

# 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.

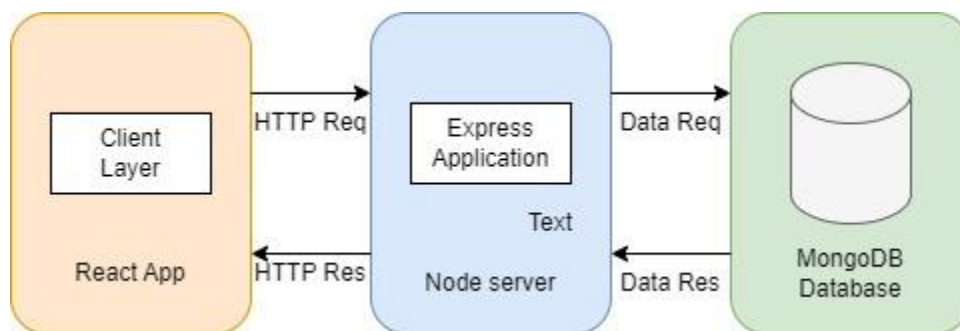
**Admin:** Administrators have full control over the platform. They can create, edit, or delete user accounts as needed, access and manage all courses and content, and create new course categories based on demand.

## Technology Stack:

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

## Architecture:

Virtulearn Follows a monolithic client-server-based Architecture.

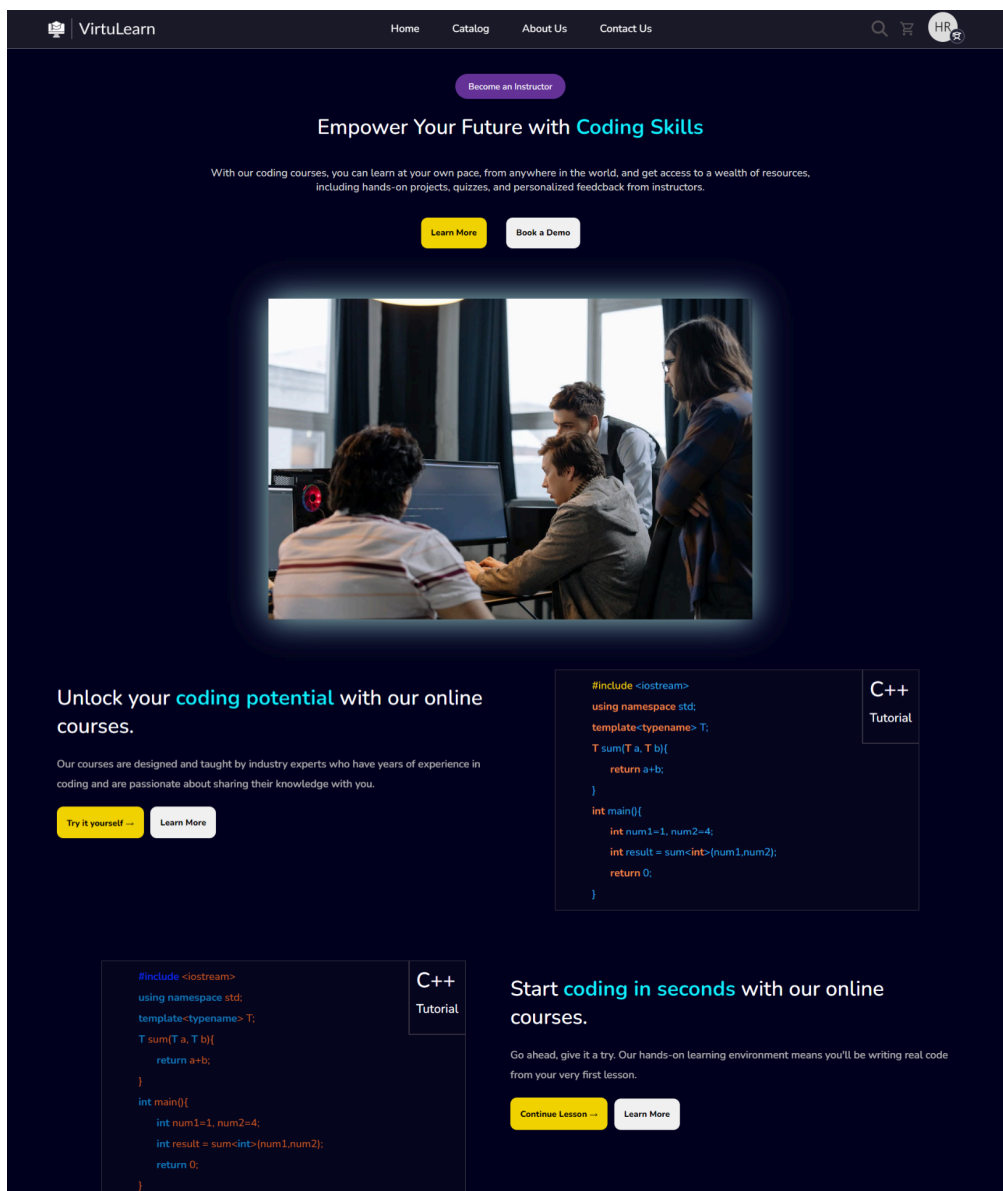


As shown in above figure client is User interface(Frontend) of application. Students, Instructor and Admin can interact with Client. Client send HTTP request to middle layer for handling some process or logic. Middle layer can interact and request data from MongoDB Database and provide the HTTP response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

