resignation
 - Other General and statistical reports as per requirement of COA.
- Conduct a **thorough study of the existing ERP system** to ensure a smooth transition to an enhanced, feature-rich module.

Enable **seamless data integration** across the **Mobile App, Academic Module, E-Office, Samarthya and other applications** of the Council to ensure a **unified data system** and enhance overall productivity.

3. Act Enforcement Module

i. Complaint Handling Against Quacks

- **Online Complaint Submission**
 - Complainants can submit complaints online with supporting documents.
 - Automated **acknowledgment emails** to complainants upon submission.
- **Action Against Violators (Misuse of Title)**
 - Online system-generated **notices** to violators.
 - Violators can **respond online** through the same system.
 - **Status tracking & public display** of complaints and actions taken. Feature to be available on website.
 - **Automated reminders** to violators for non-response.
 - **Upload & display** of Show Cause letters and violator replies on the COA website.

ii. Right to Information (RTI) Processing

- **Online RTI Application Submission**
 - Applicants can submit RTI applications and pay the **RTI fee online**.
- **Internal RTI Workflow Management**
 - RTI applications can be **automatically forwarded** to relevant COA departments.
 - Departments to respond to the **Central Public Information Officer (CPIO)** within the RTI time frame.
 - **Appeal applications** (with supporting documents) can be forwarded to the **Appellate Authority**.
- **RTI Tracking & Public Disclosure**
 - ERP system maintains a **real-time status** of RTI applications and appeals.

- **Automated email replies** to applicants via the online system.
- **Public display of RTI application status & appeals** on the COA website.
- **Disclosure of RTI information** on the COA website per **CIC guidelines**.

iii. Court Case Management

- **Case Database & Tracking**
 - Addition of **new court cases** in the portal, categorized by type and jurisdiction (High Courts, Supreme Court).
 - **Comprehensive case details**, including case number, court name, hearing dates, and status including next date of hearing /advocates name with contact details etc.
- **Legal Communication & Advocate Management**
 - Automated **case notifications & provision for document forwarding** to empaneled COA Advocates.
 - Advocate database with **contact details, PAN, bank details, and other information**.
 - **Date of hearing & court orders** to be maintained and updated in the system.
 - **Automated hearing reminders** to legal teams and higher authorities
 - **Generation of note sheets for advocate payments**.
 - **Empaneled Advocates Management** – Add/Delete functionality.

4. Secretariat Module

1. COA Member Information & Management

- **Centralized Member Database:** Develop and maintain a comprehensive database that captures detailed information on COA members—including membership status, tenure, roles, and committee affiliations.
- **Committee Membership Tracking:** Implement centralized tracking of committees, sub-committees, boards etc. to support targeted and effective communication and track of meetings, status, reports etc.
- **Committee Management:** Implement a system to track and manage committee activities and enable real-time updating of committee progress and milestones.
- **Advanced Search & Filter:** Enable robust search and filtering capabilities for quick retrieval of member and committee details.
- **Integrate with E-office** for online delivery of agenda / minutes and other communication

2. Automated Communication & Letter Generation

- **Bulk & Selective Messaging:** Provide a system for sending letters, notifications, and circulars to:
 - All members,
 - Specific committees, sub-committees, boards or
 - Individual recipients based on customizable selection criteria.
- **Template-Driven Document Generation:** Support both predefined and user-defined templates for consistent, professional correspondence.
- **Automated Dispatch Tracking:** Integrate email, SMS, and postal dispatch tracking to monitor the delivery and receipt of communications.

3. Meeting Agenda & Minutes Management

- **Automated Agenda & Minutes Processing:** Automate the generation, uploading, and distribution of meeting agendas and minutes (including annexures) for:
 - Council meetings,
 - Executive Committee meetings,
 - Committee and Sub-Committee meetings, and
 - General communications.
- **Digital Archive:** Establish a secure digital archive for storing agendas, minutes, reports and key decisions, ensuring ease of retrieval and historical reference.

