AI SUPPORTED AICTE APPROVAL PROCESS PORTAL

ROADMAP

1 DIGITIZING THE APPLICATION PROCESS

Streamline application submissions and reviews with automated systems and real-time tracking.

2 AI-DRIVEN DOCUMENT VERIFICATION

Automatically authenticate and ensure compliance of uploaded documents using AI algorithms.

3 INTELLIGENT EVALUATOR MATCHING

Efficiently assign applications to the most suitable evaluators based on expertise and availability through AI.

4 SECURE AND COMPILANT DATA MANAGEMENT

Protect sensitive data with robust AI-powered security measures and adhere to privacy regulations.

5 DATA-DRIVEN INSIGHTS AND REPORTING

Leverage AI analytics to generate comprehensive reports and identify process improvements.

6 CONTINUOUS IMPROVEMENT AND INNOVATION

Enhance the approval process through ongoing feedback and AI-driven analysis for continuous optimization.

AICTE MANUAL APPROVAL PROCESS

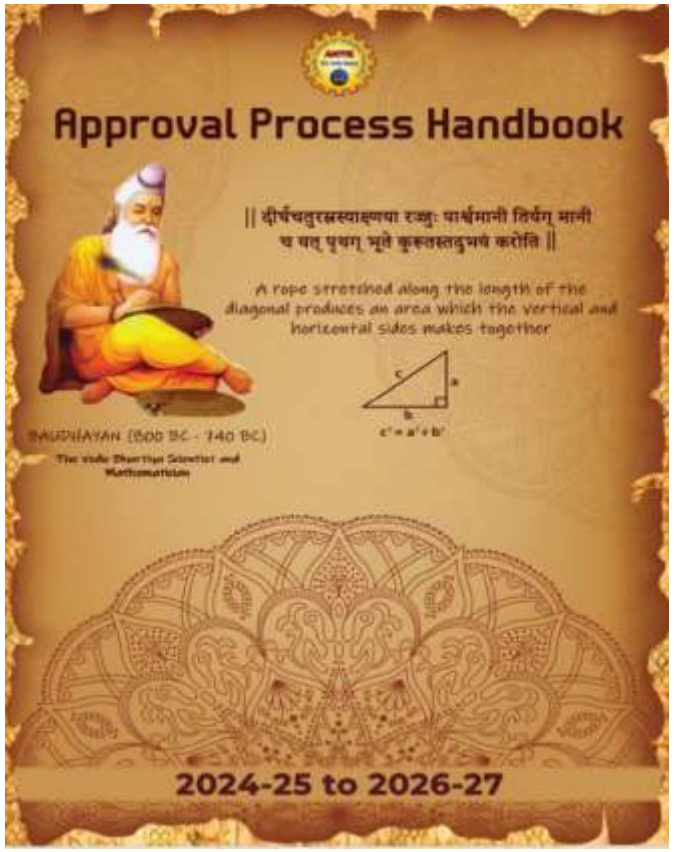
The AICTE (All India Council for Technical Education) approval process is a detailed and multi-step procedure for educational institutions seeking recognition for technical programs in India. It involves verifying compliance with AICTE's standards, including infrastructure, faculty qualifications, curriculum, and financial stability. The process requires submitting comprehensive documentation, conducting inspections, and meeting strict criteria set by AICTE. Institutions must adhere to regulations related to student-teacher ratios, facilities, and industry partnerships. The complexity arises from the stringent norms, periodic updates to guidelines, and the need for consistent quality assurance to maintain approval. Successfully navigating this process demands significant administrative and strategic effort.

PROBLEM STATEMENT

The AICTE approval process involves numerous steps and interactions among educational institutions, regulatory authorities, and evaluators.

There is a need for an innovative AI-supported portal that can modernize and streamline the approval workflow, enhance transparency, and significantly reduce processing times

Key Chapters in Process Handbook



Chapters	Description
Chapter-I	Grant of Approval for New Institution
Chapter-II	Grant of Extension of Approval for Existing Institution
Chapter-III	Collaboration & Twinning Programmers
Chapter-IV	Grant of Approval for Universities
Chapter-V	Approval for Open and Distance Learning(ODL) /Online Learning (OL)

Modules

1. User Registration & Authentication Module: Ensures secure user registration and login with role-based access control for both applicants and evaluators.

2. Application Submission Module: Facilitates the submission of applications, collecting all required data and documents in a structured format.

3. AI-Powered Document Verification Module: Uses AI algorithms to verify the authenticity and completeness of submitted documents efficiently.

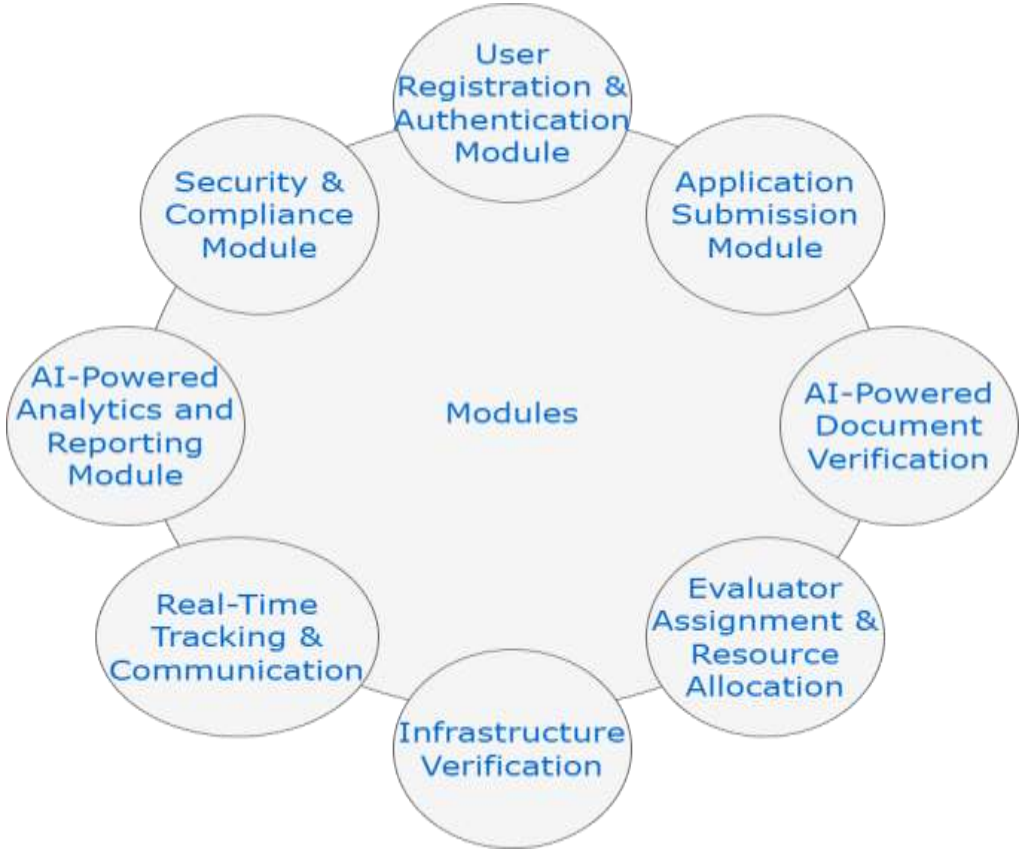
4. Evaluator Assignment & Resource Allocation: Assigns evaluators to applications based on expertise, optimizing resources for better review efficiency.

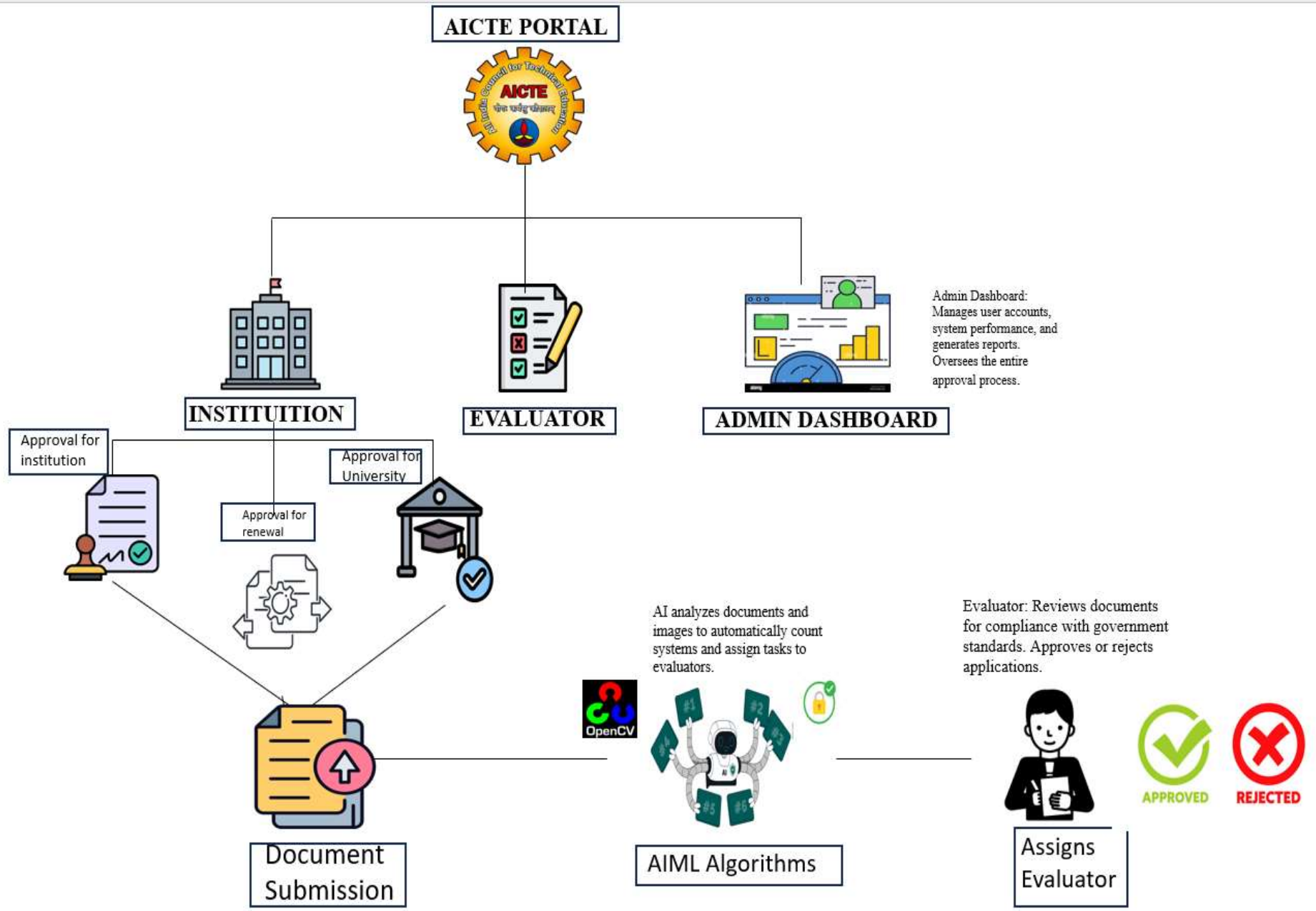
5. Infrastructure Verification: Incorporates visual analysis (using tools like OpenCV and YOLOv5) to confirm the physical infrastructure's compliance with guidelines.

