Team Alpha

Yifu Fang
Jiajun Dai
Anthony Zunino
Jena Kelbessa
Project Report Due: 12/1/23
CMPE 202-01 Software Systems Engineering, Mr. Vinodh

Our XP Core Values

- *Communication*
    - The team was proactive with asking questions, helping navigate past other teammates getting blocked. Everyone was able to stay up-to-date with the latest merge requests and updating the database. Communication is the most important value for our group because we all are working on the project remotely due to time conflicts with work, other classes, and distance from each other.
- *Feedback*
    - Because communication was quick, we were able to get feedback on each other's work quickly and efficiently continue progressing through our tasks. Using Discord to share code snippets or sharing screens in a call was paramount to making sure everyone was on the same page, as multiple people working on different tasks can lead to inconsistencies when putting the pieces together. Without constant and helpful feedback, the codebase would be much more tangled.

Weekly Scrum Reports (Notes, Stories, Backlog, Work Remaining)

Standup Meeting #1
9/13/23

Standup notes:

- Time:
    - 10-1030a
- Attendance:
    - Everyone

- Preferred method of communication is Discord
- Sprint duration 2 weeks
- Meeting time:
    - Friday mornings 10-1045a
    - Worst case scenario 5-6p on campus before class
        - Yifu best case scenario 530p
- Project
    - Front-end: React
        - html/css/JS if it's simpler (Ask prof 9/15/23!)
    - AWS for cloud (<30GB to be free)
    - Web server
    - Back-end in python
        - Helpful library Flask for API development

Familiarity of Skills:

- Jena
    - C++, Python, a bit of APIs, html/css, javascript, java, a bit of SQL
- Jai:
    - Python, React, SQL
- Yifu
    - Python, C#, a bit of Java, a bit of node.js, html/css, javascript, web server
- Anthony
    - C++/python/UML(-ish)

Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
    - Helped figure out the layout of the project, can focus on skeleton for front-end
- Jai
    - Helped figure out layout of the project and answered Jena and Anthony's questions, focus on working with Yifu
- Anthony

        - Studied Flask and React, plan to work on authentication with Jena and will also look into using Jira for Scrum
    - Jena
        - Studied Flask and React, plan to work on authentication

Backlog

- Setup Scrum task board
- Create skeleton of frontend and backend
- Create basic login screen to begin

Standup Meeting #2
9/29/23

Standup notes:

- Time:
    - 10-1030a
- Attendance:
    - Everyone

Notes:

UML Class Diagram Keywords (reference: https://sjsu.instructure.com/courses/1570055/assignments/6768326):

-

Classes:

- Theater
  attributes: auditoriums: Auditorium[ ]

- Auditorium(Screen):
  attributes: seats: boolean[ ][ ]

- Movie:
  attributes: title, release_date, description

- Schedule

User classes (directly pulled from project assignment, only three users):

- Non-member
- Member
- Admin (theater-employees)

Other classes:

-

- Front-end pages (based on amc website: https://www.amctheatres.com/, and project page: https://sjsu.instructure.com/courses/1570055/assignments/6768326):

- Home/landing page(before login)
    - a navbar with nav buttons (All users):
        - Theaters
        - Locations
        - Movie schedule
            - Current
            - Upcoming
        - View Membership Options
            - Regular (free)
            - Premium ($15/yr)

        - View Registration/Signup
        - About/Contact
        - Book Tickets
            - Online service fee
                - Non-member: $1.50/ea tix
                - Member: free
            - Reward points (all members) 1 point/$1 spent
    - Nav buttons (members)
        - View Account
            - Past ticket purchases
            - Rewards points earned
            - List of movies watched past 30 days
            - Refund / cancel ticket purchase request
    - Nav buttons (employees)
        - Theater schedule
            - Change showtimes
            - Change movies
        - Theater seating
        - View analytics (last 30/60/90 days)
            - By location
            - By movie
        - Configure discount pricing

- Home/landing page(after login)
    - a navbar with nav buttons ‘see a movie’, ‘find a theater’, ‘membership’, ‘About’, ‘Contact’, ‘Book Tickets’
    - with user profile pic display at top right corner
    - with logout button at top right corner
- Login page
    - with login, signup button at the bottom of username, password input fields
- Signup page
    - with signup button at the bottom of username, password input fields
- Shopping-cart page (check-out page)

Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
    - Created skeleton for frontend, will work on movie carousel and UML
- Jai
    - Worked with Yifu on frontend, will work on admin v. regular v. premium users
- Anthony
    - Worked on authentication - created basic login page, will continue to work on authentication with JWT or session cookies and update Standup Journal
- Jena
    - Worked on authentication, will continue to work on authentication