4. Integration of Address Book

- **Integrate address book existing in e-office for** Creating a well-organized database for storing and managing contact details for important persons/authorities/institutions/groups. However, the same may also be integrated among all the modules of the ERP, so as to use the same in Dynamic made across the applications.
- **Multi-Channel Communication Support:** Ensure the system supports communication via email, SMS, and postal mail.
- Communication to COA employees/COA members on various matters/updates such as renewal of health/PAI insurance
-

5. Foreign Qualification Recognition

The Foreign Qualification Recognition Module aims to streamline the process of evaluating applications for recognizing the foreign architectural qualifications. It will facilitate online application submission, document verification, coordination with the Ministry and COA, status tracking, and communication with applicants.

i. Application Submission & Candidate Portal

User Registration & Login: Candidates can create an account and log in securely.

Online Application Submission: Candidates can apply for foreign qualification recognition by filling out forms and uploading required documents along with provision for payment of prescribed fees

Application Tracking: Applicants can track their application status in real-time.

Query Management: Candidates can raise queries and receive responses through the portal.

ii. Document Management & Verification

Document Upload: Secure upload of required documents such as degree certificates, transcripts, and supporting documents.

Deficiency Handling: Option to request additional or missing documents from applicants.

Document Verification: Automated/manual verification of submitted documents.

Online examination by Committee

Provision for viewing online application and documents by the Committee and Council

Submission of online report by the Committee

iii. Processing & Coordination with Ministry/COA

Application Review Workflow: Systematic movement of applications through various approval stages.

Ministry/COA Coordination: Tracking application movement with the Ministry and COA, including file status updates.

Decision Making & Approval: Automated notifications on qualification recognition status.

iv. Communication & Notifications

Automated Email/SMS Alerts: Notifications for application submission, deficiency requests, status updates, and final decisions.

Portal Messaging System: Secure communication between applicants and COA officials.

v. Reporting & Dashboard

Admin Dashboard: Overview of pending, approved, and rejected applications.

Reports & Analytics: Generate reports on application statistics and processing timelines.

5. E-Learning Process Module / Learning Management System (LMS)

Centre Information

1. **Centre Name & Location**
 2. **Programme Details & duration**
 3. **Centre Capacity (seats)**
 4. **Training Programme Date-Schedule**
 5. **Details of Coordinator / In-charge**
 6. **Email Address**
 7. **Mobile Number**
-

Registration Process

1. Registration

For architects and other professionals, the registration form requires the following details:

- Registration Number* (for architects only)
- **Name of the Architect/ other Professionals**
- **Profession** (only for non-architects)
- **Mobile Number**
- **Experience:** Duration & Field of Study / Subject
- **Email Address**
- **Aadhar Number (with OTP Verification)**

While registering for a particular programme, participants can select their available preferred centers.

The registration request is sent to the admin for approval.

After approval, an email containing payment link shall be sent to participants.

Upon completing / verifying payment details, the applicant / student is registered for the said training programme, and the selected centre receives a notification of the new registration.

- The registration fee is pre-determined based on profession (Architects or other professionals).
 - Each Centre / Programme has a fixed capacity (e.g., 20 students). Once the capacity of a centre is reached, no further registrations are accepted.
-

Post-Registration Process

- After registration and center allocation, the student will receive a notification with programme details (including detailed instructions). A receipt for the registration will also be generated.
 - The student will be provided with login credentials. Upon logging in, they can access study materials (PDFs & slides) and video tutorials for self-paced learning.
 - Log of the Material read / viewed by the participants shall be maintained.
-

COA Admin Functions:

- To approve the registration submitted by the Participants.
- **Upload Study Material:** Admin can upload and manage study materials.
- **Question Management:** Admin can upload questions for assessments.
- Provision for Question paper setters to submit questions, which may be sent to moderators and to add in database for exam, when finally approved.
- Provision to appoint assessors / moderators for verifying the exam process/ questions attempted by participants.
- Once a student successfully completes the training, a certificate will be generated, confirming their completion of the specified programme.
- On Successful training and completion of the programme the participants shall be required to register with the Council with the option of renewal i.e. annual/ One time upon payment of fees.