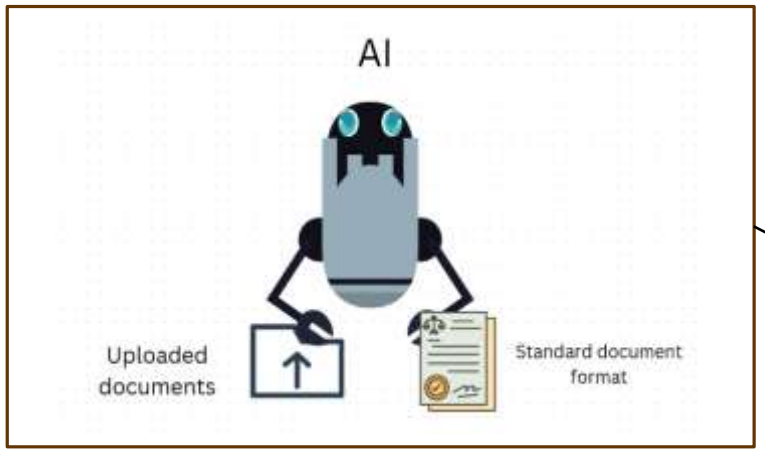
6. Real-Time Tracking & Communication: Provides real-time status updates and seamless communication channels for applicants, evaluators, and administrators.

7. AI-Powered Analytics & Reporting Module: Analyzes data for insights, automating reports for transparency and data-driven decision-making.

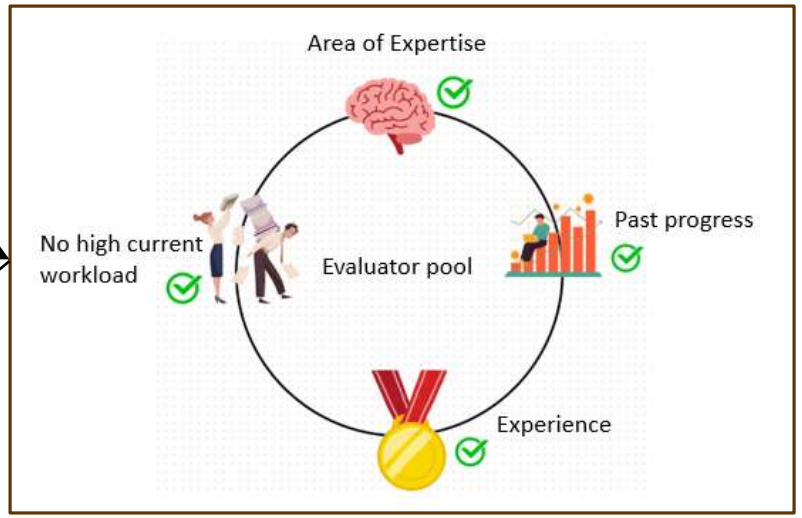
8. Security & Compliance Module: Ensures robust security protocols and adherence to compliance regulations for data protection and privacy.



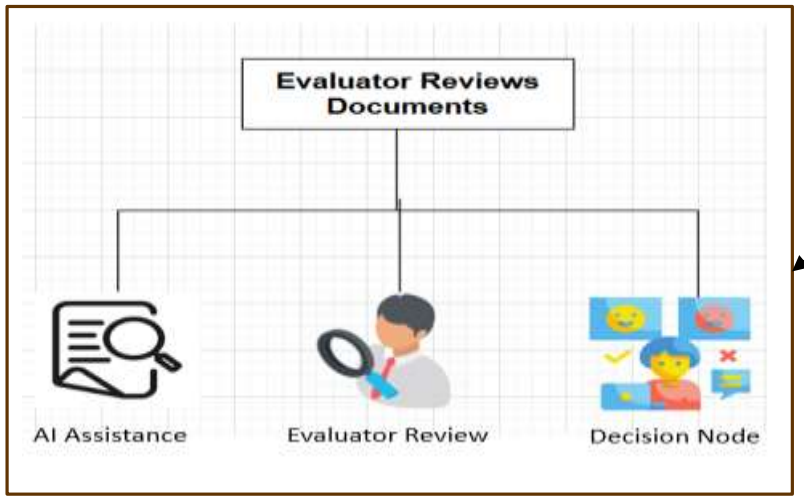

AICTE PORTAL
INSTITUITION
EVALUATOR
ADMIN DASHBOARD
Admin Dashboard:
Manages user accounts, system performance, and generates reports.
Oversees the entire approval process.
Approval for institution
Approval for renewal
Approval for University
Document Submission
AI analyzes documents and images to automatically count systems and assign tasks to evaluators.
OpenCV
AIML Algorithms
Evaluator: Reviews documents for compliance with government standards. Approves or rejects applications.
Assigns Evaluator
APPROVED
REJECTED



AI compares the uploaded document with the standard format. If it matches, it moves forward; if not, it's flagged.

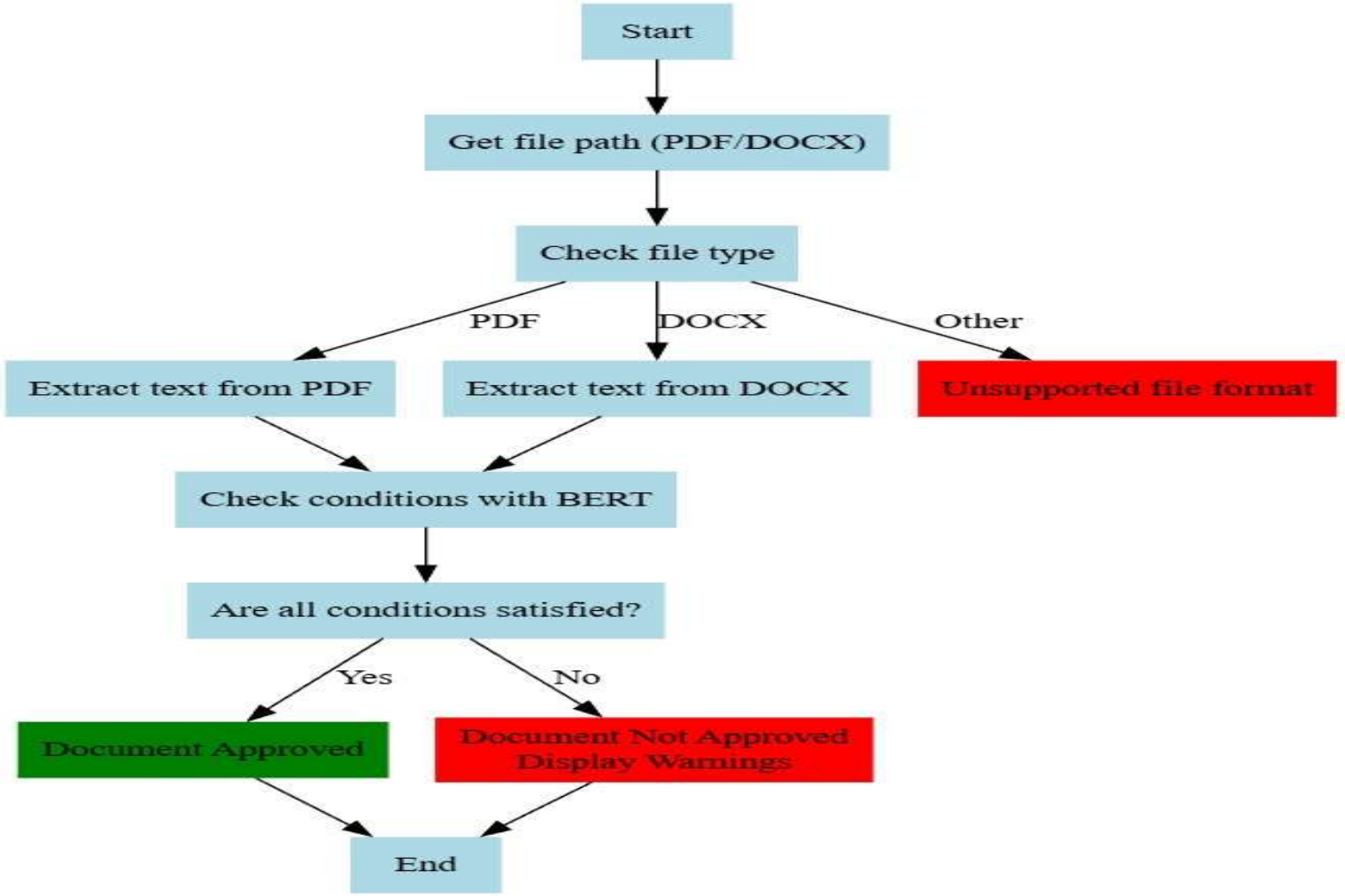


AI assigns an evaluator based on expertise, performance, workload, and experience.

