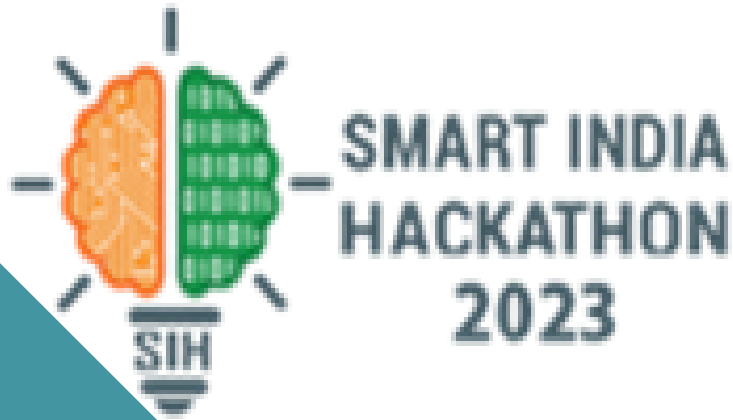


(1)



# Basic Details of the Team and Problem Statement

**Organization Name:** Ministry of AYUSH

**PS Code:** SIH1341

**Problem Statement Title:** PG Dissertation Management System

**Team Name:** Team wrenchD

**Team Leader Name:** Ishaan Minocha

**Institute Code (AISHE):** C-32870

**Institute Name:** Maharaja Agrasen Institute of Technology, Delhi.

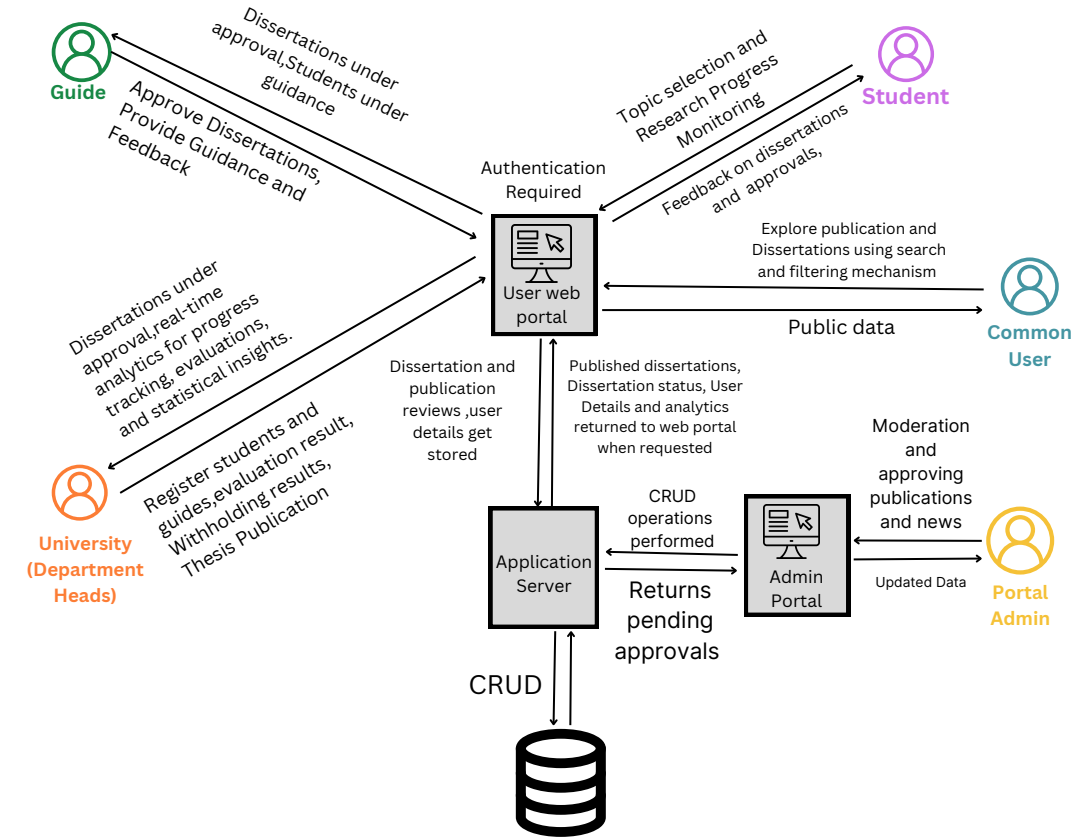
**Theme Name:** Smart Education

# (2) Idea Details:

## Idea/Solution:

- Addressing the inefficiencies of traditional PG dissertation management, using '**Anusandhaan**' an all-in-one solution, streamlining processes from **topic selection** to **approval** and dissertation **publication**.
- Enhanced Approval Process:** A customizable **plagiarism check feature** to tackle ethical issues, elevating the **quality of research**.
- Role-Based Access:** '**Anusandhaan**' provides role-based access for researchers, guides, universities, and administrators. Each user enjoys a tailored dashboard for efficient **dissertation and publication management**.
- Real-Time Progress Monitoring:** Our system offers real-time progress tracking, empowering universities, guides, and admins with **analytical dashboards**. Visualize data through graphs, charts, and metrics for actionable insights.
- Streamlined Evaluation:** Dissertation evaluation and approvals are seamlessly managed by both guides and universities, maintaining the **ideal student-guide ratio** for each institution.
- For global user around the world **content is translated into multiple languages** to make it accessible to a wider audience using **Artificial Intelligence and Machine Learning**.
- Unified Backend and Database:** Solution offers a **mutual backend and database for both the mobile app and website**, ensuring data consistency and reliability.

## Workflow:



## Technology Stack:

- Frontend:** {Tailwind CSS, React.JS}
- Backend:** {Python, Django}
- App:** {Dart, Flutter}
- Database:** {MariaDB, PostgreSQL}
- Graphics/UI:** {Canva, Figma}
- Blockchain/NFT:** {Ethereum, Solidity}
- ML/AI:** {TensorFlow, SciKit}

(3)