TRC Centre Admin Functions

- **Participant List:** Each TRC Admin has access to the list of registered participants and can mark attendance (present/absent) for the classes attended in person.
- **Guide Allocation:** Centre Admin can assign guides to students.
- **Site Allocation:** Admin can assign specific sites for students to visit.

After completing site visit, participants can upload their reports, which the guides can review and comment on, which shall be visible to individual participants. The participants shall further modify the report as per the suggestions/ advice of the guide and upload for the approval of the guide.

All the above processes shall be recorded in the system.

Final Assessment

- An online examination will be conducted at the end of the training programme.
- After the exam, provision to be made for results announcement on individual login.

The participants shall be provided with login on the website with a provision to upload the reports of the audits/ other reports which he may conduct after award of registration. The archive of all such reports shall be available on the portal.

List of all the certified professionals shall be published on website along with their specialization.

Webpage should have a provision for each programme with separate sub-domain(s).

NOTE:- The LMS module shall include TEXT/MP4/ PDF files for the learning of the Prospective students alongwith assignments to be completed by the students.

System Requirements

- **User-Friendly Interface:** Simple and intuitive for applicants and COA officials.
- **Secure Document Storage:** Encrypted storage with controlled access.
- **Automated Workflow:** Efficient processing and movement of applications.
- **Audit Trail:** Maintain a history of application status changes and decisions.

Expected Benefits

- **Faster & Transparent Processing:** Reduces manual handling and improves efficiency.
- **Real-Time Tracking:** Applicants and COA officials can track applications at every stage.
- **Improved Coordination:** Seamless integration with Ministry/COA workflows.

6. Digital File Management

- **Centralized system** for storing and managing files in digital mode for various Departments with File movement & tracking and search and filter functionality:

Other Requirements

Database & Table Structure Updates

- **Normalization** of existing tables to reduce redundancy.
- Implement **indexes and optimized queries** for faster performance.
- Define **primary keys, foreign keys, and constraints** for data integrity.
- Optimize **storage engines and partitioning** for better scalability.
- Implement **backup and disaster recovery strategies**.
-

Development & Deployment Plan

Analysis & Planning

- Audit the **existing database and codebase**.
- Identify **legacy dependencies and compatibility issues**.
- Define **data migration strategy**.

Development & Testing

- Refactor **PHP codebase** for compatibility with PHP 8.x.
- Implement **structured error handling and logging**.
- Conduct **unit testing and system testing**.

Migration & Deployment

- Perform **database migration with minimal downtime**.
- Deploy in a **staging environment for final testing**.
- Roll out the **production release** with monitoring in place.

Reports & Dashboard Module

- Real-time analytics & reports
- **Graphical dashboard** for key performance indicators (KPIs)
- Export data to Excel, PDF, and other formats

Security Enhancements

- Implement **input validation & sanitization** (to prevent SQL injection & XSS).
- Enforce **password hashing & authentication improvements**.
- Implement **role-based access control (RBAC)**.
- Ensure **SSL/TLS encryption** for secure communication.
- Conduct **regular security audits and vulnerability assessments**.

Performance & Scalability Improvements

- Optimize **database queries & indexing**.

- Implement **caching mechanisms** (Redis, Memcached).
- Ensure **horizontal and vertical scalability** options.

User Management & Security Features

- Multi-level user authentication & access control
- Audit logs & activity tracking
- Integration with single sign-on (SSO) mechanisms
- Compliance with data protection standards

Web-Based Interface Development

- User-friendly, responsive UI/UX
- Multi-browser and device compatibility
- Integration with government guidelines (if applicable)

Integration with Third-Party Systems

- Payment Gateway for online transactions
- SMS/Email
- Integration with external APIs (Digi Locker, Aadhaar, GST, etc.)/ Banks/Authorities

Testing & Quality Assurance

- Unit testing, integration testing, and UAT
- Load testing for performance validation
- Security testing (penetration tests, vulnerability scans, etc.)