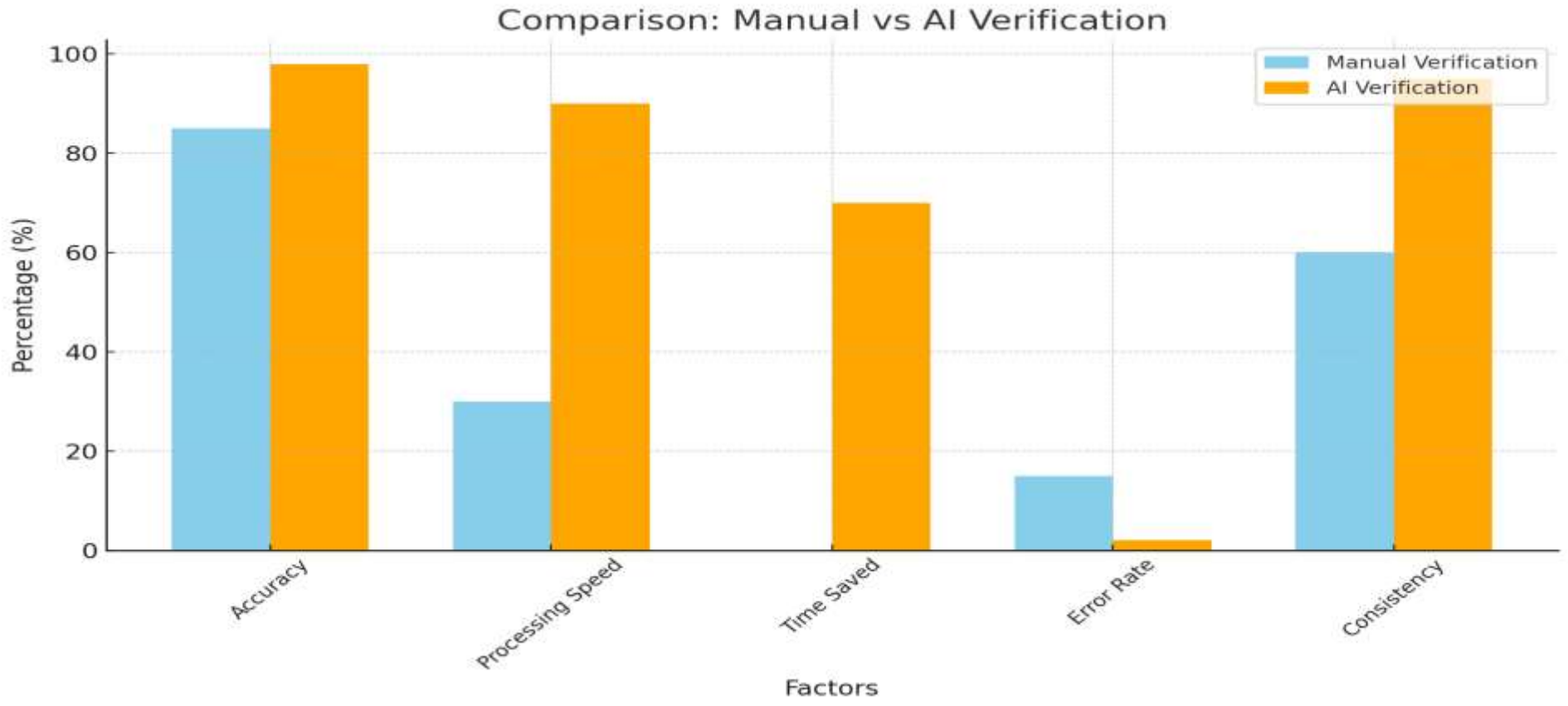


The evaluator, with AI assistance, reviews the document to ensure accuracy, compliance, and relevance, then makes a final decision to accept, reject, or hold.

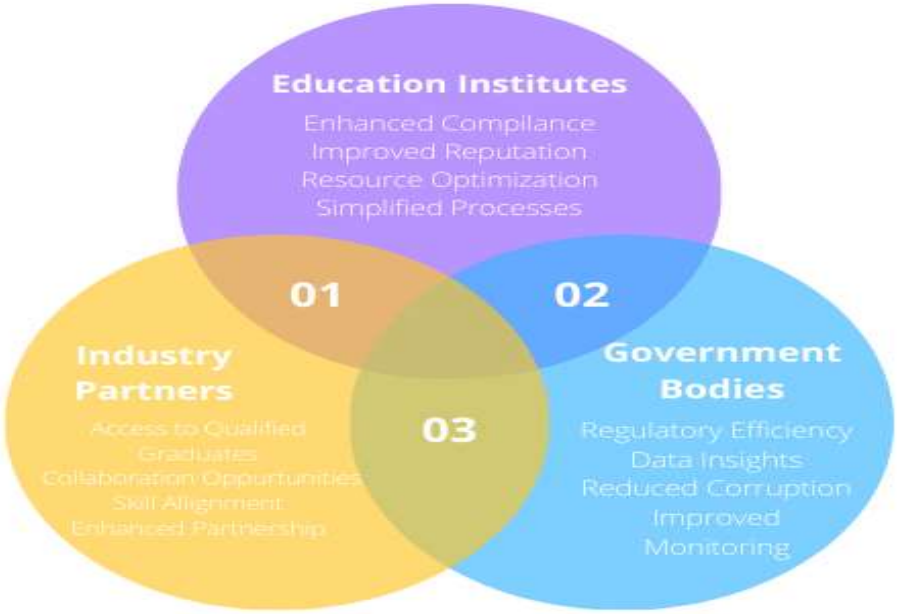
AI Document verification process



Manual verification vs AI verification



Stakeholders Benefits



01

Industry partners and educational institutes collaborate to align skills, share knowledge, and promote innovation for mutual growth.

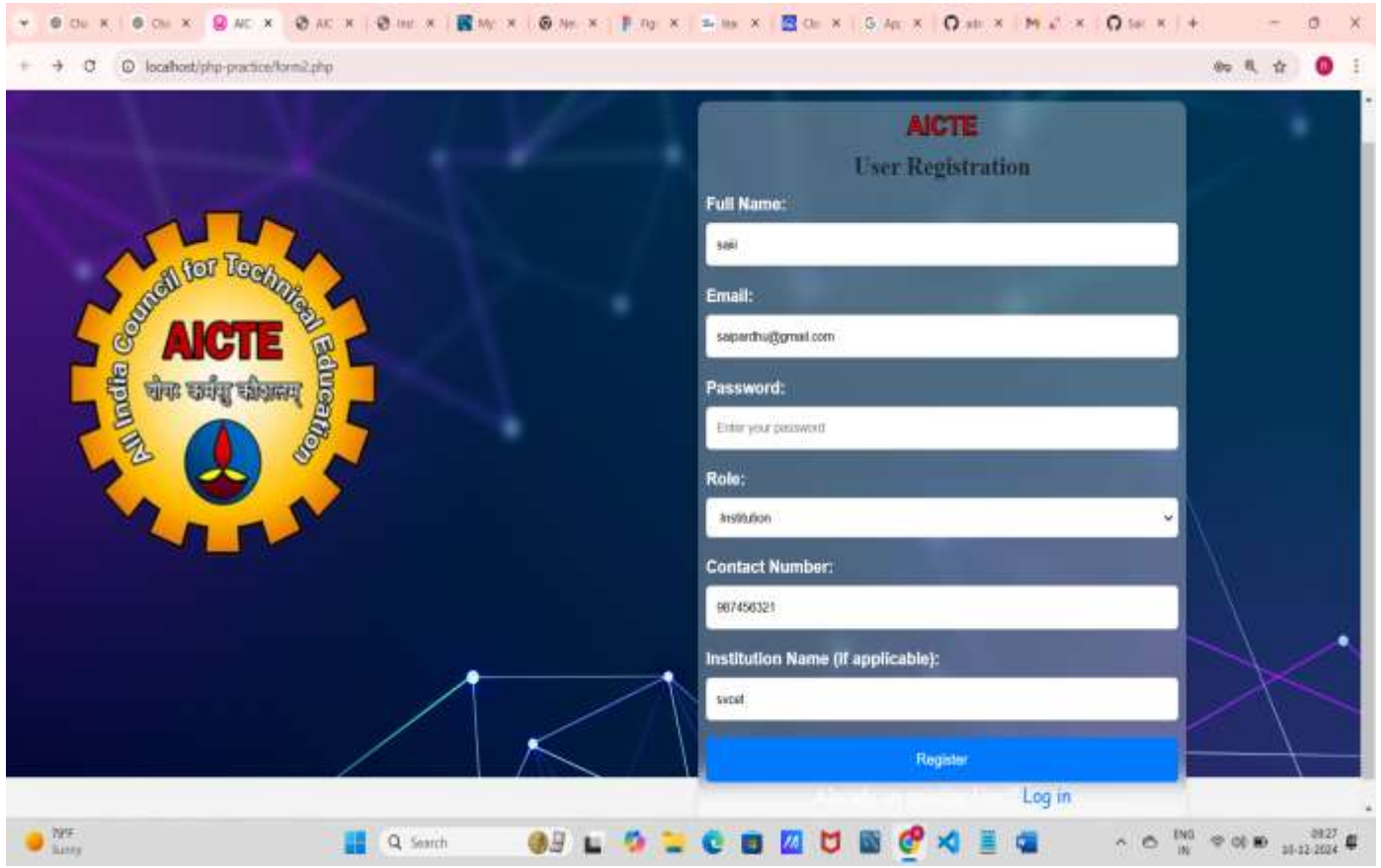
02

Educational institutes and government bodies work together to improve regulatory compliance, enhance educational standards, and foster efficient processes that benefit both sectors.

03

Industry partners and government bodies work together to improve regulations and foster growth.

User Registration page



Content Explanation:

- This is the **User Registration Page** designed for the AICTE system.
- The page facilitates new users to register and access the system's features.

