Online Classroom

Requirements and Specification Document

Date 2nd Feb 2020

Version major/minor

1. Project Abstract

The web app helps the teacher and students to find a common platform to share video resources. Every teacher and student will have their own id, also the students need to have a key, provided by their teacher, to join the virtual classrooms, which can be created only by teachers.

2. Document Revision History

Rev. 1.0 date - initial version

3. Customer

The software is targeted at the audience of Students and Teachers. The project was informed by our batchmates who themselves are students of IIT Roorkee.

Let there be a dummy student, now he was not able to clear concepts in class, so he wants some video resources which can help him, and that's where we come to rescue by providing them with a platform, where some teacher-approved resources can be shared among the students of the class.

A brief description of the customer for this software, both in general (the population who might eventually use such a system) and specifically for this document (the customer(s) who informed this document). Every project is expected to have a dummy customer. Requirements should not be derived simply from discussion among team members.

4. Competitive Landscape

Presently, competitive industries working in the field of online classrooms are “Moodle”, “Piazza” and some others, but they don’t provide the option to share video resources with simplicity.
Also, there are millions of videos present on YouTube, which the students can watch to clear the concepts, but at the same time, students don’t know the quality of content provided in the videos. Also if the content is correct but the prof. prefers a different approach, then student have to face fate.
Also, the platforms like Moodle, Piazza and others are well established, well known among the student-teacher community. They have professional developers that help them grow in harmony with the latest technological trends.
A platform “Unacademy” also provides courses but they don’t have that good discussion platform, which we will be including in our platform.
Our marketing strategy will mostly depend on the word of mouth of the people using it.

Briefly identify the competitors in this market, this may need to be on a country and industry basis as the landscape varies dramatically. Any functional details about the competitive solutions should be provided. For example, the known strengths or differentiator points in the competitive solutions, and also their weakness. Identifying the strengths helps ensure that we design a competitive solution; the weaknesses allow us to consider these as areas for potential differentiation. Remember there are all sorts of sources for competitive information – Marketing, Development, Customers, the internet, field staff, and those that we have hired from the competition (don’t be afraid to be creative here. Note that this section may or may not be something that we want customers to see, depending on how ’honest’ we wish to appear as a .company).
What product features can create competitive differentiators? Competitive barriers? Can a patent position be obtained in this area? What is the current patent status in this arena?

5. System Requirements

Initially, the user will face a login screen, with functionality to sign up as a new user. We will provide an option to choose whether the user is a Teacher or a Student and than navigate them on that basis.

For teachers we will provide the functionality to create online classrooms where they can share video resources with the students. They will be able to share the key to classroom, and anyone in the possession of the key would be able to be a member of classroom.
For the students part, after they login, we will ask them to add themself to classrooms with the help of key provided by their teachers. Using the classroom they will be able to see videos shared by their mentors.
The mentors have the right to share the key to anyone, and anyway they prefer, it means that they can apply charges for registering into the courses, although there will be an upper limit to the cost of the course, set by the application administrators.

Also we will provide the users to use their Gmail/Facebook Id to sign up with the system.

We will add some features to comment on video so that the users can discuss at the same thread without causing any confusion.

To develop a basic working model we would need around 4 weeks after which most of work will vary with user reviews.

As each user needs to login with mail id to access the platform we don't have much security concerns on that area, although as the platform grows we may hire some security experts to make the platform more secure.

A user can be able to access only his own dashboard, and the video lectures provided by the

*We would need servers to host our platform and databases to store videos on the cloud.
Also the user can use any OS to access the application.*

6. Checklist

The following checklist is provided to help you think about whether the document is complete and correct. You may want to add your own additional questions to the list.

• Have all the viewpoints of all the stakeholders been taken into account?

• Do the requirements completely specify what the function of the program should be?

• Are all non-functional requirements (e.g. speed, memory, capacity) specified?

• If there are requirements imposed by the environment in which the program will be used,
are those requirements specified?

• Do the requirements avoid specifying a solution or a design?

• Are separate requirements listed separately and not lumped together?

• Are the requirements clear and precise, not ambiguous • Are the requirements consistent, no contradictions?

• Are the requirements accompanied by a rationale or justification?

• Are the requirements given in a consistent format?

• Are the requirements properly prioritized?

• How is the notation in the document? Are graphical and mathematical notation used
appropriately? Is the technical jargon kept to a minimum?

• Does the requirements document make good use of scenarios and use cases?

• Are the requirements realistic?

Are the requirements verifiable?