

Mini Project Abstract

Course: Create Your First Web App with Python and Flask

I have developed a web application titled "StudyBuddy: Personalized Learning Companion" as part of my mini project. This project is designed to assist students in accessing tailored learning resources based on their academic needs, interests, and learning pace. Users can input a topic or subject they struggle with, and the app returns simplified YouTube videos and downloadable PDFs related to that topic.

The project was developed using Python and the Flask framework, following the Coursera course. It includes a user-friendly interface with intuitive forms and navigation. The frontend uses HTML and CSS templates connected to Flask routes. The backend processes user input and fetches or recommends relevant learning materials.

Key features of the application include:

- A homepage introducing the app's purpose.
- A topic input form to help personalize resource suggestions.
- A result page displaying curated videos and downloadable notes.
- An 'About Us' and 'Contact Us' section for additional support.

This project enhanced my understanding of core Flask concepts like routing, Jinja2 templating, form handling, and integrating front-end design with backend logic. It also helped me apply these skills to create a useful tool for personalized learning.

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