Backlog

Remaining Effort Total: 100 hours

- Maintain Scrum Journal (~10 minutes / week)
- Home page (5 hours)
- Membership page (1 hour)
- Book Tickets page (30 hours)
- About Us page (1 hour)
- Finish Login/Register (3 hours)
- Regular vs. Premium user dashboard (20 hours)
    - Info about user
- Employee dashboard (30 hours)
    - Schedule
    - Change # seats
- AWS (5 hours)
- **Create UML diagram (FIRST PRIORITY) (2 hours)**
    - Everyone can work on this
    - Determine architecture
    - Lucidchart lets us share between people
    - https://www.lucidchart.com/pages/examples/uml_diagram_tool
- **Create a page for log-in/out (3 hours)**
    - Jena/Tony can take this task (tons of tutorials)
    - Use AMC theaters as a reference
    - Navigation buttons, search bar location, etc.
- **Everyone will work on the front-end**
    - There will be many pages to redirect to
    - Everyone can work on a page
- With a strong front-end design, then can start working on back-end
- Later on, there will be APIs to implement and each of us can work on one
- Jai found movie database and suggests MySQL WorkBench
    - Yifu thinks we might not need a database (don't have a lot of data)
    - Only really need like 20/30 lines
    - Everyone to download MySQL (whole thing, not just Workbench)

Goals for this sprint:

- **Finish UML architecture (Monday, 10/2/23)**
    - **SCRUM Meeting (everyone is free 10-12a)**
        - **Monday, 11-12p meeting**
    - **Everyone**
- **Log-in page (Friday, 10/6/23)**
    - **Jena/Tony**
- Optional task - Flask Python class/function declarations
        - Typically after UML
        - Jai/Yifu

Mini-standup Meeting #3
9/29/23

Standup notes:

- Time:
  - 11-1130a
- Attendance:
  - Everyone

Notes:

- Since lucid has limitations on shapes, documents spread out. Jena's document is for frontend / flowchart, the following is for class diagram
  - Class diagram: https://lucid.app/lucidchart/49b7b591-5c3f-4edd-9fce-3ecc06c059b0/edit?utm_source=sendgrid&utm_email=doc-invite-reminder&shared=true&existing=1&docId=49b7b591-5c3f-4edd-9fce-3ecc06c059b0&utm_campaign=transactional&utm_medium=email&utm_prod=chart&utm_lang=en&invitationId=inv_5ac29294-c83b-4e3c-8f6e-6392c01b0870&page=0_0
  - Flowchart frontend: https://lucid.app/lucidchart/87c2f2ed-5c4d-4aeb-8a1c-2f4fcb0c5634/edit?invitationId=inv_4e9e46a0-977e-4c7e-bcf0-461ac34301ca&page=0_0#
- **NEED TO USE DATABASE**
  - Use Flask for free testing on deployment
  - Move to AWS for demo

Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
  - Finished movie carousel on homepage, will help Anthony and Jena with authentication, blocked on authentication and backend
- Jai
  - Continuing to work on admin v. regular v. premium users frontend - helped answer Anthony + Jena questions, will work on employee actions frontend
- Anthony
  - Updated Standup Journal - still working on auth, will continue to work on authentication using session cookies and look into how to connect to a database with a config file
- Jena
  - Worked on authentication, will continue to work on authentication

Backlog

Remaining Effort Total: 92 hours

- Maintain Scrum Journal (~10 minutes / week)
- Create a backend with populated data (5 hours)
- Membership page (1 hour)

- Book Tickets page (30 hours)
- About Us page (1 hour)
- Finish Login/Register (1 hours)
- Regular vs. Premium user dashboard (20 hours)
    - Info about user
- Employee dashboard (25 hours)
    - Schedule
    - Change # seats
- AWS (5 hours)

Mini-standup Meeting #4
10/13/23

Standup notes:

- Time:
  - 10-1030a
- Attendance:
  - Everyone

Notes:

- We should use the screenshot Yifu created for when someone types in the URL
- Tailwind CSS lets you type in className with html stylings in the class name
- Backend running on separate terminal
  - python backend.py
  - Go back to frontend
- Need to implement cookies for maintaining login state when switching pages
- Tailwind Link: https://tailwindcss.com/docs/
  - add tailwind
  - npm install
- Work on backend authentication
  - Jena & Tony

Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
  - Working with Jai on creating backend tables with populated movie data, will continue creating database with mock data
- Jai
  - Helped answer Anthony + Jena questions, will continue work on employee actions frontend and creating backend tables
- Anthony
  - Updated Standup Journal - still working on auth using session cookies, will look into how to connect to a database with a config file
- Jena
  - Worked on authentication, will continue to work on authentication