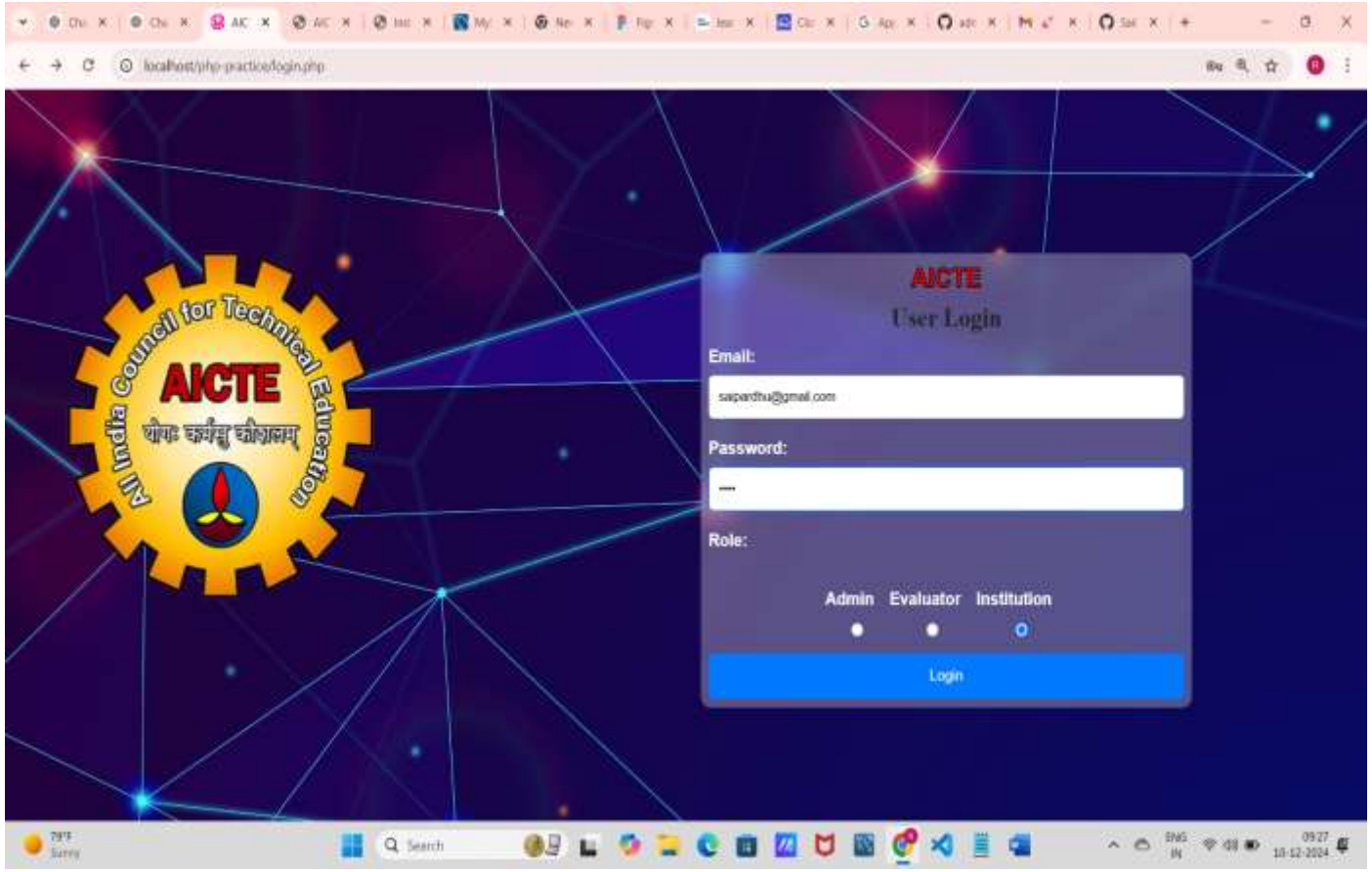
Form Fields:

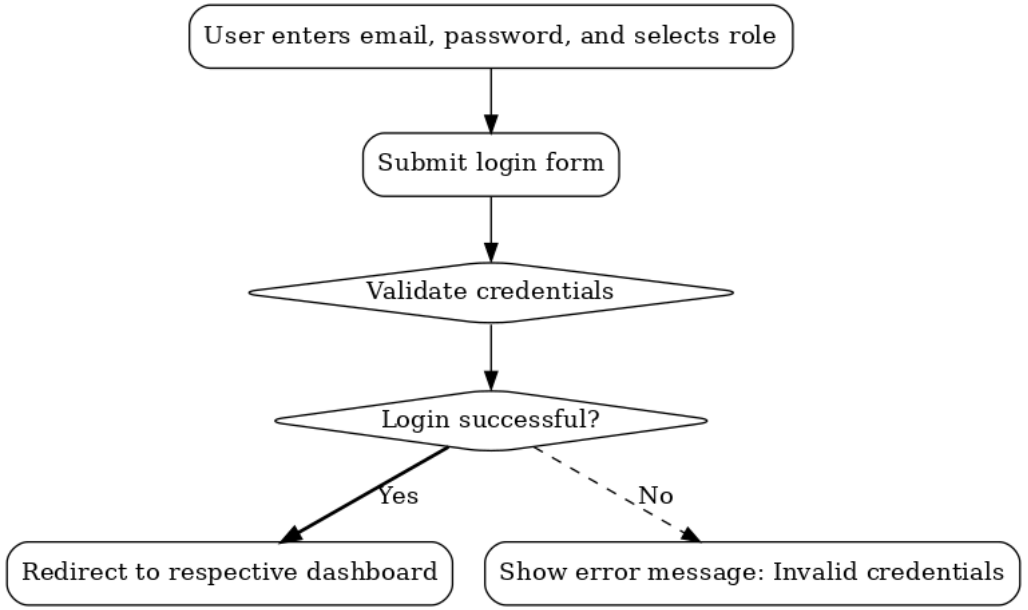
1. **Full Name**: Input field to enter the user's complete name.
2. **Email**: Input field for the user's email address, used for verification and communication.
3. **Password**: A secure input field to set the user's account password.
4. **Role**: Dropdown selection to define the user's role (e.g., Institution, Administrator).
5. **Contact Number**: Input for a valid contact number for user identification.
6. **Institution Name**: (If applicable) Input for associating the user with their institution.

Call-to-Actions:

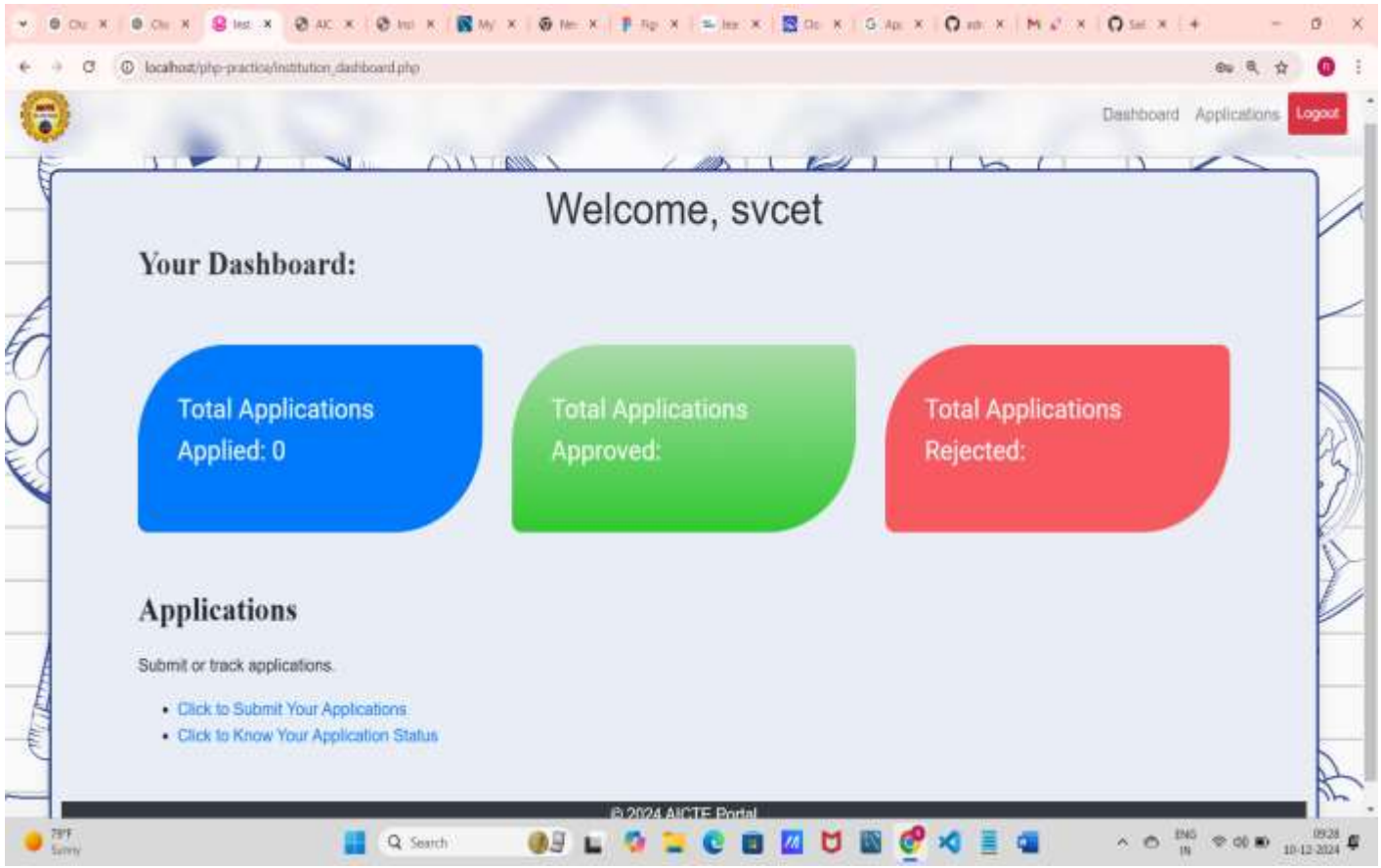
- **Register Button**: Submits the form after all required fields are filled correctly.
- **Log In Link**: For existing users to directly access their accounts.