- **GitHub Repo Link:** [VirtuLearn-EdTechplatform](#)

## 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.

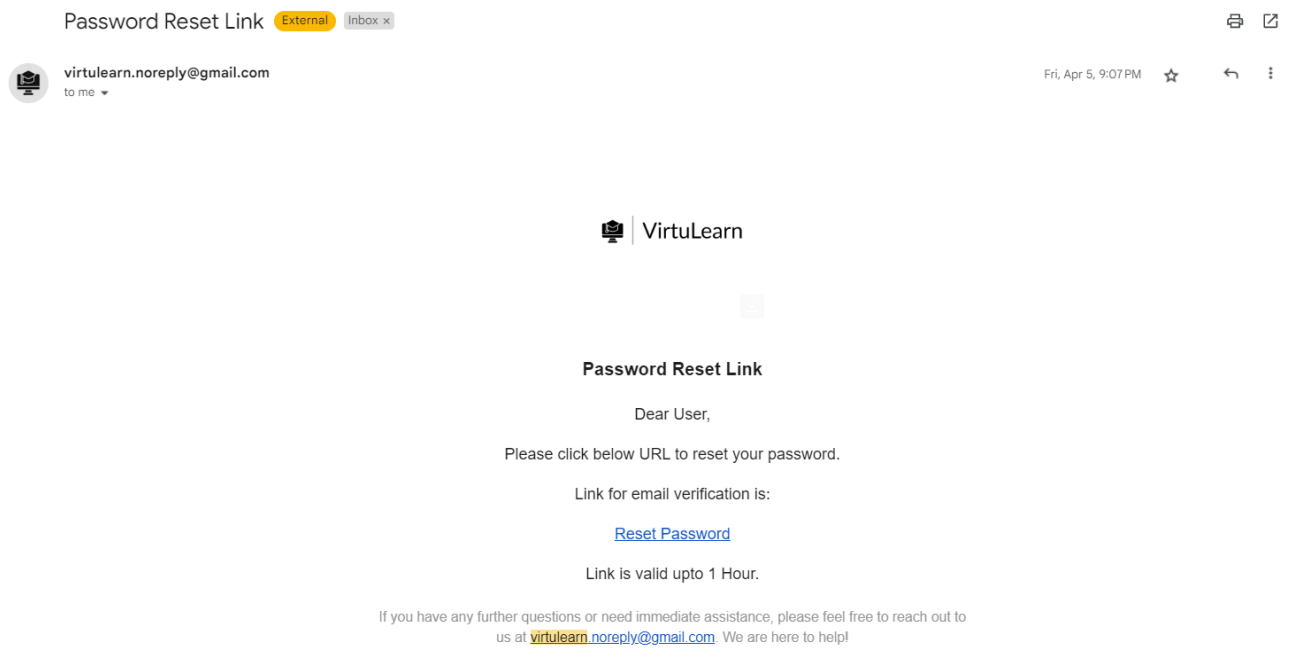
The screenshot shows the login page of the VirtuLearn platform. The browser address bar displays 'localhost:3000/login'. The page features a dark blue header with the VirtuLearn logo and navigation links: Home, Catalog, About Us, and Contact Us. A search bar and a 'Sign In' button are also present. The main content area has a 'Welcome Back' heading and the tagline 'Build Skills for today, tomorrow, and beyond. Education to future-proof your career.' Below this, there are two tabs: 'Student' and 'Instructor'. The login form includes fields for 'Email Address' and 'Password', both marked with an asterisk. A 'Forgot Password' link is located next to the password field. A yellow 'Sign in' button is at the bottom of the form. To the right of the form is a photograph of a group of diverse students and an instructor in a library setting, with one student giving a high-five to the instructor.

