VirtuLearn- EdTech Platform

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VirtuLearn is an Educational Technology platform aimed at revolutionizing online education. It provides a seamless and interactive learning experience for students while offering instructors a platform to showcase their expertise.

Functionality of Application:

VirtuLearn caters to three main types of users:

Students: They can browse a vast library of courses, enroll in courses of interest, consume engaging content, track their progress, and provide ratings and reviews for courses.

Instructors: They have the ability to create and manage their online courses, upload various content types like videos, images, and text, and track earning and student details from their instructor dashboard.

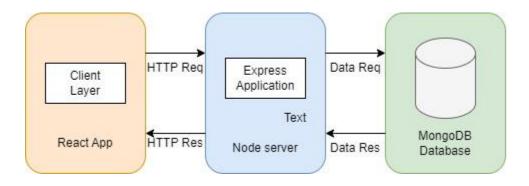
Admin: Administrators have full control over the platform. They can create, edit, or delete user accounts as needed, access and manage all courses and content, and create new course categories based on demand.

Technology Stack:

MERN Stack: MongoDB, Express.js, React.js, Node.js.

Architecture:

Virtulearn Follows a monolithic client-server-based Architecture.

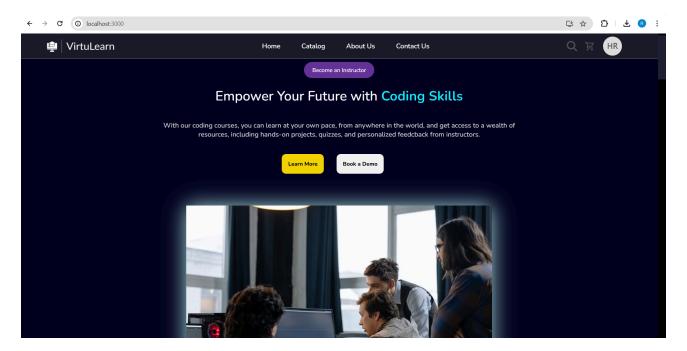


As shown in above figure client is User interface(Frontend) of application. Students, Instructor and Admin can interact with Client. Client send HTTP request to middle layer for handling some process or logic. Middle layer can interact and request data from MongoDB Database and provide the HTTP response back to the client.

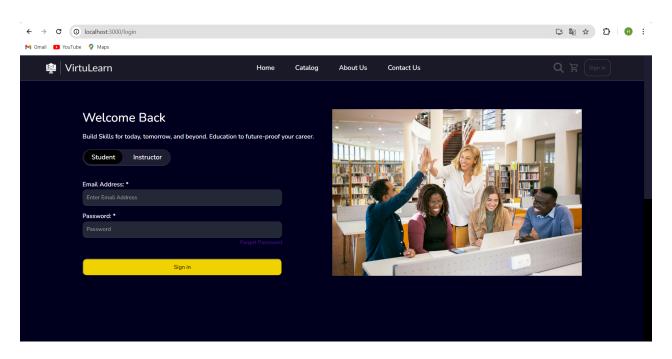
• GitHub Repo Link: <u>VirtuLearn-EdTechplatform</u>

Some Implementation snapshot

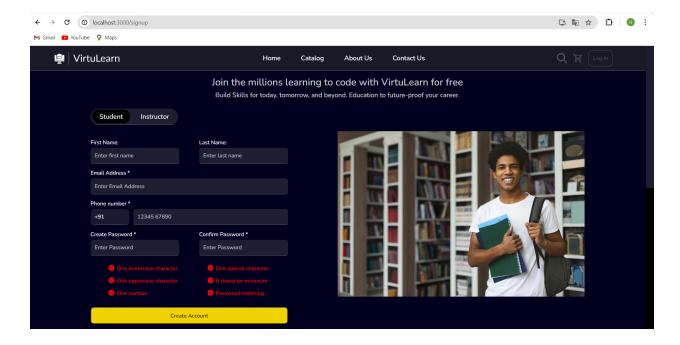
1) Homepage: The VirtuLearn homepage welcomes users with highlighting essential features and navigation options to kickstart their learning journey.