User Login page





Institution Dashboard

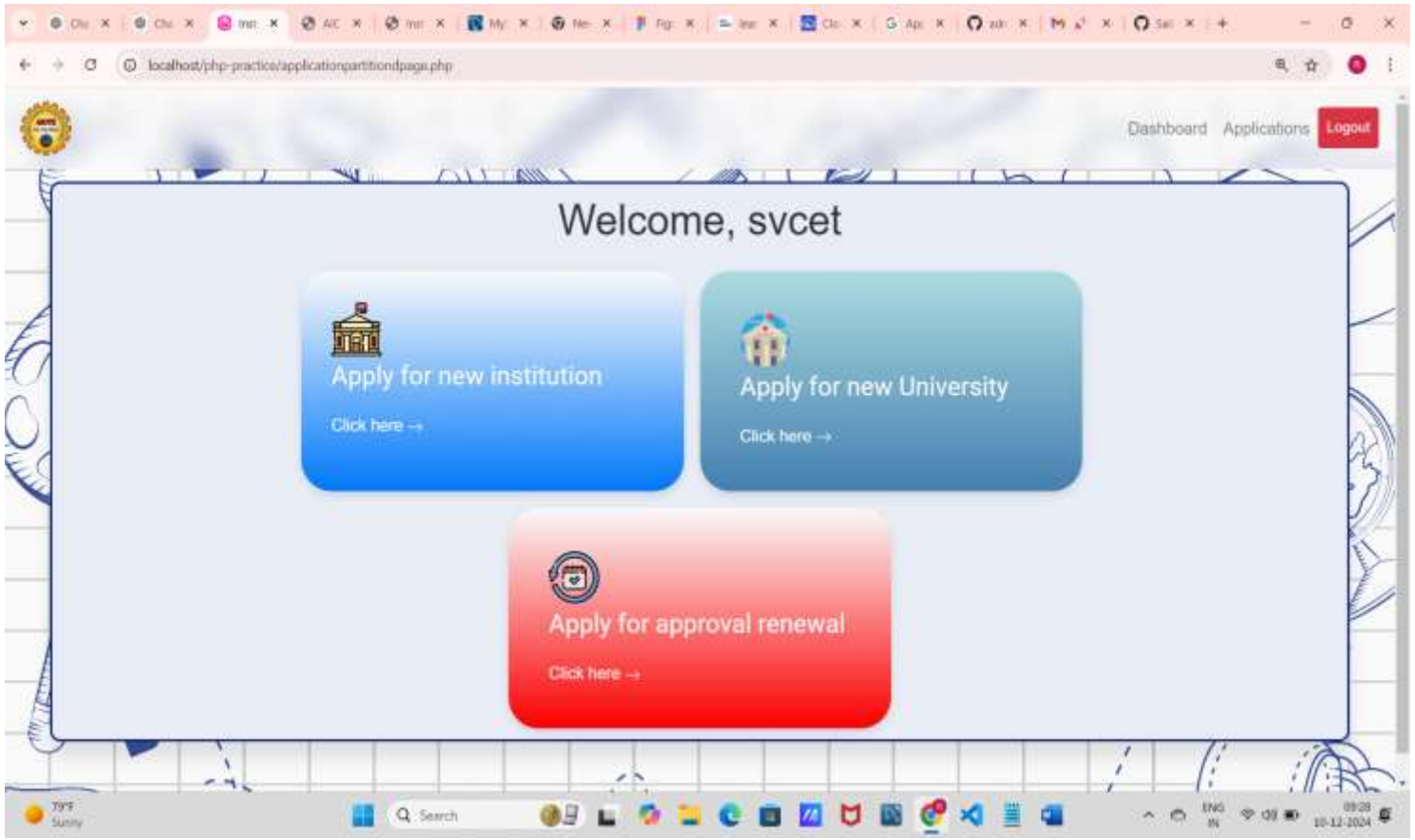


Total Applications Applied: Displays the count of applications submitted.

Total Applications Approved: Shows the number of applications that were successfully approved.

Total Applications Rejected: Highlights the rejected application count.

Institution application dashboard

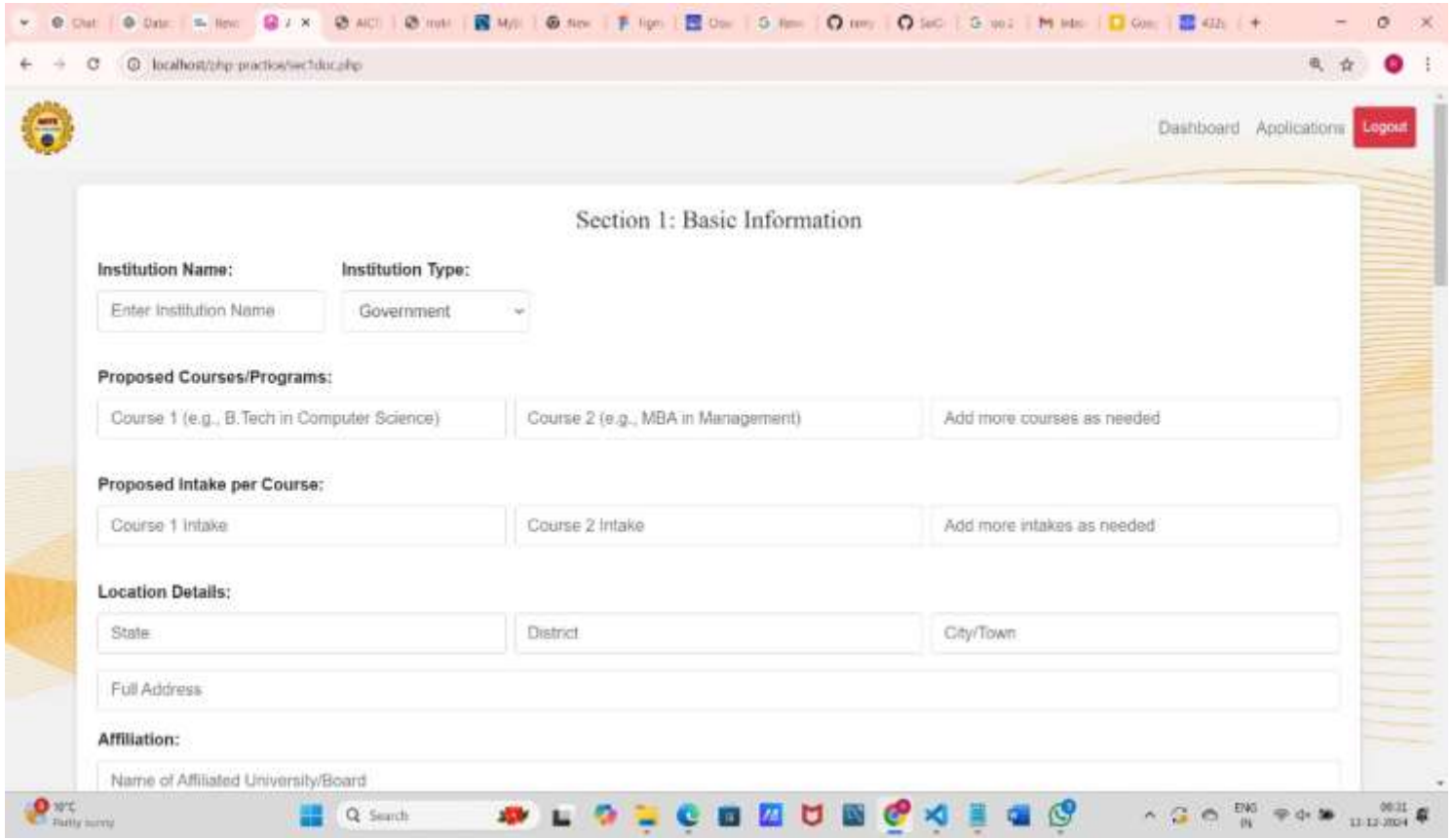


Apply for New Institution: For institutions registering for the first time.

Apply for New University: For applying to establish a new university.

Approval Renewal: For existing institutions/universities seeking to renew their approvals.

Institutional Details



Institution Name: A text input for entering the institution's name.

Institution Type: A dropdown menu for selecting the type of institution (e.g., Government, Private).

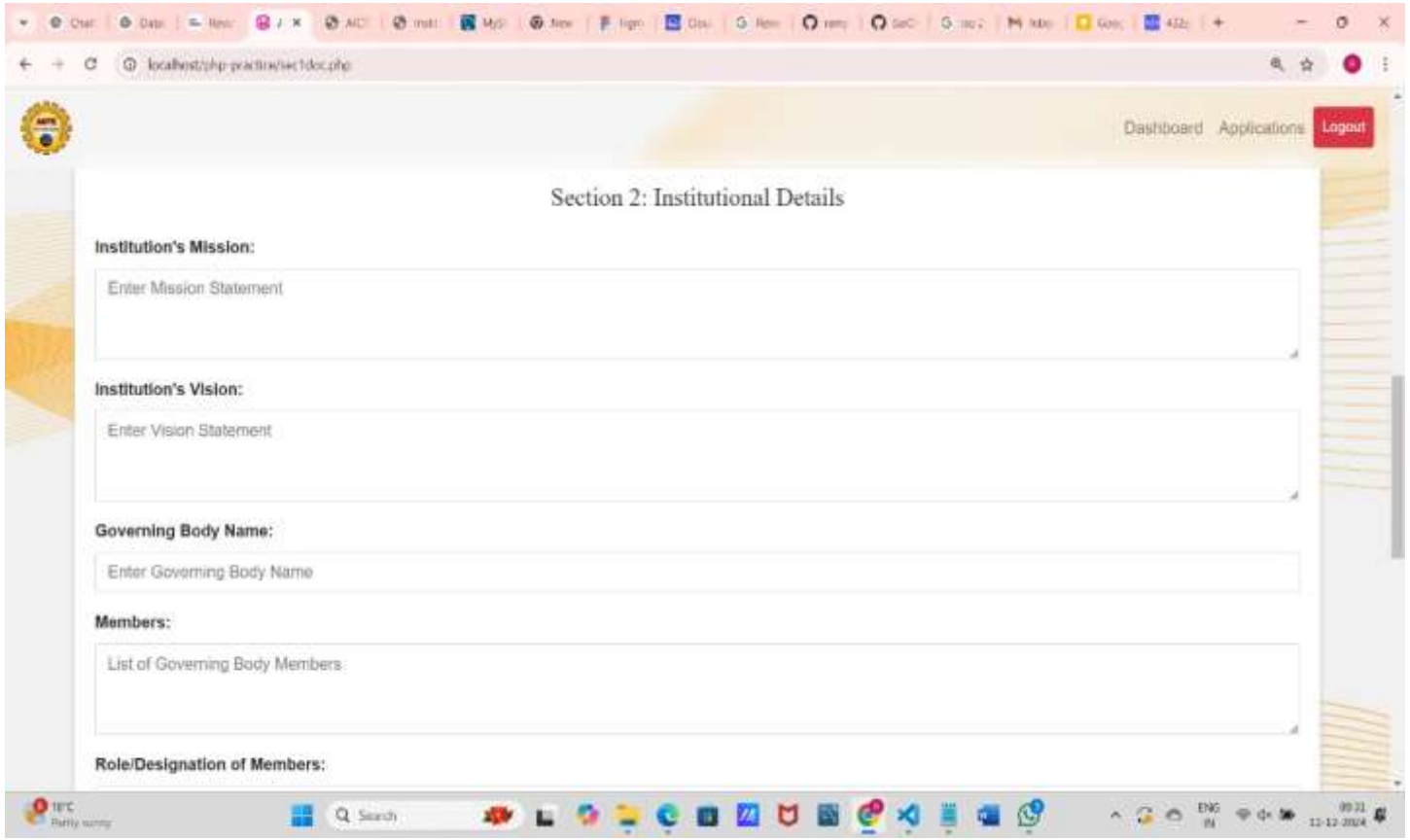
Proposed Courses/Programs: Fields to list courses or programs offered, with placeholders (e.g., B.Tech in Computer Science) and options to add more.

Proposed Intake per Course: Input fields for specifying the intake capacity for each course, with expandable options.

Location Details: Fields to input the state, district, city/town, and the full address of the institution.

Affiliation: A text input for entering the name of the affiliated university or board.

Institutional Details



Institution's Mission: A text area for inputting the mission statement.

