Tech Stack

Mindstack is a web-based learning application designed to make studying more effective and engaging. It provides students with interactive tools such as a Flashcard Builder, Custom Quiz Creation, Progress Tracking, a Student Dashboard, and a News Feed. Selecting the right technologies ensures a smooth, secure, and scalable system that enhances the overall learning experience.

Frontend Technologies

HTML: Defines the structure of web pages.

CSS/SCSS: Styles and enhances the visual layout of the application.

Typescript/Javascript: Provides interactivity and dynamic behavior.

Angular: A modern framework for building responsive and modular web applications.

Bootstrap: Used for responsive design and pre-styled UI components.

Backend Technologies

PHP: a server-side scripting language used in web-based applications to dynamically generate and manage content, interact with databases, and handle server logic.

MySQL: Serves as the primary relational database for storing user data, flashcards, quizzes, and progress tracking.

Development Tools and Environment

Visual Studio Code: The main code editor for writing and debugging the project.

XAMPP: Initially used for local MySQL database setup during early development.

GitHub: Used for version control and team collaboration during development.

Deployment and Hosting

Hostinger: A web hosting platform that supports Python and MySQL-based web applications. Provides stable and cost-effective hosting for PHP-based web applications.