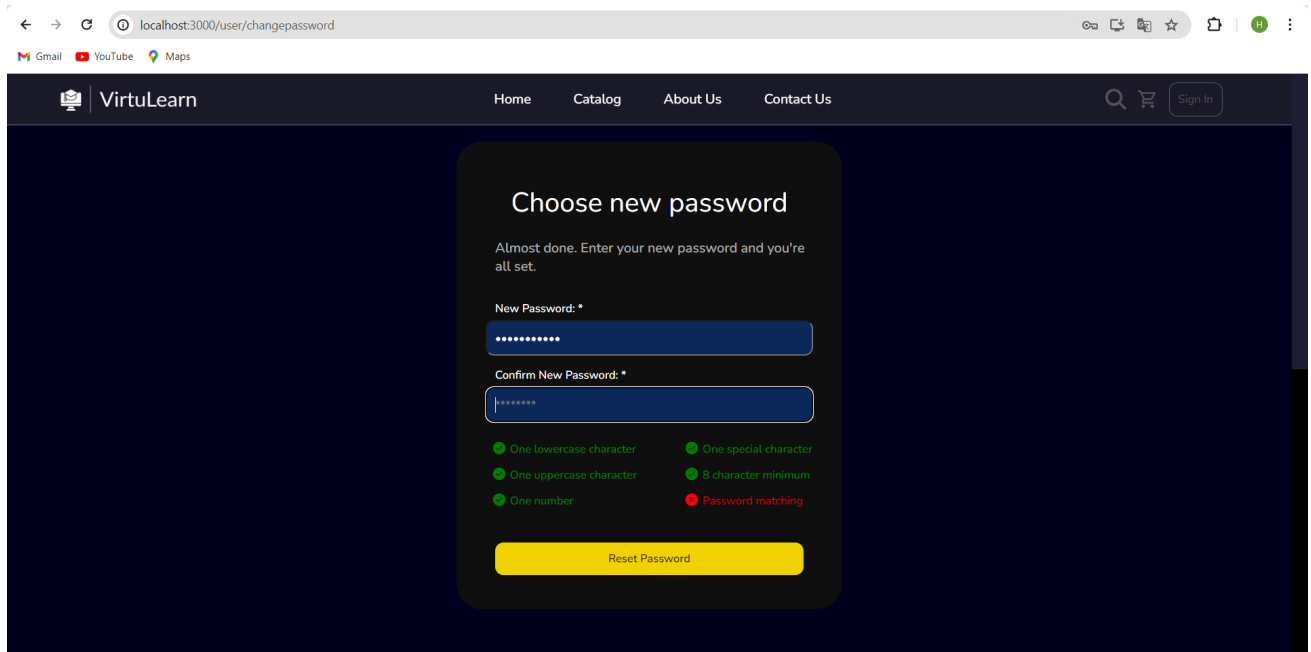
- 3) **Signup** : New users can register for VirtuLearn through signup page, where they can input necessary details to set up their accounts and get started.

The screenshot shows the signup page of the VirtuLearn platform. The browser address bar displays 'localhost:3000/signup'. The page features a dark blue header with the VirtuLearn logo and navigation links: Home, Catalog, About Us, and Contact Us. A search bar and a 'Log In' button are also present. The main content area has a heading 'Join the millions learning to code with VirtuLearn for free' and the tagline 'Build Skills for today, tomorrow, and beyond. Education to future-proof your career.' Below this, there are two tabs: 'Student' and 'Instructor'. The signup form includes fields for 'First Name', 'Last Name', 'Email Address', and 'Phone number', all marked with an asterisk. The 'Phone number' field has a dropdown menu showing '+91' and a text input showing '12345 67890'. There are also fields for 'Create Password' and 'Confirm Password', both marked with an asterisk. Below these fields, there are four red error messages: 'One lowercase character', 'One uppercase character', 'One number', and 'One special character'. There are also two red error messages: '8 character minimum' and 'Password matching'. A yellow 'Create Account' button is at the bottom of the form. To the right of the form is a photograph of a young man with curly hair, wearing a white t-shirt and a backpack, holding two blue folders, standing in a library.

