

Criterion A - Planning

Word Count: 413 (excluding success criteria)

Scenario

The Model United Nations (MUN) club at my school is preparing to hold its first public MUN conference. At these conferences, “chairs” that moderate each “committee” need to keep track of everything that goes on during the sessions, such as attendance of delegates, number of speeches, timing of speeches, number of resolutions submitted and so on. So far, members of the club have been making use of Excel spreadsheets to perform these tasks. However, setting up spreadsheets every time for each committee is tedious. Moreover, the conference is aimed towards students who are beginners at MUN, hence it will include people who will be acting as chairs for the first time. Training them to use those spreadsheets properly is also time-consuming for the club. The supervisor of the club has approached me with this problem, hoping to find a dedicated user-friendly program for managing MUN conferences. They tried to find existing software online, however, the available options are all too old and outdated, or too expensive for a conference of this scale. Being one of the leaders of the club, and an eager computer science student, I was approached by the supervisor to find a solution to this problem. The supervisor was both the client and the adviser for this solution.

Rationale

My solution will be written in Java. I chose java because it is a mature programming language with a rich ecosystem of libraries and frameworks that will make the development process easier for me, especially for GUI programming which is an area many languages are lacking in. Moreover, the object-oriented nature of Java will allow me to closely model each entity and aspect of an MUN conference, which will further streamline the development process. With these tools, I will build a desktop application that can perform all the basic tasks for managing an MUN conference, with a focus on a user-friendly interface. The program will be offline, as requested by the client, in order to avoid possible issues due to internet connectivity which might disrupt conferences. The program will use an embedded, self-contained database for storing data, because it will need to be distributed to other users and installed on their computers. This will be done using the H2 embedded database. Since the product will be used by beginners, there will be a focus on user-friendliness and an appealing user-interface. This will be achieved using the JavaFX framework and its support for Cascading Style Sheets (CSS) to create powerful interfaces.

Success Criteria

1. The client should be able to create, update and delete a “conference”.
2. For each conference, the client should be able to create, update and delete “committees”.
3. For each committee, the client should be able to create, update and delete “delegates”.
4. The client should be able to create, update and delete topics for each committee.
5. The client should be able to create, update, and delete resolutions for each committee.
6. The client should be able to set a timer for speeches given by delegates.
7. The client should be able to update the number of speeches and actions for each delegate.
8. The client should be able to see basic statistics for committees and delegates.
9. The client should be able to mark a conference as finished or ongoing.
10. Data for finished conferences should be stored and easily accessible by the client and can be easily deleted when needed.
11. A Home screen on startup, with navigation buttons for accessing the product’s functionality.
12. A clean, visually appealing, user-friendly interface which is easy to navigate.
13. A friendly user-experience where possible errors and exceptions are handled gracefully.