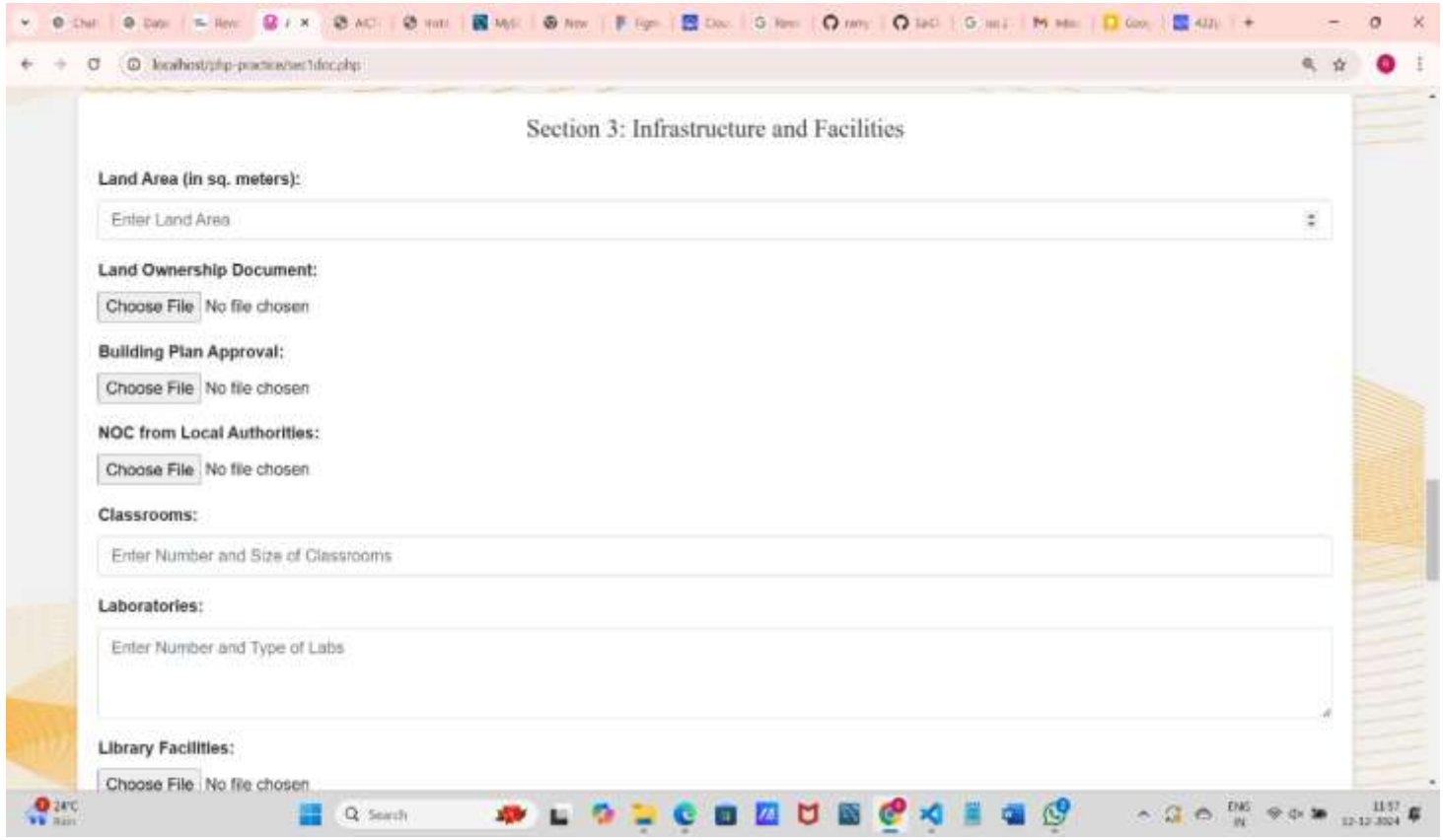
Institution's Vision: A text area for entering the vision statement.

Governing Body Name: A field for the name of the governing body.

Members: A section for listing governing body members.

Role/Designation of Members: A field for specifying roles or designations.

Infrastructure and facilities details



Land Area (in sq. meters): A text input field for entering the total land area of the institution, measured in square meters.

Land Ownership Document: A file upload field for attaching documents that verify the ownership of the land on which the institution is built.

Building Plan Approval: A file upload option for submitting documents showing that the institution's building plan has been approved by the relevant authorities.

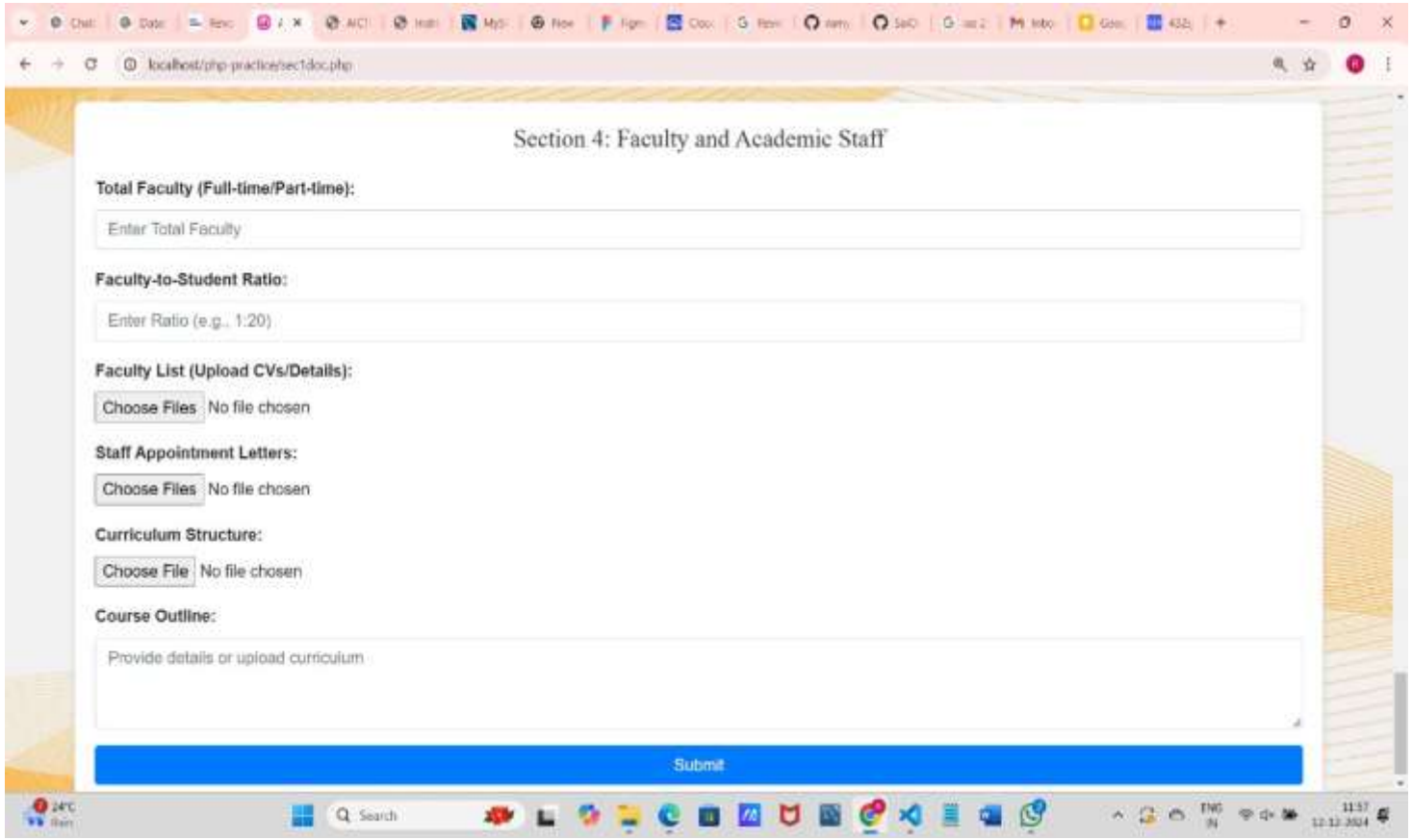
NOC from Local Authorities: A file upload option for attaching a No Objection Certificate (NOC) issued by local authorities.

Classrooms: A text input field for specifying the number and size of classrooms in the institution.

Laboratories: A text input field for detailing the number and types of laboratories available in the institution.

Library Facilities:A file upload field for including details or documentation about the library facilities.

Faculty and Academic Staff details



Total Faculty (Full-time/Part-time):A text field for entering the total number of faculty members, including both full-time and part-time staff.

Faculty-to-Student Ratio: A text field to input the ratio of faculty members to students (e.g., 1:20).

Faculty List (Upload CVs/Details): A file upload option to attach documents containing the CVs or other details of the faculty members.

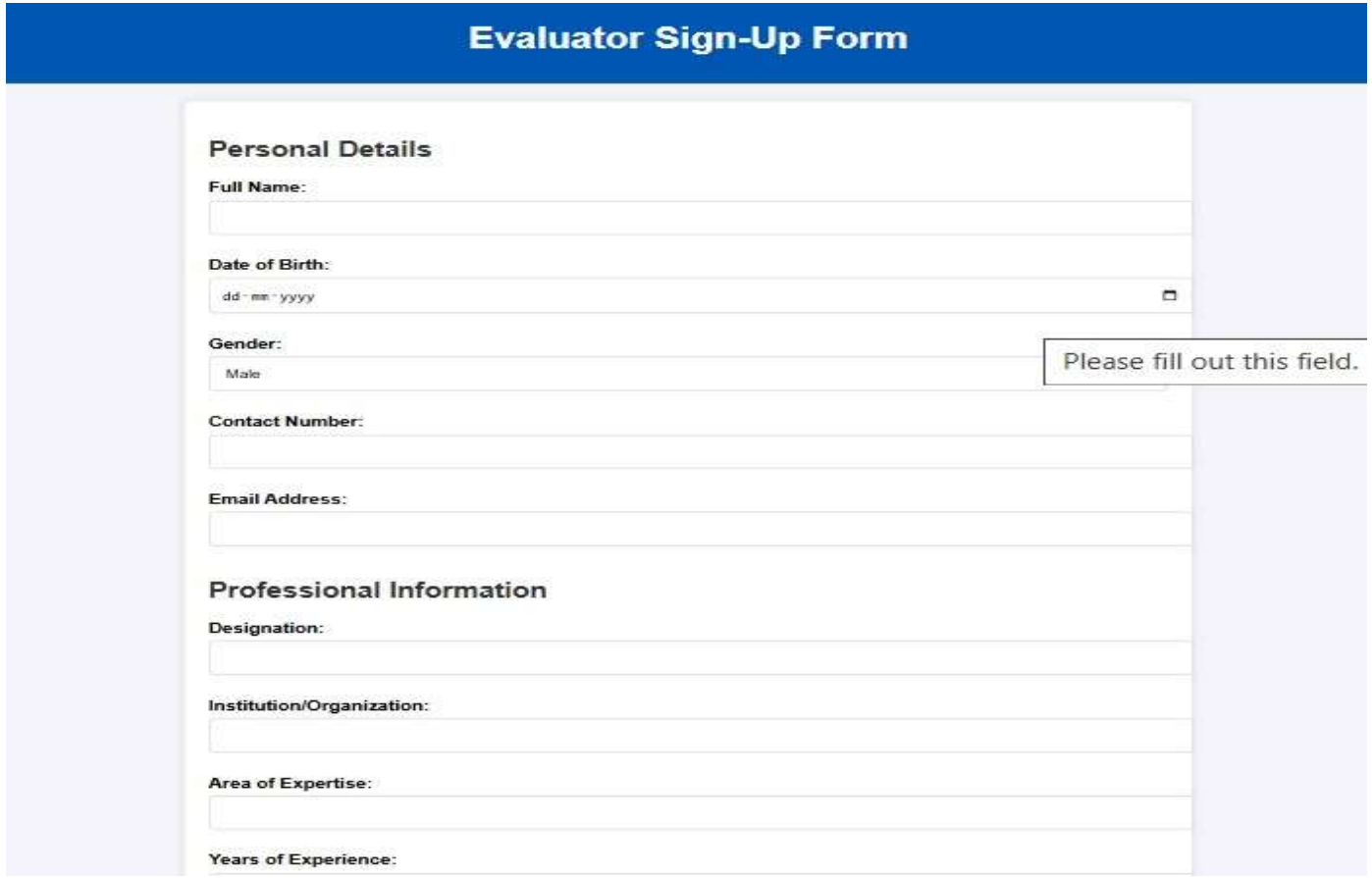
Staff Appointment Letters: A file upload option for attaching appointment letters of staff.