Training & Deployment

- Training for system users & administrators
- Deployment on live servers (NIC/Cloud-based environment)
- Comprehensive documentation & user manuals

Maintenance & Support

- Post-implementation support (bug fixes & updates) for 1 year
- Annual Maintenance Contract (AMC) for continuous improvements
- Regular security updates & performance monitoring

Deliverables

1. **Updated PHP Codebase** (compatible with PHP 8.x).
2. **Optimized MySQL Database** (with new schema documentation).
3. **Fully functional ERP system** with core modules.
4. **Migration Plan & Execution** (including data integrity validation).
5. **ERP System with All Modules Upgraded & Tested.**
6. **Security & Performance Enhancements.**
7. **User Training & Documentation.**
8. **Technical documentation (API, architecture, security protocols).**
9. **Testing reports & compliance checklists.**
10. **Live deployment & performance monitoring dashboard.**

Timeline & Milestones

- **Phase 1:** Requirement Analysis & System Design – **4 Weeks**
- **Phase 2:** Development of Core Modules – **12 Weeks**
- **Phase 3:** Integration & Testing – **6 Weeks**
- **Phase 4:** Deployment & Training – **4 Weeks**

Project Assumptions

- Existing **functionalities will be retained unless specified otherwise.**
- Users will **provide necessary inputs and approvals** during testing phases.
- The new system will be **hosted on a secure and scalable infrastructure.**

Technology Stack

- **Frontend:** HTML5, CSS3, JavaScript (React/Angular)
- **Backend:** PHP (Latest Version)
- **Database:** MySQL (Latest Version)
- **Security:** SSL, OAuth2, Encryption Standards
- **Hosting:** NIC Cloud / Government-approved data center

Acceptance Criteria

- All modules are **fully functional** and meet defined requirements.
- **Successful data migration** without loss.
- **User acceptance testing (UAT) approval** from stakeholders.
- Compliance with **security & performance benchmarks.**

Conclusion

This ERP development will **enhance performance, security, and maintainability**, ensuring the system is **future-ready and efficient**. The modernization will **align with industry standards** while improving usability and operational workflows.

III. Part 2 - COA Website Development

1. Objective

To design, develop, and implement a website that adheres to the latest **Guidelines for Indian Government Websites (GIGW 3.0)** and follows the **Digital Brand Identity Manual (DBIM)** issued by **MeitY (Ministry of Electronics and Information Technology)**. The website will be user-friendly, accessible, and secure, ensuring compliance with all required government regulations.

2. Scope of Work

A. Website Design & Development

The website will be designed following the Government of India's latest web guidelines and best practices.

Key Features & Functionalities:

1. **User-Centric UI/UX Design**
 - Adherence to **DBIM color schemes, typography, and branding guidelines.**
 - **Responsive design** to ensure compatibility across devices (mobile, tablet, desktop).
 - Accessibility-compliant UI (as per WCAG 2.1 AA and GIGW 3.0).
2. **Navigation & Information Architecture**
 - **Clear menu structure** with hierarchical categorization.
 - **Breadcrumb navigation** for user-friendly browsing.
 - **Search functionality** for easy access to content.

3. **GIGW 3.0 & DBIM Compliance**
 - Compliance with **GIGW 3.0 accessibility, usability, and security standards**.
 - Implementation of **standardized header, footer, and layout** as per DBIM.
 - Use of **open-source fonts and standard government color palette**.
4. **Content Management System (CMS) Integration**
 - Development on an **Open-Source CMS (WordPress/Drupal) or custom PHP-based CMS**.
 - Role-based access for content managers and administrators.
 - Multilingual support (English, Hindi, and regional languages as needed).
5. **Security & Performance**
 - Implementation of **SSL/TLS encryption** for secure access.
 - Protection against **XSS, CSRF, SQL Injection, and other vulnerabilities**.
 - Optimization for **fast page loading and performance** (as per GIGW benchmarks).
6. **Compliance with Indian Government Directives**
 - Hosting on **NIC, or any government-approved infrastructure**.
 - Adherence to **Data Localization Policies** as per GoI norms.
 - Integration with **DigiLocker, e-Gov APIs, and Single Sign-On (SSO) mechanisms** if required.

