**Learning Management System (LMS)**

**About the document:**

**This document serves the purpose of helping us to kick start the project. It should not be considered as a complete requirements document.**

**Introduction:**

We will develop a simple, web or mobile based Learning management System as our class project. Our goal is to develop a fully functional, bug free, aesthetic looking LMS that does some basic functions for its user. We want to keep it simple with limited scope so that we can finish it during the course.

**Users:**

LMS has 2 set of users. (1) Students (2) Instructors. We assume that entire LMS is going to be run by these 2 set of users and hence we will delegate some functionality to these set of users that are performed by specific users for normal LMS. For example, role of administrator in normal LMS is critical and important. But in our case, all these functionality will be delegated to our 2 set of users.

**Overall Picture:**

The purpose of the LMS is to provide a portal for students and instructor to communicate effectively with one another. An instructor can run an entire class through LMS. A student can perform all the tasks necessary to fulfill the requirements of the class through LMS.

**Individual User Tasks:**

1. **Instructor**
   1. Instructor can sign up with LMS.
   2. Instructor can sign in if already sign up.
   3. Instructor can post a new class.
   4. Within the class, instructor can post course material.
   5. Instructor can post assignments that consists of questions.
   6. Instructor can post quizzes.
   7. Instructor can post exam.
   8. Instructor can grade students’ submissions.
   9. Instructor can add or remove students from the class if necessary.
   10. Instructor can track if a student studied a course material or not.
   11. Instructor can observe the analytics of an assignment, quiz or exam.
2. **Students**
   1. Student can sign up with LMS.
   2. Student can sign in if not already sign up.
   3. Student can register for an already published class.
   4. Student can drop a class.
   5. Student views and studies the course material.
   6. Student can submit class assignments.
   7. Student can take quizzes.
   8. Student can take exam.
   9. Student can view grades.
   10. Student can submit end of class review for instructor.
   11. Student can view his/her own standing within the class for an assignment, quiz etc.

**Critical Consideration:**

1. FERPA: All the student information is owned by student. It should be kept secured. No unauthorized person should be able to access student’s information.
2. If a class is subscribed by large number of students and for example, if they try to take the exam at the same amount of time, LMS should be able to handle the load.
3. Students and Instructors will use the system using web browsers like Chrome, Firefox, and Safari etc. Make sure that LMS works and acts similarly across browsers.
4. LMS should be intuitive to use for both Instructors and Students. Even first time users should be able to navigate through it easily and should be able to find necessary information.

**Final Product Notes:**

1. System should not contain any annoying or show stopper bugs.
2. It should perform all the functionality mentioned in the document.
3. Vendor is responsible to deploy and maintain the application.
4. In case source code handover is determined, the source code should be in pristine state. It should be readable and maintainable.
5. Try to keep the cost of development, tools, deployment etc. minimum.