Curriculum Structure: A file upload option for providing the curriculum structure document.

Course Outline: A text area to input details about the course curriculum or to upload related information.

Submit Button: A button at the bottom for submitting the entered data and uploaded files.

Evaluator Sign-Up Form



Personal Details

Full Name: A text field for the evaluator's name.

Date of Birth: A date picker for entering the birth date in the format dd-mm-yyyy.

Gender: A dropdown or selection field (e.g., Male, Female, Other).

Contact Number: A text input for the phone number.

Email Address: A field for the evaluator's email.

Professional Information

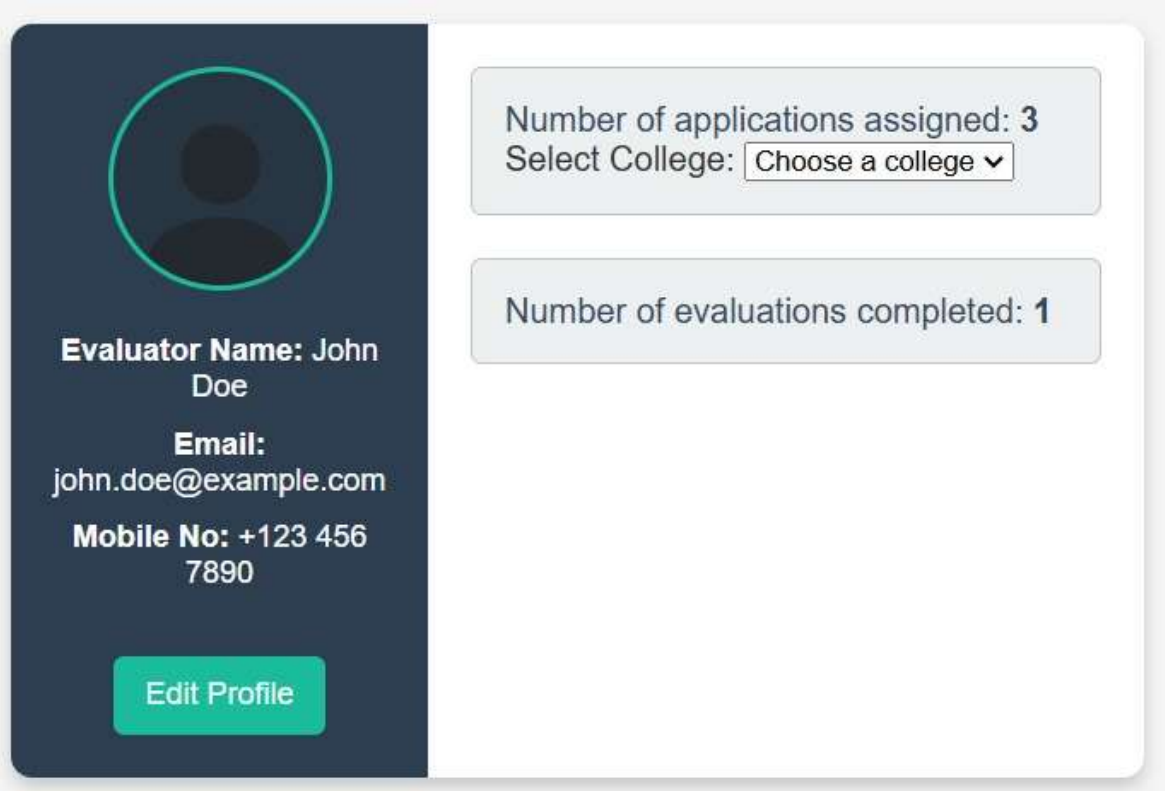
Designation: A text field for the evaluator's role or title.

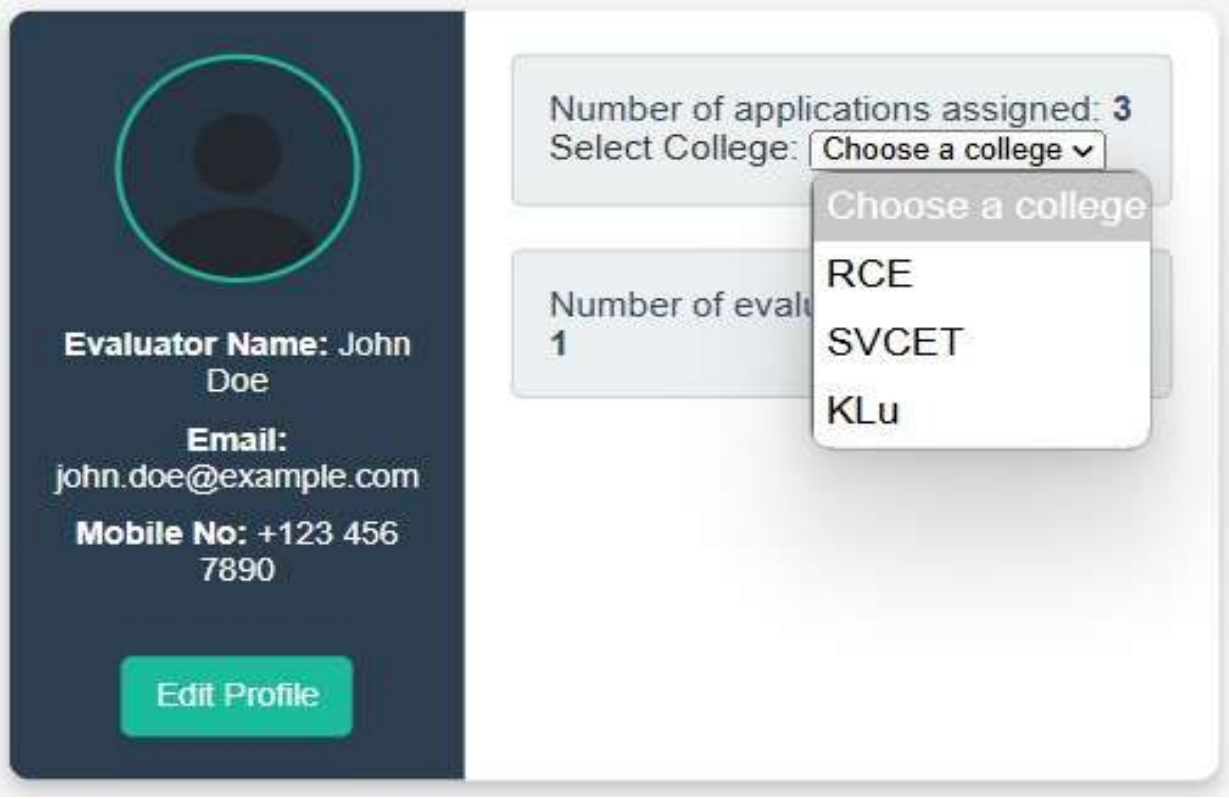
Institution/Organization: A field to input the affiliated organization or institution.

Area of Expertise: A text field for specifying specialization areas.

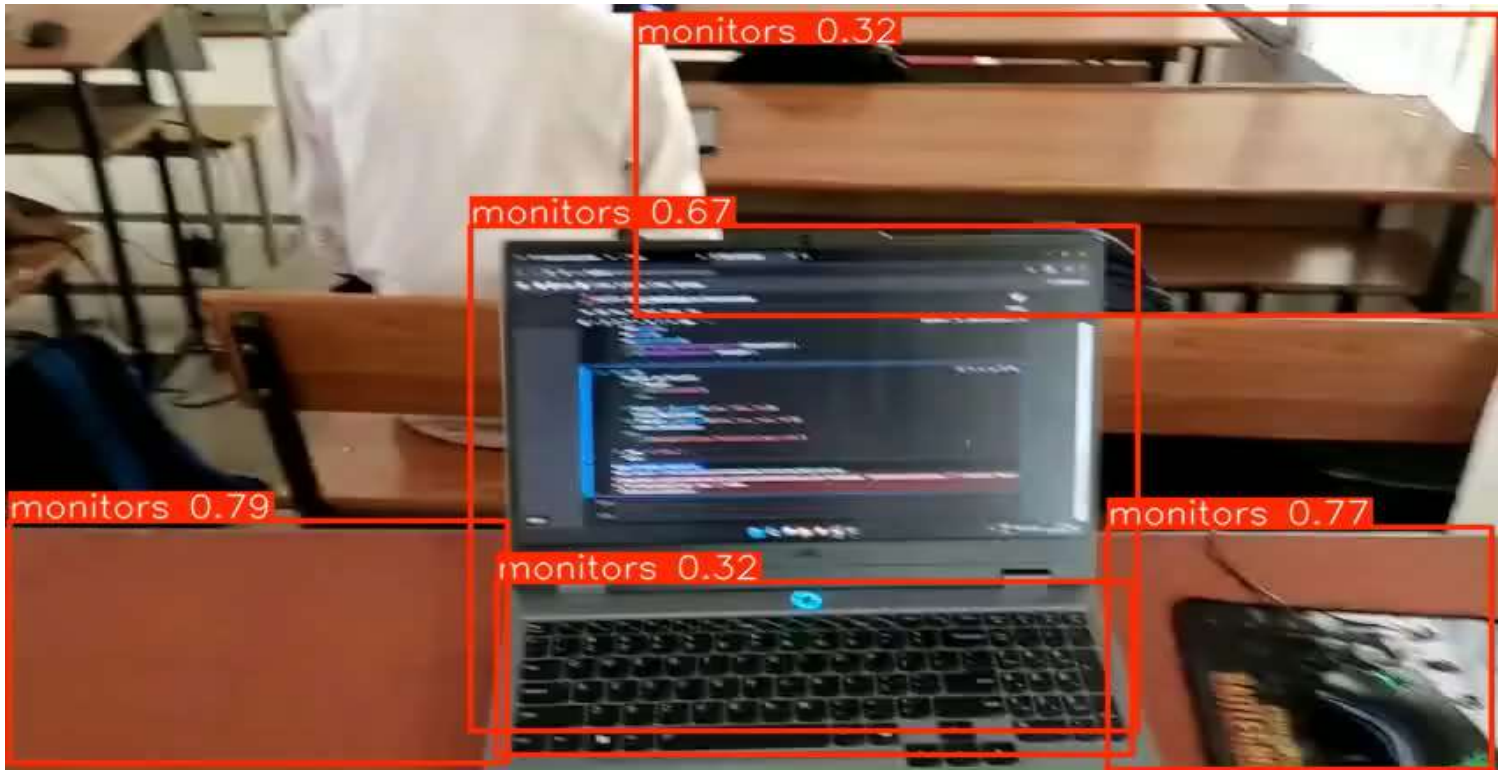
Years of Experience: A numerical field for detailing professional experience.