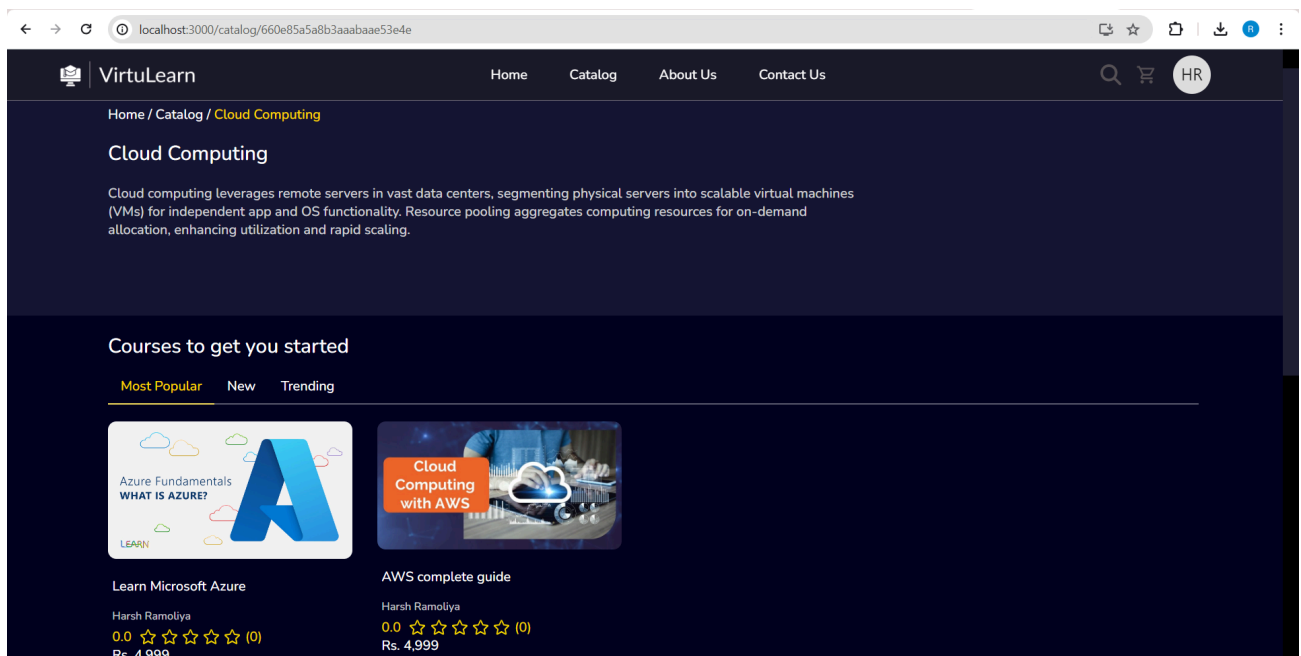
- 4) **Reset Password:** If a user forgets their password, we have added a feature to reset their password. We will send a Password reset link to the user's email ID.

The screenshot shows a web browser at localhost:3000/forgetpassword. The VirtueLearn website has a dark blue header with navigation links: Home, Catalog, About Us, and Contact Us. A search icon, a shopping cart icon, and a 'Sign In' button are on the right. The main content area is a dark blue card with the title 'Reset your password'. Below the title, it says: 'Have no fear. We'll email you instructions to reset your password. If you don't have access to your email we can try account recovery'. There is a text input field for 'Email Address: \*' containing 'harshramoliya9503@gmail.com'. Below the input is a yellow 'Sign in' button. At the bottom of the card is a link '← Back to Login'.

