

## Criterion A: Planning

### Scenario

For Japanese Club administration, keeping track of student attendance is often a hassle. The club's primary method of recording attendance was to have members sign their names on a Google Spreadsheet. However, given that Japanese Club does not have a definitive number of club members, this meant that people could show up to meetings once and never again, or non-club members could attend and be marked as members. As such, attendance numbers are confusing to record, especially for club events that require definitive numbers. In addition, notifying members for meetings is difficult since not all of them use the same messaging applications. Since the goal of Japanese Club is to allow people to have fun experiencing Japanese culture while still being organized enough to be supported by school administration, neither of these situations are beneficial. As such, I contacted a board member of Japanese Club for their input in making a program that would help keep track of members, events, and other functions needed for the club to be better organized. This interaction is noted in Appendix 1. In addition, my Computer Science teacher will act as my advisor while I am developing this product.

WC: 195

### **Rationale for Proposed Program**

In order to better help Japanese Club log their information, I have proposed a GUI to better manage club attendance. I have chosen to develop my program in Java because I have been coding in that language for the past two years, and thus have the most familiarity with it. In addition, since SQL specializes in databases, I aim to incorporate SQL to record member information into a database. In terms of software, development would take place through Eclipse and its WindowBuilder functionality. Eclipse makes it simple to add and edit elements like JTables, JButtons, through either the WindowBuilder or the source code, making it convenient to code in. As the software uses Java, and Java functions independent of platforms, my program would be capable of being used anywhere regardless of operating system, something that would greatly benefit my client. In regards to my planned functions, the program would allow the client to add and edit students in their club member roster, and sort said students by their chosen criteria. To better help with attendance management, a function to add and edit events to a calendar accessible to all club members will be added. All information entered into the program will be saved to both a database and a file, ensuring it is not lost when closing the program. I firmly believe that my program will help Japanese Club better manage their attendance information and prevent confusion about their records.

WC: 240

## **Success Criteria**

- The program should allow users to create their own usernames and passwords.
- The program should allow users varying levels of access through a username and password.
- All data should be saved in a database upon opening and closing the program.
- The program should only allow editing of the club roster, events, and general information page by administrators.
- The club roster should only be available to administrators.
- The program should allow administrators to add, edit, and remove students from the club roster.
- The club roster should be saved to a database that can only be accessed by administrators.
- The event calendar should be viewable by both administrators and regular members, but only allow administrators to edit.
- The event calendar should allow administrators to add, edit, and remove events.
- The home page should be viewable by both administrators and regular members, but only allow administrators to edit.