Evaluator Login





AI Implementation working



Ensuring Robust Security in Document Verification

Data
Encryption

Fraud
Detection

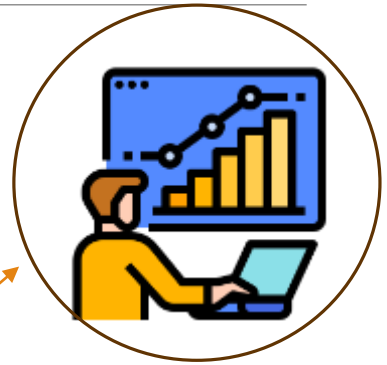
Access
Control

Audit
Trails

Real-Time Tracking: Stay Updated at every step

Instant Notifications

Evaluator Activity Monitoring

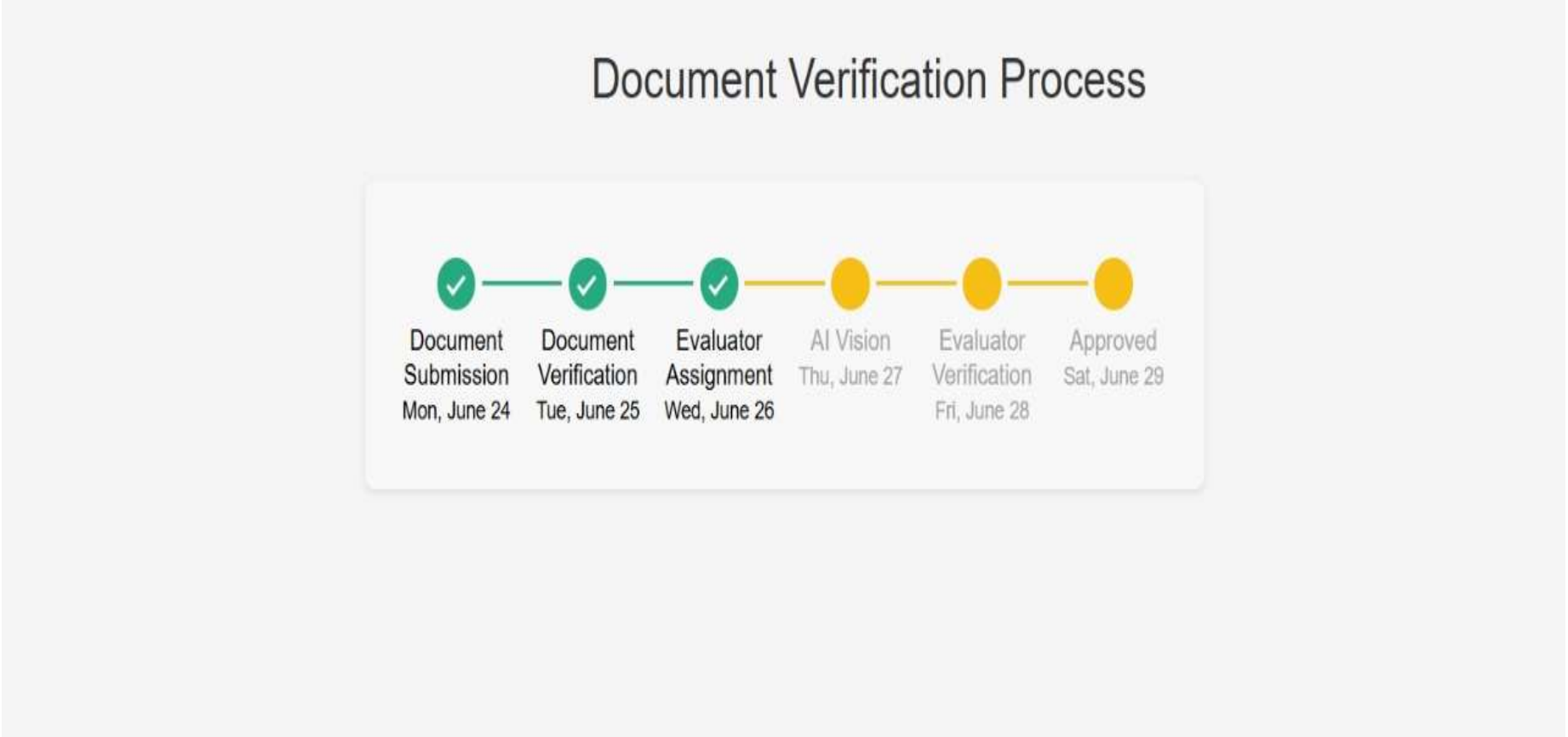


Live Status Updates

Progress Dashboard

"With real-time tracking, you're always in control of the process."

Real-Time Tracking



Technical Stack

Web Development

HTML/CSS: For creating a responsive user interface.

PHP (WAMP Server): For server-side processing and dynamic content management.

Database Management

MySQL: To store user data, application statuses, and institutional information.

AI and Machine Learning

YOLOv5: For automating document verification.

BERT: A deep learning model that understands the context of words in text by analyzing them bidirectionally.

Torch: For developing predictive models to assist in decision-making.

Image Processing

OpenCV: For processing and verifying uploaded documents.

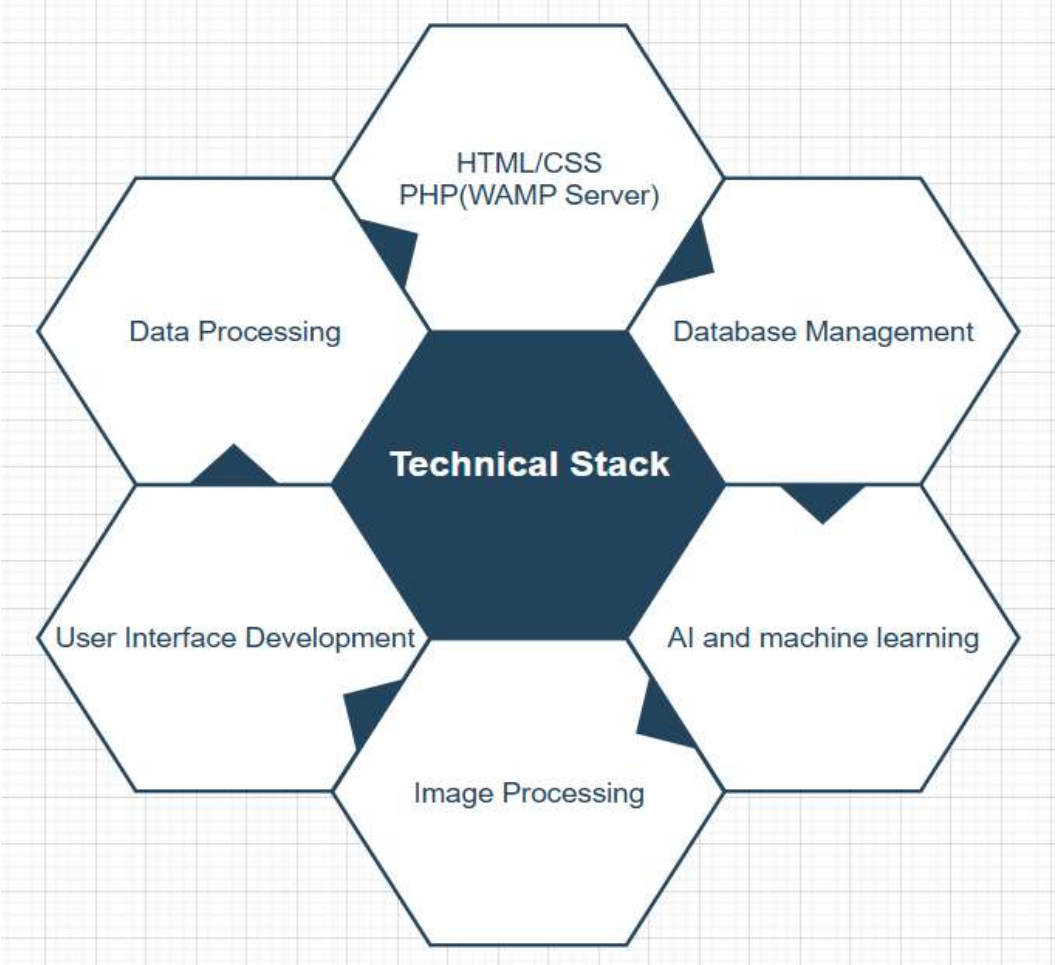
User Interface Development

Tkinter: For creating desktop applications for administrative tasks.

Data Processing

Difflib: For comparing documents and maintaining data integrity.

pdfplumber: For extracting text from PDF submissions.



Linkedin Profiles

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https:/www.linkedin.com/in/attulurisaiomkar%20%20

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https:/www.linkedin.com/in/ramya-mantena%20

https:/www.linkedin.com/in/pardha-sai-

gudivada%20%20https:/www.linkedin.com/in/naveen-lotti

Thank You

Let's work together!