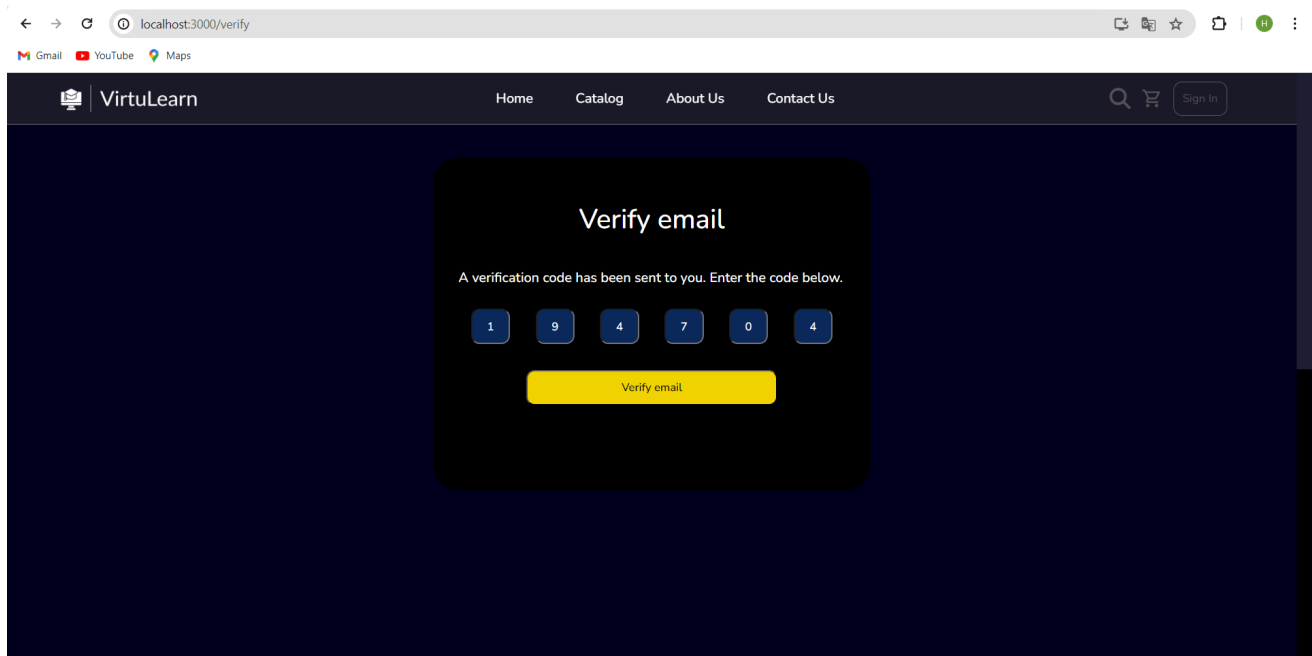
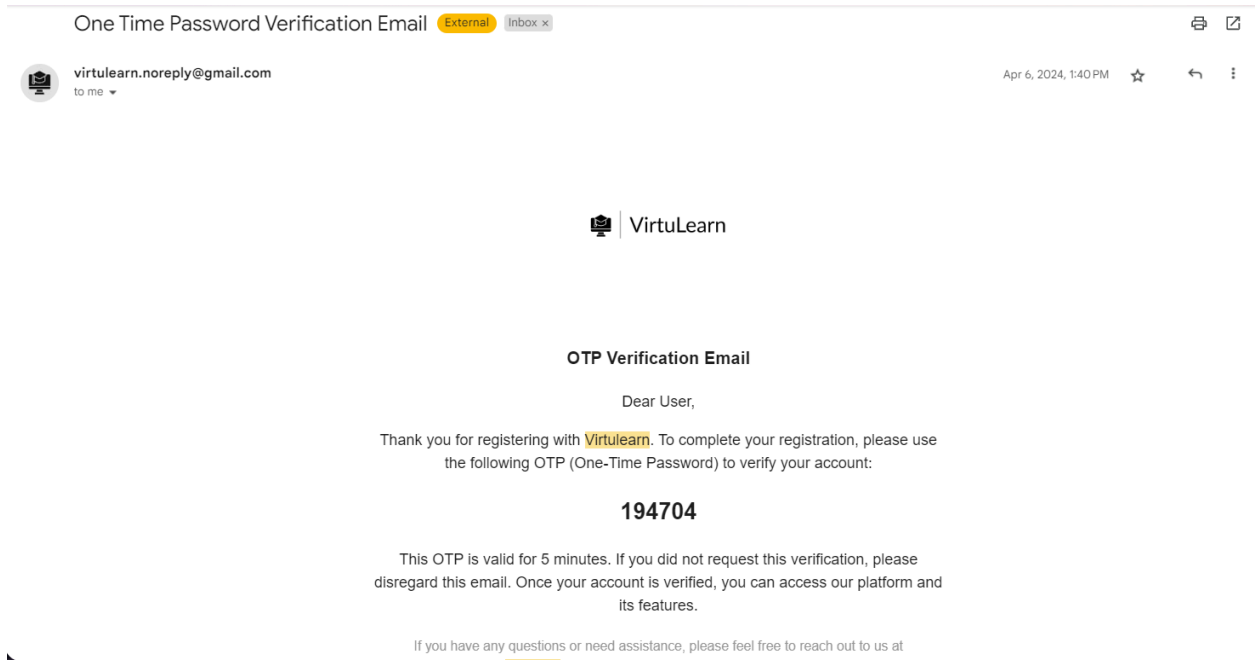




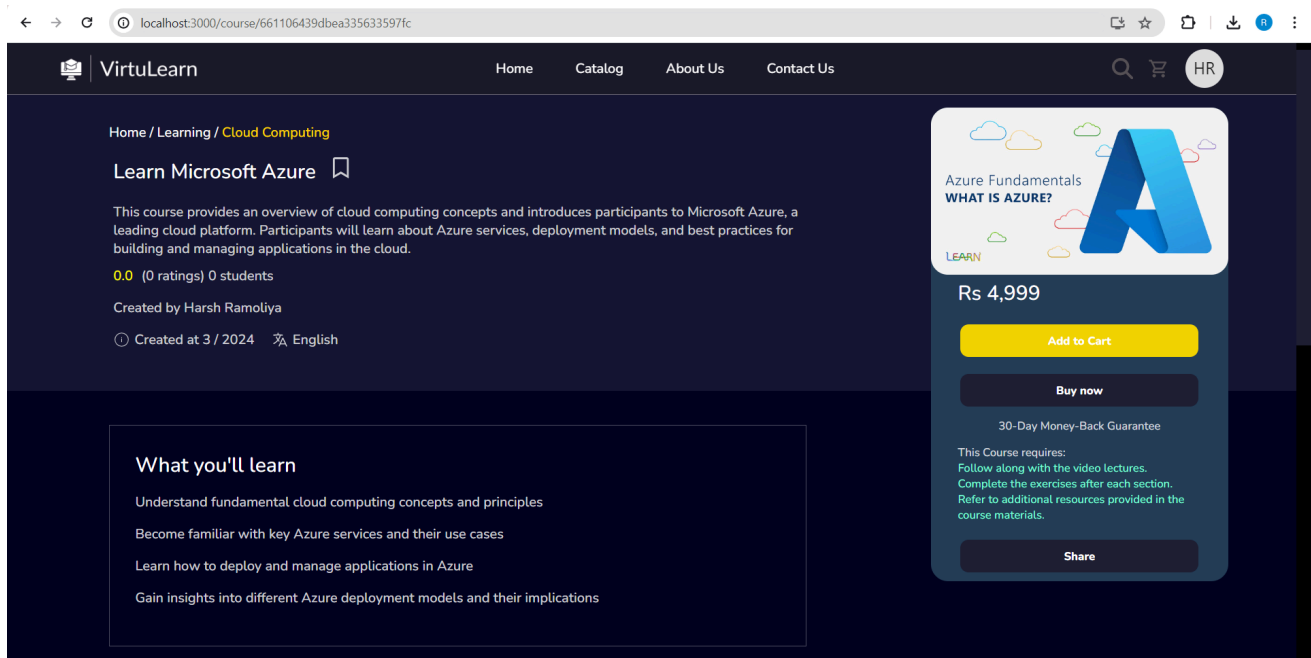
- 5) **Course Catalog** : The course catalog displays courses from specific categories, enabling users to explore and select from a curated list of learning opportunities tailored to their interests and objectives.



