

**Date: November 25th**

**Attendees:** Emmanuel, Wail, Yesenia, Shichang

**Notes:**

- **Networking Success:** Yesenia successfully configured the server and performed **port forwarding**, allowing external clients (Wail and Shichang) to connect to her server using the dedicated IP address and port **9999**. This resolves the initial challenge of needing to meet in person
- **VM Approach Abandoned:** Shichang reported that spending time building multiple VMs failed because the clients require a GUI, but the VM only supported terminal use. VMs are local host and not open to the public, confirming port forwarding was the necessary alternative.
- Wail and Shichang successfully tested logging in, adding courses, and dropping courses on Yesenia's server.
- **Data Persistence Bug:** A bug was identified where closing the server causes the users.csv data file to be **overwritten or deleted**, reverting it to hard-coded content. This requires fixing in the Data Manager implementation.
- **Client Disconnect Counter Bug:** When clients disconnect, the log message displays an incorrect client number because the client counter is incrementally counting new clients but is **not correctly saving/updating the specific client ID** upon disconnection. Wail needs to update the counter logic in the disconnect section of the server code.
- **Hold Implementation Flaw:** The "Remove Hold" feature lacks logic to check if a student currently *has* a hold before attempting removal. If a student exists, it still attempts removal instead of returning a status message (e.g., student does not have a hold). This requires a counter or attribute to track holds.

Split up tasks:

Extra Features:

- Ability to add multiple universities to the system - Yesenia
- Add a button to the admin to view all universities - Yesenia

For Student:

- Show course ID after adding a course - Shichang
- For view student schedule button add student name at the top and Add attributes such as: instructor name, course credits, days classes are oAered, capacity(aka class size), waitlist, pre reqs - Shichang
- Add a button to view if student has a hold; - Shichang
- Show course ID after dropping a course - Shichang
- Add logout button - Shichang

View courses available:

- Add attributes such as: instructor name, course credits, days classes are oAered, capacity(aka class size), waitlist, pre reqs - Wail

For Admin:

- Correctly implement add and remove hold(add a local counter for holds) - Wail
- Add button to withdraw student from course - Shichang
- To add admin, display example of admin id like A0001- Shichang
- When adding, editing, removing course, add example to each showing what the course id should look like "CS413"- Shichang
- When deleting a course, display course id with the course deleted successfully message; same thing for adding course - Shichang
- Add a button to view all the admins - Shichang
- Add logout button - Shichang
- Add view students schedule button, admin will input student id and the system will return that student's schedule - Shichang

Report:

- Add university name to the top of the report - Emmanuel
- Add attributes such as: instructor name, course credits, days classes are offered, capacity(aka class size), waitlist, pre reqs - Emmanuel

Limitations:

- Adding buttons: Admin and Student to login - Wail
- To limit the inputs for passwords, usernames, and student/admin id's to only accept our pattern/rules. Return failed message and retry message - Wail
- How we can pre-load all the data files for students and admins, for security reasons we can't allow users who aren't in the system(right now we are just letting everyone log in) - Wail
- Try to add if student has a hold to the report - Wail

**Implement testing individually!!**

**Meeting tomorrow at 3pm!**