# Approach Details

## Use Case:

- The **'Portal Admin'** holds the authority to manage the database and register universities within the system.
- Universities can register both students and guides under them.
- Students can **select their research topics** from thrust areas of specific departments.
- University can assign guides to students as per prescribed **student-guide ratio**.
- **Students** can submit their completed dissertations for evaluation ,with access to their **dissertation evaluation results** and accompanying **feedback**.
- Users enjoy a user-friendly **search and filtering mechanism** to pinpoint dissertations based on factors such as the **medical system, category, body system, and disease**.
- Evaluators can evaluate students' dissertations using **plagiarism check tools**, referencing previous feedback, and considering approvals from guides and universities.
- For **real-time progress analysis and monitoring**, both administrators and university can access Analytics, including progress tracking, evaluations, and statistical insights.
- After evaluation, ethical checks and approvals, universities can grant approval for **dissertation publication**.
- In cases of disapproved dissertations, universities can **withhold the PG student's result**.

## Show Stopper/Dependencies:

### Show Stopper:

- 3rd party plagiarism check tool.
- Integration with Existing Systems with existing university systems and databases i.e. data migration.

### Dependencies :

- Accessibility of dissertations for plagiarism check from the existing research ayush portal.
- External python libraries such as SciKit, PyPDF2, etc.

# Team Member Details

**Team Leader Name:** Ishaan Minocha

Branch: B.Tech

Stream: CSE

Year: 2nd

**Team Member 1 Name:** Aman

Branch: B.Tech

Stream: CSE

Year: 2nd

**Team Member 2 Name:** Anisha Dua

Branch: B.Tech

Stream: AIML

Year: 2nd

**Team Member 3 Name:** Chanmeet Singh Sahni

Branch: B.Tech

Stream: CSE

Year: 2nd

**Team Member 4 Name:** Haaris Huda

Branch: B.Tech

Stream: CSE

Year: 2nd

**Team Member 5 Name:** Tarang Tyagi

Branch: B.Tech

Stream: CSE

Year: 2nd

**Team Mentor 1 Name:** Mr. Alok Kumar

Category: Academic

Expertise: Computer Networking

Domain Experience (in years): 15