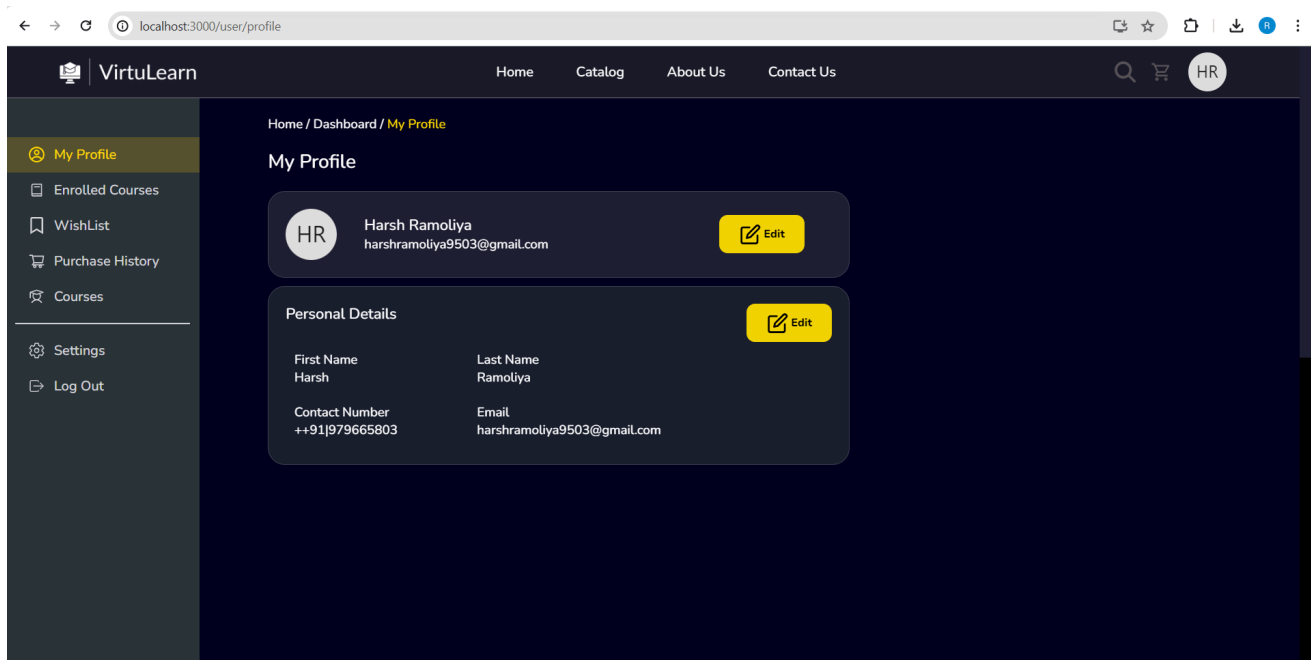
- 6) **OTP Verification For Signup:** Whenever new user sign up for the first time, we send a time password to their email address and verify. This reduces the risk of unauthorized access to the platform.