Backlog

Remaining Effort Total: 77 hours

- Maintain Scrum Journal (~10 minutes / week)
- Create a backend with populated data (4 hours)
- Membership page (1 hour)
- Book Tickets page (25 hours)
- About Us page (1 hour)
- Finish Login/Register (1 hours)
- Regular vs. Premium user dashboard (20 hours)

    - Info about user
- Employee dashboard (20 hours)
    - Schedule
    - Change # seats
- AWS (5 hours)

Mini-standup Meeting #5
11/3/23

Standup notes:

- Time:
    - 10-1030a
- Attendance:
    - Everyone

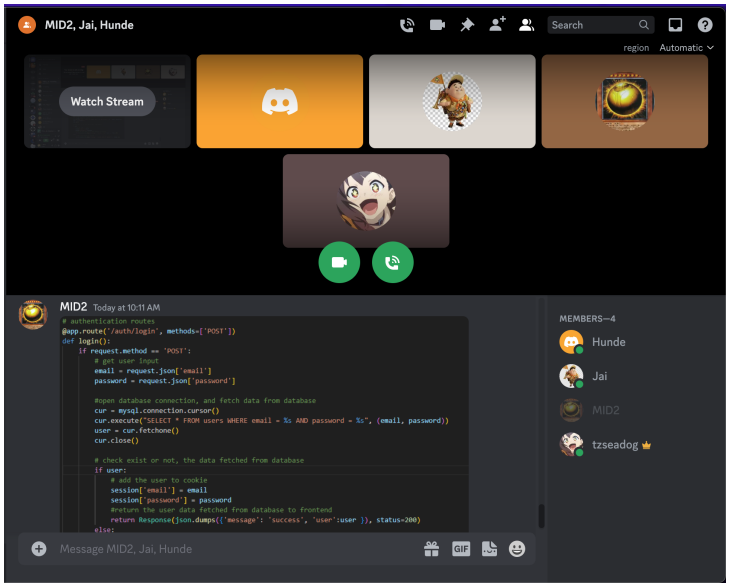
Notes:

- Yifu and Jai got solid front-end development
- Jenna and I are still working on the backend authentication with frontend and storing a token the user authenticates
    - Advice:
        - Work on frontend first
        - Add another route in routes.py with a method called login
        - Use Yifu's screenshot as reference for how the backend responds to the frontend
- Login will read from the database to compare with the user passed in email/password
    - If it does then login
    - If it doesn't then return email doesn't exist
- Store token into frontend session
- @login-required before each API call to make sure
- SQLAlchemy is universal lib for SQL, Jai to share database to team
    - Each member can access the database
    - Any changes must be uploaded to google drive with a link for others to grab it (can't use git for it)
- **Need to look up how to import SQL database in Flask**
    - **Could try and show information pop up in frontend**
- https://www.mysql.com/products/community/

```python
# authentication routes
@app.route('/auth/login', methods=['POST'])
def login():
    if request.method == 'POST':
        # get user input
        email = request.json['email']
        password = request.json['password']

        #open database connection, and fetch data from database
        cur = mysql.connection.cursor()
        cur.execute("SELECT * FROM users WHERE email = %s AND password = %s", (email, password))
        user = cur.fetchone()
        cur.close()

        # check exist or not, the data fetched from database
        if user:
            # add the user to cookie
            session['email'] = email
            session['password'] = password
            #return the user data fetched from database to frontend
            return Response(json.dumps({'message': 'success', 'user':user }), status=200)
        else:
            # return error message to frontend
            return Response(json.dumps({'message': 'Invalid email or password'}), status=401)
```



Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
    - Updated routes and fleshed out the look of frontend using Tailwind, will work on backend request skeleton
- Jai
    - Worked with Yifu on creating a solid frontend look at links to each page seamlessly, will work on Book Tickets
- Anthony
    - Updated Standup Journal - finished auth using session cookies, will look into how to connect to a database with a config file

- Jena

Backlog

Remaining Effort Total: 71 hours

- Maintain Scrum Journal (~10 minutes / week)
- Create a backend with populated data (2 hours)
- Membership page (2 hour)
    - Need upgrade button to update backend
- Book Tickets page (20 hours)
    - Need backend mock data to fill out the screen
- About Us page (1 hour)
- Finish Login/Register (1 hours)
- Regular vs. Premium user dashboard (20 hours)
    - Info about user
- Employee dashboard (20 hours)
    - Schedule
    - Change # seats
- AWS (5 hours)

Standup Meeting #6
11/25/23

Standup notes:

- Time:
    - 8-930a
- Attendance:
    - Everyone

Notes:

- Could consider using client-sided session, using local storage
    - Can do both server and client
    - Pro: If anything happens to API, won't lose information
    - Right now session-sided is fine
- Need multiple tables
    - User
    - Movies
    - Theaters