B. Website Functional Components

1. **Homepage Features:**
 - Banner section for important announcements.
 - Latest news, circulars, and notifications.
 - Dynamic event updates.
2. **Citizen Services & Engagement**
 - Online forms for grievance redressal, feedback, and RTI requests.
 - Integration with **UMANG, MyGov, and e-Governance platforms** if needed.
 - Subscription feature for newsletters and updates.
3. **Accessibility & Inclusivity Features**
 - Text-to-speech functionality.
 - High contrast mode and font resizing.
 - Screen reader compatibility.
4. **Search Engine Optimization (SEO) & Digital Presence Optimization**
 - SEO-optimized URLs, meta tags, and structured data.
 - Integration with **Google Analytics, NIC Analytics, or Indian Web Analytics System (IWAS)**.

C. Testing & Quality Assurance

- **Cross-Browser Testing:** Chrome, Firefox, Edge, Safari.
- **Performance Testing:** Load time, scalability checks.
- **Security Testing:** Penetration testing and vulnerability assessment.
- **Accessibility Testing:** WCAG & GIGW compliance verification.

D. Deployment & Training

- Deployment on **NIC Cloud** or a government-approved hosting environment.
- Training sessions for website administrators and content managers.
- Technical documentation and user manuals.

3. Deliverables

1. **Fully Functional Website** complying with GIGW 3.0 & DBIM.
2. **CMS with Role-Based Access Control** for content management.
3. **Technical Documentation** (system architecture, database schema).
4. **Testing & Compliance Reports** (Security, Accessibility, Performance).
5. **Training & User Guides** for website administrators.

4. Timeline

- **Phase 1:** Requirement Analysis & Planning – **4 weeks**
- **Phase 2:** UI/UX Design & Development – **8 weeks**
- **Phase 3:** Testing & GIGW Compliance Audit – **4 weeks**
- **Phase 4:** Deployment & Training – **2 weeks**

5. Technology Stack

- **Frontend:** HTML5, CSS3, JavaScript (React/Angular/Vue)
- **Backend:** PHP (Latest Version), Python (if required)
- **CMS:** WordPress/Drupal or custom PHP-based CMS
- **Database:** MySQL/PostgreSQL
- **Security:** SSL, OWASP security best practices

6. Acceptance Criteria

- Website must be **fully functional and responsive**.
- Pass **GIGW 3.0 compliance audit**.
- Successful **security testing with no critical vulnerabilities**.
- Approval from **concerned government authorities**.

7. Support & Maintenance

- **Post-Implementation Support:** 6 months of bug fixes & updates.
- **Annual Maintenance Contract (AMC) (Optional):** Regular updates, security patches, and feature enhancements.

Chapter - 6 PAYMENT SCHEDULE (Schedule to Bidder)

STAGES OF PAYMENT		
1.	ON SOFTWARE REQUIREMENT SPECIFICATION (SRS) SIGN UP	10%
2.	ON PROTOTYPE (DESIGN LAYOUT) LIGHT OF (COMPLETE PROJECT)	15%
3.	ON USER ACCEPTANCE TRIAL (UAT) ON SERVICE PROVIDER SERVER (COMPLETE PROJECT)	30%
4.	AFTER GO LIVE/SUCCESSFUL COMPLETION OF PROJECT ALONG WITH CERTIFICATION AND GOVT./AGENCY AUDIT.	35%
5.	Free Warranty for a period of 12 Months	5%
6.	After Successful completion of Exit Management	5%

AGREEMENT

This Agreement is MADE on THIS _____ day of _____
BETWEEN THE Registrar, Council of Architecture, New Delhi (hereinafter called the 'OWNER' which expression shall, unless excluded by or repugnant to the context be deemed to include his successor in office, and permitted assigns) of the One part and M/s.

_____, a proprietary concern of

_____ having its office at _____
_____ (hereinafter referred to as the ("Design Development and Implementation of ERP and Website/Web portal of COA) **which** expression shall, unless excluded by or repugnant to the context be deemed for themselves, and their respective executors, administrators, assigns legal associates, or successor) of the other part.

WHEREAS the OWNER, owns and possesses all other rights to ("Design Development and Implementation of ERP and Website/Web portal of COA") (hereinafter called the 'WORK')

AND WHEREAS pursuant to the offer made by the service provider to supply the said WORK on the terms appearing hereinafter.