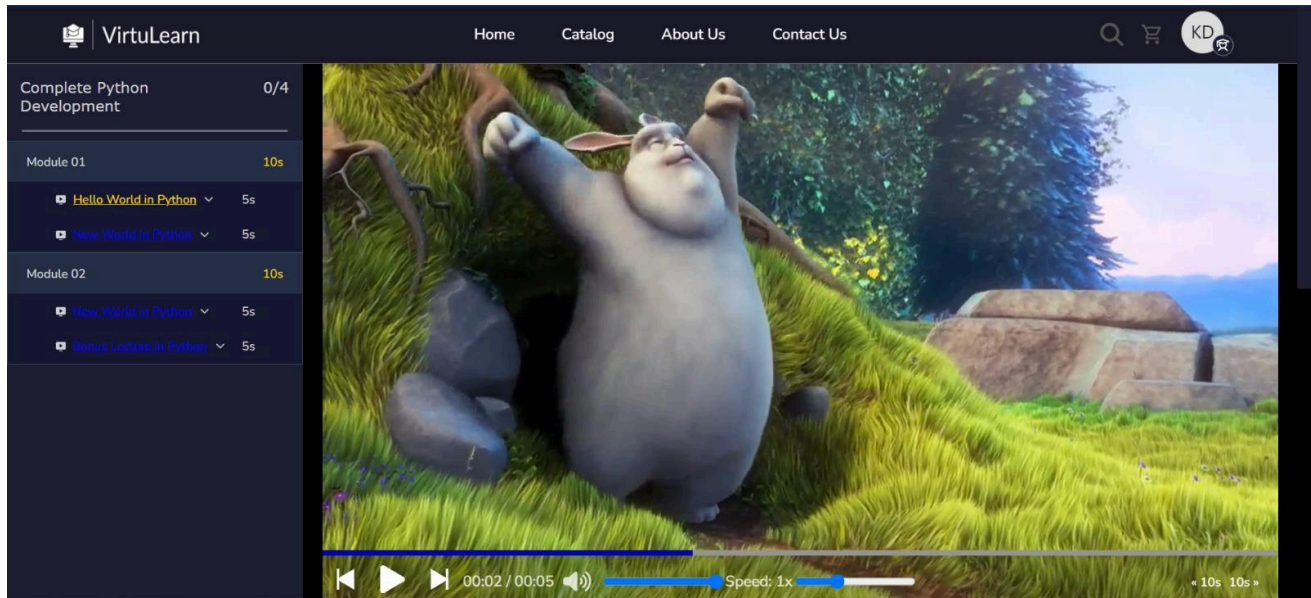
- 7) **Course Details:** When users choose a course, they can see detailed info about what they'll learn, Course content, Price, Reviews, who's teaching it, and if there are any requirements they need to meet before joining.



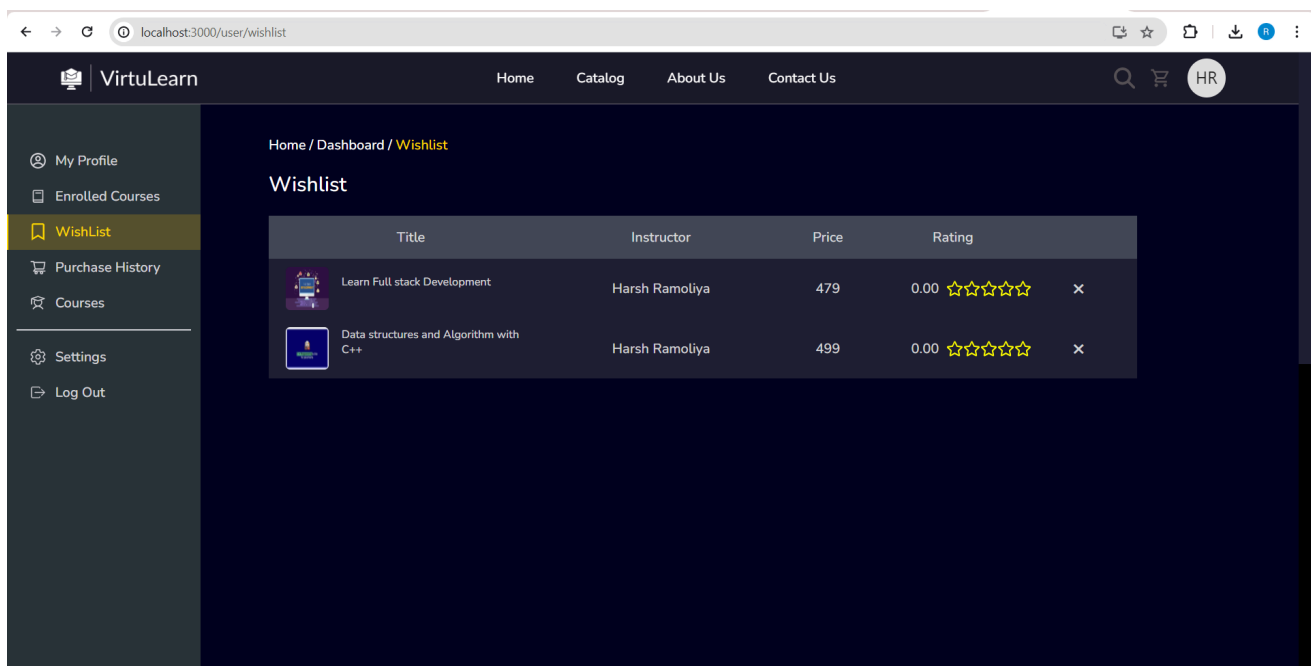
- 8) **Students Profile :** Students can personalize their profiles by editing their personal information and even uploading a profile picture



- 9) **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.

