

Functional Requirements of Virtual Classroom Application

Objective

The main functional objectives of the virtual classroom are to create and offer courses, enroll students in offered courses, provide a platform to present and discuss materials related to a particular course, store course materials online such that they are easily accessible, and providing the tools necessary for student evaluation and feedback. The major functional requirements for the Virtual Classroom system are discussed in the following paragraphs. The most basic of functionalities of a virtual classroom is to maintain an identity of a user. This involves adding a new profile and modifying it later. The profile may also be archived if the user becomes dormant however, from a security point of view, deleting a user profile should not be allowed. Creating and modifying an existing profile should be allowed by all users however, archiving it should only be allowed for the administrator. The users' profiles may be of students or instructors.

Features Supported in Application

Dashboard

1. Login

For admin

1. Register, view, edit, delete teachers
2. Change password

For teacher

1. Register, view, edit, delete students
2. Change password
3. Upload course materials
4. Upload/View scores
5. Upload/View attendance
6. View/enter feedback
7. View student certificate

For students

1. Change password
2. View course material
3. View attendance
4. View score
5. Upload internship certificates
6. View/enter feedback



Login

The initial dashboard consists of a login page, where the admin, student or teacher can select their roles and log into their respective dashboards using their username and password.

Admin

Once logged in, the admin can register, view, delete and update teachers

Teachers

Once logged in, teachers can change their password and update their profile. Registration of students is done by the teachers for their respective classrooms. In their dashboard, teachers can upload student attendance details, course materials and student internal and external scores. Teachers can also upload regular assignments.

Students

Once logged in, students can change their password. In their dashboard, students can view their attendance, view their scores, view course material and update their profile. Students can also upload internship certificates and enter feedback. Students can answer assignments.



Features for Teacher:

Login > Dashboard > Create a Classroom

AND

Login > Dashboard > Delete a Classroom

AND

Login > Dashboard > Manage Classroom Participants

AND

Login > Dashboard > Share Materials/Resource

On the dashboard Teachers should be able to access analytics and reports to monitor student engagement, progress, and performance within the virtual classroom. These functional requirements outline the key features and capabilities that teachers should have in a virtual classroom project.

Field Name Description

Create a Classroom	Allows the Teacher to create a virtual classroom
Delete Classroom	Allows the Teacher to delete a virtual classroom
Manage Classroom Participants	Allows the Teacher to manage their virtual classrooms
Share Materials	Allows the Teacher to share materials in virtual classroom



Teacher Interactions:

1. Teachers can **create a classroom** by providing details such as the classroom name, subject, schedule, and access permissions. This interaction allows teachers to set up the foundation of the virtual classroom.
2. The **Delete Classroom** interaction allows teachers to manage their virtual classrooms effectively, removing any classrooms that are no longer needed or have completed their course duration.
3. Teachers have the ability to **manage classrooms**, including modifying classroom settings, updating information, and adjusting access controls. They can configure options such as participant roles, privacy settings, and communication preferences.
4. Teachers can upload and **Share course materials** such as lecture slides, documents, videos, and other resources. These materials provide students with the necessary information and resources to support their learning.

Click **[Back to Dashboard](#)** to navigate back to the dashboard

Features for Students:

Signup/Login > User Login

AND

Signup/Login > Dashboard > Classroom > Accessing Course Materials

AND

Signup/Login > Dashboard > Classroom > Participating in Live Sessions

AND

Signup/Login > Dashboard > Classroom > Submitting Assignments

AND

Signup/Login > Dashboard > Classroom > Accessing Graded Feedback

AND

Signup/Login > Dashboard > Classroom > Messaging

When the user opens the application, student will be displayed with the Signup/Login page. After Providing the essential information then student is directed to Dashboard. Dashboard allows students to easily navigate through different course sections, access resources, and track their progress. Provide clear instructions on how to navigate the virtual classroom environment.

Field Name	Description
User Login	Allows student to log into their account using their registered credentials.
Accessing Course Materials	Allows student to access course materials such as lecture slides, assignments
Participating in Live Sessions	Allows Student to participate in live sessions, such as video conferences or webinars
Submitting Assignments	Allows Student to submit assignments electronically, either by uploading files or entering text
Accessing Graded Feedback	Allows student to view their grades and feedback

Student Interactions:

1. For student there will be a **Signup/Login** option, where student is directed to dashboard.
2. Students can view and **Access course materials** such as lecture notes, presentations, readings, videos, and other resources shared by the teacher.
3. Students can actively **Participate in live sessions** and forums within the virtual classroom. They can post questions, respond to prompts, share ideas, and collaborate with peers
4. Students can **Submit assignments** electronically through the virtual classroom platform. They can upload files, complete online forms, or use other designated methods for assignment submission.
5. Students should be able to **Access grades and feedback** provided by the teacher for their assignments and assessments.
6. Students should be able to send **Messages** to the teacher or other students within the virtual classroom platform for communication purposes.

Click Back to navigate back to the **Dashboard**.

Click Logout to logout.