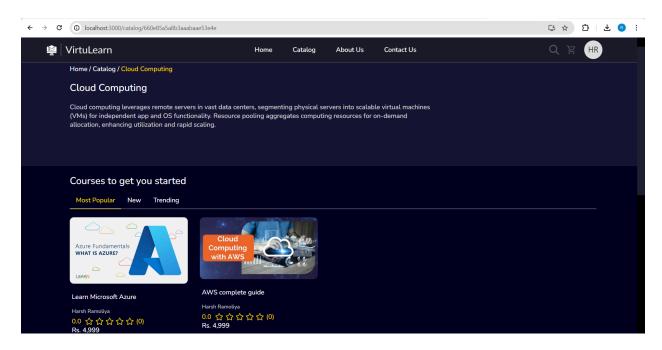
2) Login: Instructors and Students Can Login to the platform for accessing features of VirtuLearn.



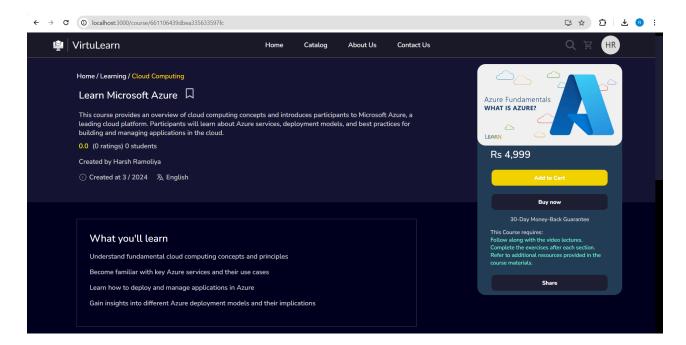
3) Signup: New users can register for VirtuLearn through signup page, where they can input necessary details to set up their accounts and get started.



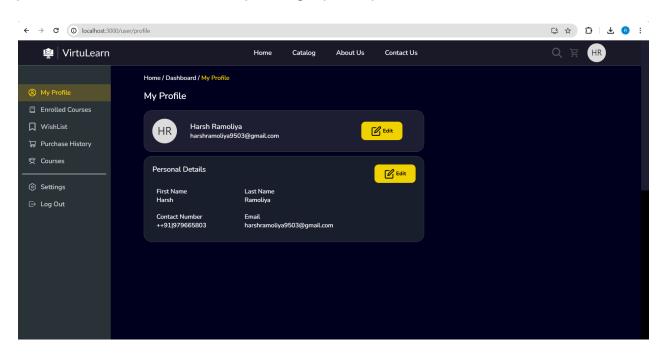
4) Course Catalog: The course catalog displays courses from specific categories, enabling users to explore and select from a curated list of learning opportunities tailored to their interests and objectives.



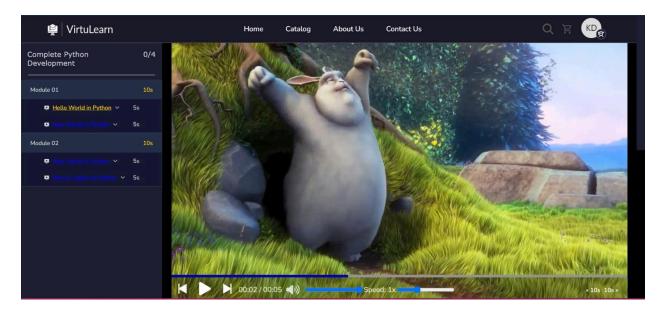
5) Course Details: When users choose a course, they can see detailed info about what they'll learn, Course content, Price, Reviews, who's teaching it, and if there are any requirements they need to meet before joining.