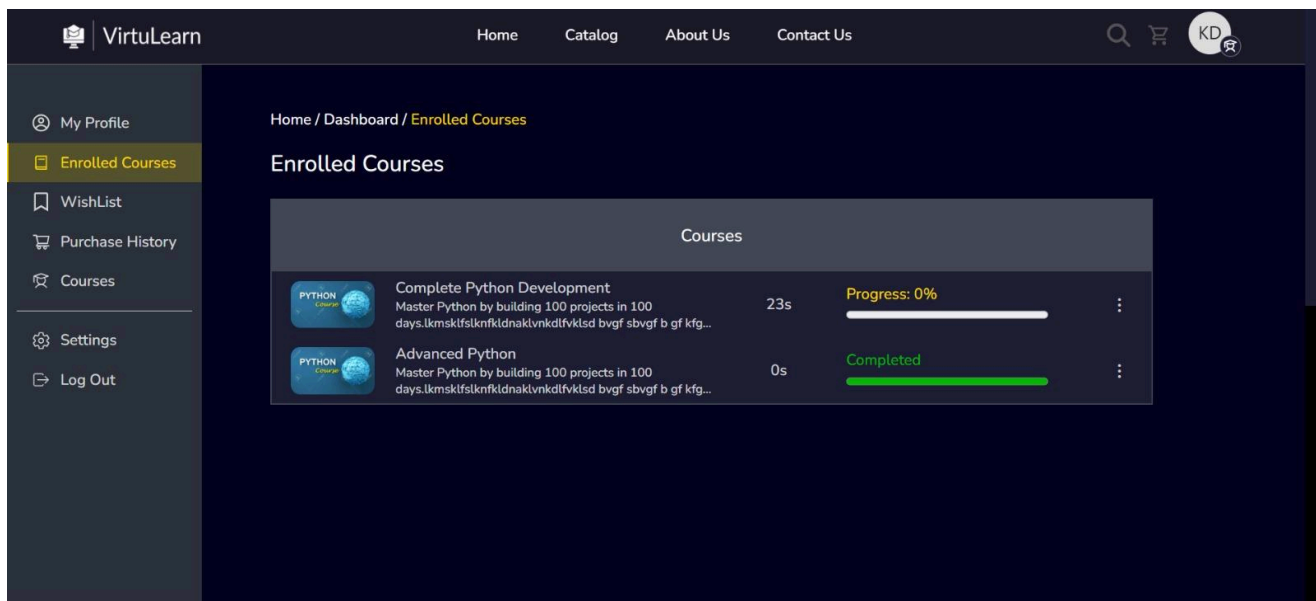


- 10) **Students Course wishlist:** Students have the option to curate their wishlist, keeping track of courses they're interested in or plan to enroll in the future, making their learning journey more organized and personalized.





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



**12) 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.



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

The screenshot shows the VirtuLearn course builder interface. The top navigation bar includes the VirtuLearn logo, Home, Catalog, About Us, and Contact Us links, along with search, shopping cart, and user profile icons. The left sidebar contains links for My Profile, Instructor, My Courses, Settings, and Log Out. The main content area features a 'Back to Dashboard' link and a progress indicator with three steps: 1 (highlighted), 2, and 3. The form for step 1 includes fields for Course Title, Course Short Description, Price, and Category (with 'Python' selected).

VirtuLearn

Home Catalog About Us Contact Us

My Profile

Instructor

My Courses

Settings

Log Out

Back to Dashboard

1 2 3

Course Title:\*

Enter Course Title

Course Short Description:\*

Enter Description

Price:\*

Enter Price

Category:\*

Python

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

The screenshot shows the VirtuLearn course builder interface with the 'Add Lecture' modal open. The top navigation bar and left sidebar are the same as in the previous screenshot. The main content area shows a 'Back to Dashboard' link and a progress indicator with a yellow checkmark in the first step. The 'Course Builder' section shows 'Module 01' and an 'Add Lecture' button. The 'Add Lecture' modal includes a video upload area with a cloud icon and text: 'Drag and drop a video, or Click Here. Max: 120MB. Aspect ratio 16:9 Recommended size 1024x576'. It also has fields for Lecture Title and Lecture Description, and an 'Add' button.

VirtuLearn

Home Catalog About Us Contact Us

My Profile

Instructor

My Courses

Settings

Log Out

Back to Dashboard

Course Builder

Module 01

+ Add Lecture

Add a section to build your course

Add Section

Lecture Video:\*

Drag and drop a video, or Click Here. Max: 120MB. Aspect ratio 16:9 Recommended size 1024x576

Lecture Title: \*

Enter Lecture Title

Lecture Description: \*

Enter Description

Add