

Proposal

Team Picture:



Team Competency:

Jon- experienced in Java, C and C++, currently in my 4th semester and an intern at Maverick Software Consulting where I do testing on a web application with java and selenium

Max- Languages: Swift, C++, Java, JS, Node. Sophomore. Internships: Tero International (PHP, JS, barely mySQL)

Nathan- Java, C, Javascript

Emin- Experience in Java, C, C++, and Javascript. Junior standing Internships: NA

No team members have experience in SpringBoot and very limited Android experience so we will need to learn how to use both. The group has knowledge of how to create a database and we will be using mySQL

Project

Name: Getit

General Problem Addressed: Class management

Summary: Class management, note-taking, schedule planning, and attendance tracking all in a closely integrated system. The information provided to or collected by one of the aforementioned 'modules' will often be used by multiple others so that it improves the functionality and practicality of the entire system. For example, notes you take can be stored by class in the class manager section and will be available for access along with homework and other course materials. This could be done automatically based on what class you have scheduled at that time. The scheduling portion could keep track of which days you made it to class based on recorded attendance.

Our solution will include use of Android for the client and SpringBoot for the server. The program will have a login system and separate landing pages for different types of users. Students will have a page that gives them access to add courses, and view current courses, instructors will be able to take attendance of their courses they are teaching, and system moderators will be able to delete courses, and see stats). Our student home page is called the Notebook and will display the courses added. Our system will be divided into 4 systems: attendance, course rating system, note taking, multi-user login system/ course registration. The system will be dynamic in the fact that it will support multiple universities and also if the instructor does not use the system students will still be able to rate classes and take notes for it with the attendance being disabled

Attendance- will have two sides: with the student being able to mark they are in attendance through a code (or possibly a geolocation). The instructor side will be able to open it up for attendance on that day and it will record the stats on the database. GPS location is a possibility, but it's worth noting that GPS can be very unreliable (especially inside large buildings).

course rating system- will allow students to see the ratings of courses and reviews, they will also be able to rate courses that they have added to their notebook (only once)

note taking- for courses students are in they can create/ and edit new notes. They may be a share feature. The student may also be given the option to add notes after showing they attended class to potentially write down topics, ideas, and important notes covered that day.

multi-user login system/ course registration- Will have a create account page for students/ instructors. After login there is a page that shows the classes they are in. Once they click on a course in they are a student they can either rate the course or take notes. If it's an instructor then they can open up attendance.

We will be using Android Studio as our main IDE for designing our application, our main language will be Java with the SpringBoot framework and be using JSON as a part of our server. To handle multiple users at a time, SpringBoot will be setup in an api front for the database style where each method/api call is separate and not sharing general global variables

This project will be complex and significant due to:

This is the largest scale application we have worked on during our time as students, the application will include many different uses including attendance, planner, class manager and note taking while linking them all together so it is all easily accessible for students. We are aiming to use technologies none of us are familiar with, such as spring boot and android studio. JSON is also a new technology to 3 of us who have never used it before and one member who has used it lightly before. Finally, we also do not have experience in creating such a server intensive application with multi-user functionality.

