Fundamentals of System Engineering Project Abstract

StudyNotion Edtech Platform

In the contemporary era, online education platforms have revolutionized the way knowledge is disseminated and acquired. In line with this trend, our project, titled "StudyNotion," presents a Full Stack MERN (MongoDB, Express, React, Node.js) application tailored for both instructors and students. With a focus on API creation and testing using Postman, StudyNotion facilitates seamless interaction between instructors and students, ensuring a robust educational experience.

For instructors, StudyNotion offers a comprehensive suite of functionalities:

- 1. <u>Sign Up</u>: Instructors can easily register for an account, providing necessary details.
- 2. <u>Course Creation</u>: Upon registration, instructors are empowered to craft and curate their courses, incorporating diverse content formats such as videos and text.
- 3. <u>Course Publication</u>: With StudyNotion, instructors can effortlessly publish their courses, making them accessible for students to purchase and engage with.

Similarly, students benefit from an array of features designed to enhance their learning journey:

- 1. <u>Registration</u>: Students can swiftly create their accounts, furnishing requisite information.
- 2. <u>Course Exploration</u>: Once logged in, students gain access to a plethora of courses offered by various instructors, enabling them to explore diverse subjects and topics.
- 3. <u>Course Purchase</u>: StudyNotion enables students to seamlessly select and purchase courses aligned with their interests and educational objectives.
- 4. <u>Content Accessibility</u>: Upon course purchase, students can readily access course content, including video lectures and supplementary reading materials, ensuring an enriching learning experience.

At the heart of our project lies the exploration of API creation and testing. By leveraging tools like PostmanAPI (We will give demonstration of Postman API tool also), we demonstrate the seamless functionality of APIs, ensuring they deliver accurate responses and meet the platform's requirements effectively. Moreover, StudyNotion emphasizes robust authentication mechanisms, efficient course management, and streamlined content access to foster an immersive and engaging educational ecosystem.

In essence, StudyNotion emerges as a dynamic and intuitive ed-tech platform, poised to revolutionize online education. By providing a platform for instructors to showcase their expertise and enabling students to access a diverse array of educational resources, StudyNotion embodies the ethos of modern education paradigms. In the subsequent sections, we delve deeper into the technical intricacies of StudyNotion, elucidating its features and functionalities to offer a comprehensive understanding of its capabilities.

Submitted by-

-Anukalp Bhardwaj