FYP Navigator

•Introduction to FYP Navigator, a collaborative project platform designed to streamline the final year project (FYP) process.

•Aims to address challenges in project selection, team formation, and collaboration faced by students and supervisors in academia.

Problem Statement

Inefficiencies in Traditional Processes:

 - Manual coordination methods contribute to inefficiencies in FYP selection and collaboration.

 - Duplication of project concepts and challenges in aligning individuals with similar interests and skills are common issues.

Lack of Centralized Platform:

 - Absence of a centralized platform for FYP proposal submission and evaluation creates obstacles for students and supervisors.

 - This absence hinders the seamless selection and approval of projects, leading to delays and missed opportunities.

Need for Innovation:

 - There is a pressing need for an innovative web application to streamline the FYP collaboration process.

 - Such a platform should facilitate meaningful connections between students and empower supervisors to efficiently assess and endorse project proposals.

Project Objectives

1 Streamline FYP Process

Provide a comprehensive, step-by-step guide guide to navigating the FYP journey.

2 Enhance Collaboration

Foster a collaborative environment for students, supervisors, and coordinators .

3 Improve Resource Access

Consolidate and curate valuable platform. platform.

4 Boost Productivity

Optimize workflows, reduce bottlenecks, and and enhance overall FYP efficiency.

Technical Approach

Frontend

Develop a modern, user-friendly friendly web application with a with a focus on intuitive navigation and seamless user user experience.

Backend

Implement a robust server-side infrastructure to handle data management, workflow orchestration, and integration with various FYP-related systems.

Database

Design a scalable and secure secure database to store project project name , user information. information.
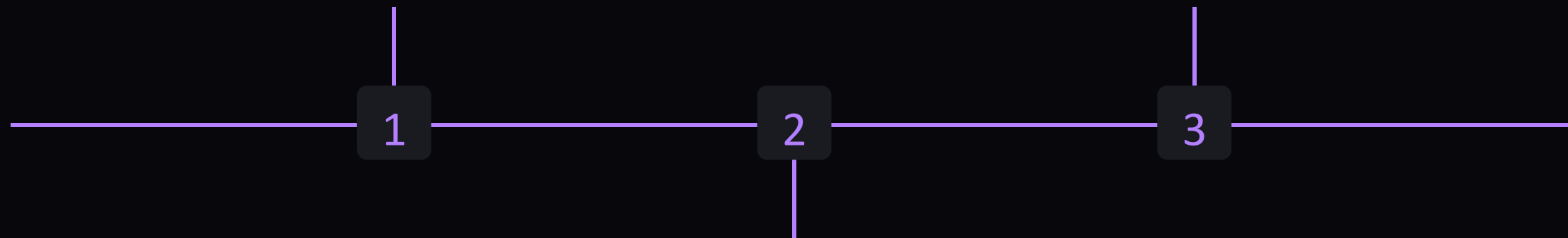
System Architecture

Client-Server Architecture

The FYP Navigator will follow a client-server model, with the frontend web application communicating with a powerful backend server.

Local server Infrastructure

The system will leverage local host services for for hosting, storage, and other infrastructure-infrastructure-related requirements, ensuring ensuring reliability and scalability.

1 **2** **3**

Microservices

The backend will be built using a microservices microservices architecture, allowing for scalability, scalability, modularity, and independence of of individual components.

Code Walkthrough

User Interface

The frontend codebase encompasses modern modern web development frameworks and libraries, such as React, to deliver a responsive responsive and engaging user interface.

Backend Services

The backend services are built using a robust framework of flask, workflow management, and integration with external systems.

Database Integration

The data layer utilizes a scalable database solution, such as postgress SQL, to store and and retrieve information efficiently.

Deployment and Hosting

The codebase is designed for seamless deployment and hosting on local host, ensuring ensuring high availability and easy scalability. scalability.

Key Features

User registration and authentication authentication

Registers user and when they login authenticates their credentials

Session management

Project runs smoothly smoothly

Project registration

Student users register register their project for for approval.

Project approval and rejection

Coordinators reject or or approve the projects projects that are registered by students. students.

Conclusion and Next Steps

Launch and Deployment

1

The FYP Navigator will be launched as a pilot program, with plans for a wider rollout wider rollout based on user feedback and performance metrics.

Continuous Improvement

2

The system will undergo regular updates and enhancements to incorporate new incorporate new features, optimize workflows and adding more accessibility for accessibility for users such as administrators and coordinators.

Expansion and Scalability

3

The long-term vision is to expand the FYP Navigator to support whole university university ecosystem, becoming a comprehensive platform for student project project management.