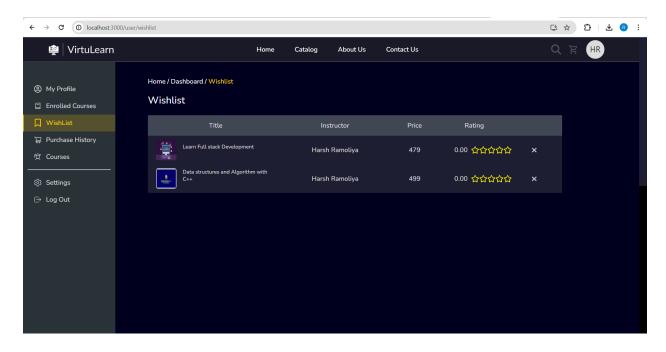
6) Students Profile: Students can personalize their profiles by editing their personal information and even uploading a profile picture



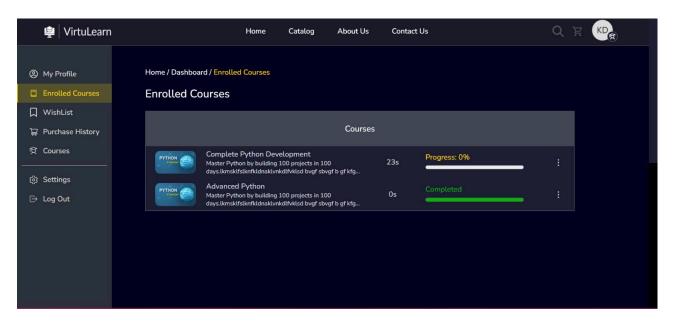
7) Course Learning: The course learning page presents a user-friendly sidebar, offering organized sections and lectures for easy navigation. Users can access video content directly related to the selected lecture, enhancing their understanding of the course material.



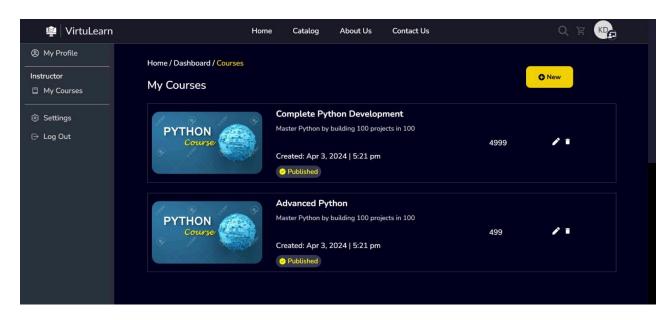
8) Students Course wishlist: Students have the option to curate their wishlist, keeping track of courses they're interested in or plan to enroll in the future, making their learning journey more organized and personalized.



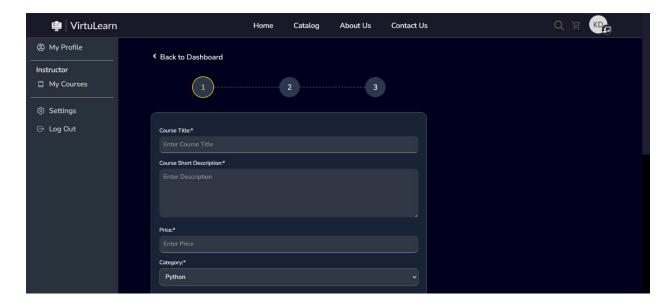
9) Students Enrolled courses: Enrolled Courses showcases the courses that students have registered for, also displays the progress of course.



10)Instructor profile: The instructor profile includes functionalities for managing courses. Instructors can create new courses from their profile, access existing courses they've created, and have the option to edit or delete them as needed.



11) Course builder for instructor: The course builder is designed so that instructors can input key details and create new course.



12)Add lectures to course: In addition to course details, the course builder allows instructors to Create sections and upload lectures to their course.

