LineUp

Version 1 - Spring 2021

Overview

LineUp is a Web Application that helps people stay in line, easing pressure to keep track of people and speed up matching up people. A common use case may be lab sections, while people are waiting for help from TA and mentors. Mentors would sometimes have to join multiple webex calls during a lab and attend to multiple students asking for help simultaneously. With Lineup, TA's could quickly set up and manage sessions by simply opening a browser and showing codes to invite users.

Goals

1. Create events and share with users via short codes
2. Keep track of people waiting in line/queue
3. Allow multiple assistants in one event
4. Logs for actions(join, leave, connected, etc.) happened in the event
5. State recovery when user come back from offline state
6. UI should have an intuitive design

Technologies

From the perspective of adopting needs of students/clients, we planned to make Lineup a Web Application using Java EE, as well as JDBC to communicate with the database(sqlite), which will be used to store user/queue data. JQuery and Bootstrap may be used when building the website.

Division of Tasks

- Testing: Unit test -> Yitao/Xinhao
- Backend/Frontend -> Yitao/Xinhao
- Database design -> Tong
- User Manual Design -> Jane
    - Such as "use case", describe functionality/procedures
- Test Manual -> Jane/Tong
    - functionality test, except the unit test section
- UX Design -> Jane/Tong
    - How the website will look like

Milestones

1. (Basic) Set up environment of the web application (Java EE, JDBC, sqlite)
    a. Database Scheme
    b. Basic Java EE and JDBC Framework
2. (Basic) Documentations:
    a. More detailed use cases
    b. Script files
3. Coding
    a. (P0)User System (No Login required, Session Based)
    b. (P0)Event create and edit
    c. (P0)User join event via share link, then they choose the queue they want to join
    d. (P1)Matching process works smoothly
    e. (P2)Support multiple assistants in event
    f. (P2)Recovery from unstable Internet connection, close accidentally, etc.
4. Testing
    a. Readme.txt
    b. Testing Manual
    c. User manual
    d. Project Report
    e. Javadoc
5. Presentation: May 3rd

Notes

- Java EE and JDBC are expected to be taught in HW5. The whole project depends on us learning this content taught in class.
- The 1st and 2nd tasks are expected to be finished by the beginning of April. (2 weeks to get familiar with the stack and set up use cases/ finalizing goal)
- The code and testing can be done in parallel and is expected to be finished by April 25th. (25 days for coding)
- The rest of the time (until May 3rd) will be used for revising the report, manual and presentation. (a week for revising)

Team

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Links

https://github.com/NeverBehave/Lineup (Private for now)