IT HAVING BEEN AGREED AND DECIDED ARE FOLLOWS:

1. THE OWNER hereby assigns the service provider the exclusive right to supply the WORK. THE Bidder warrants that at the time of execution of this Agreement they are the owners of the WORK.
2. Bidder shall service provider and supply for the WORK.
3. The Bidder undertakes to the WORK of ("Design Development and Implementation of ERP and Website/Web portal of COA"), as stated in the schedule to Tender Document, of the said lot of WORK within Six Months from the date of receipt of the said WORK provided that any further supply of the WORK shall be undertaken after prior written approval of the OWNER on the same terms and conditions.
4. The service provider undertakes to supply the WORK at the price quoted in the tender.
5. The WORK will be produced ("Design Development and Implementation of ERP and Website/Web portal of COA") including material at the expense of the Service provider.
6. The service provider shall submit a dummy / draft of the WORK for final approval of the OWNER and shall proceed with the WORK as approved by the OWNER
7. The service provider shall not, without the consent of the writing of the OWNER, make any alteration, deletion or addition to the work as finally approved by the OWNER.
8. The service provider shall provide the design of Design Development and Implementation of ERP and Website/Web portal of COA (WORK) to the OWNER for its Approval.
9. If either party will default under this Agreement, the other party may give the defaulting party written notice thereof requesting that the default be cured within thirty (30) days after giving of such notice. If the default is not cured within the said thirty (30) day period, the non-defaulting party may terminate this Agreement upon the date specified in the said notice.

10. This Agreement constitutes the entire understanding of the parties relative to (“Design Development and Implementation of ERP and Website/Web portal of COA”) of the WORK by the OWNER. No amendments, modifications, or changes in this Agreement will be effective or binding on either of the parties hereto unless reduced to writing and executed by the respective authorized representatives of each of the parties hereto.
11. If the service provider fails to fulfill the WORK within the specified period of **six months**, the OWNER shall be at liberty of forfeiting the performance security deposit and award the work to any other service provider. However, the OWNER may, after considering the reasons for the delay, allow the bidder a maximum extension of 15 days upon recovery of liquidated damages to the tune of 5% each week of the value of the job subject to a maximum of Rs. 5,00,000/-.
12. THE OWNER shall make payment to the service provider as per the payment schedule given in the Tender document.
13. This Agreement and the rights and obligations hereunder will not be assigned to any third party without the prior written consent of each other.
14. All notices or other communications required or permitted to be given pursuant to this Agreement will be in writing and will be valid and sufficient if dispatched by cable or by certified or registered post, addressed to the parties at the addresses herein above set forth. Such an address may be changed by either party at any time by notice given to other, as aforesaid.
15. A waiver by either party at any time of any breach of any provision of this Agreement shall not apply to any breach of any other provision of the Agreement or to a breach of the same provision at any other time.
16. The decision of the OWNER with respect to overall quality and outlook of the WORK shall be final and binding on the bidder and the Bidder shall be bound to execute the WORK up-to the highest standards required for execution of the WORK as per the satisfaction of the OWNER.
17. The contracting parties undertake, in case of controversy over the interpretation or execution of this Agreement, to agree to refer the dispute to a Sole Arbitrator to be appointed by the President, Council of Architecture. The award of the sole arbitrator shall be final and binding on both parties. The arbitration proceedings shall be governed by the provisions of the Arbitration and Conciliation Act, 1996, including any modification thereof for the time being in force. All disputes are subject to Courts having Jurisdiction in Delhi only.

IN WITNESS WHEREOF THE PARTIES HAVE CAUSED TO SET THEIR RESPECTIVE HANDS THROUGH THEIR DULY AUTHORISED REPRESENTATIVES ON THE DAY AND YEAR FIRST ABOVE WRITTEN.

Signed by service provider:

Signed by OWNER:

Registrar Council of Architecture
New Delhi

In the presence of Witness:

For and on Behalf of

Council of Architecture

For and on Behalf of

< service provider>

1.

1.

2.

2.