- Went over Tony's code changes for user authentication
- Merged user authentication into main

Try to use blueprint for the routing of obj oriented design

- pip install flask-blueprint

Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
    - Finished backend skeleton upgraded Anthony's SQLite3 database to MySQL, will update UML diagram with database layout
- Jai
    - Filled out database with mock data and finished work on Book Tickets, continuing to work on movie schedule and seat chart and employee updating number of seats
- Anthony
    - Finished login authentication and connection to database, working on backend skeleton Yifu created
- Jena
    - Helped ask questions after Yifu and Jai's merge to main

Backlog

Remaining Effort Total: 40 hours

- Maintain Scrum Journal (~10 minutes / week)
- Create a backend with populated data (2 hours)

- Membership page (2 hour)
    - Need upgrade button to update backend
- Finish Login/Register (1 hours)
- Regular vs. Premium user dashboard (20 hours)
    - Info about user
- Employee dashboard (10 hours)
    - Change # seats
- AWS (5 hours)

Mini-Standup Meeting #7
11/25/23

Standup notes:

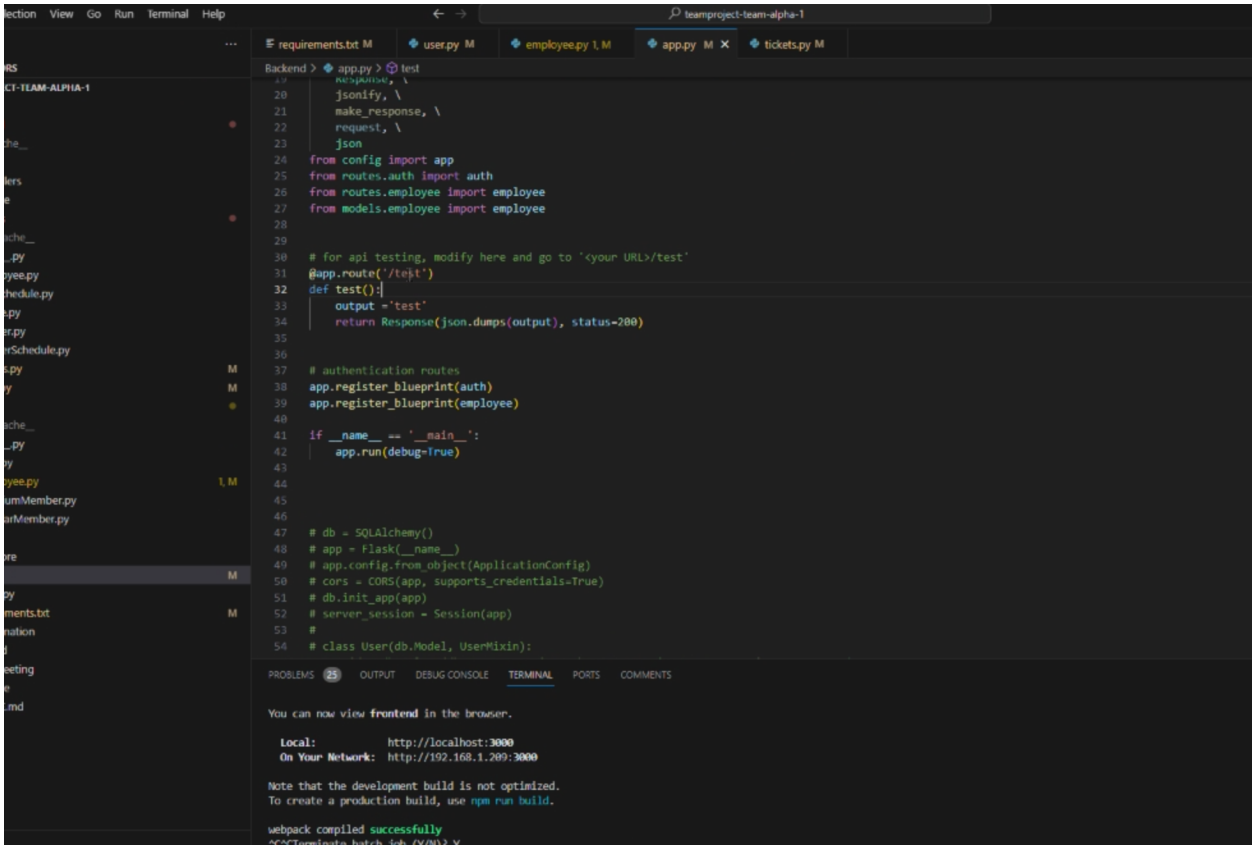
- Time:
    - 9-11p
- Attendance:
    - Everyone

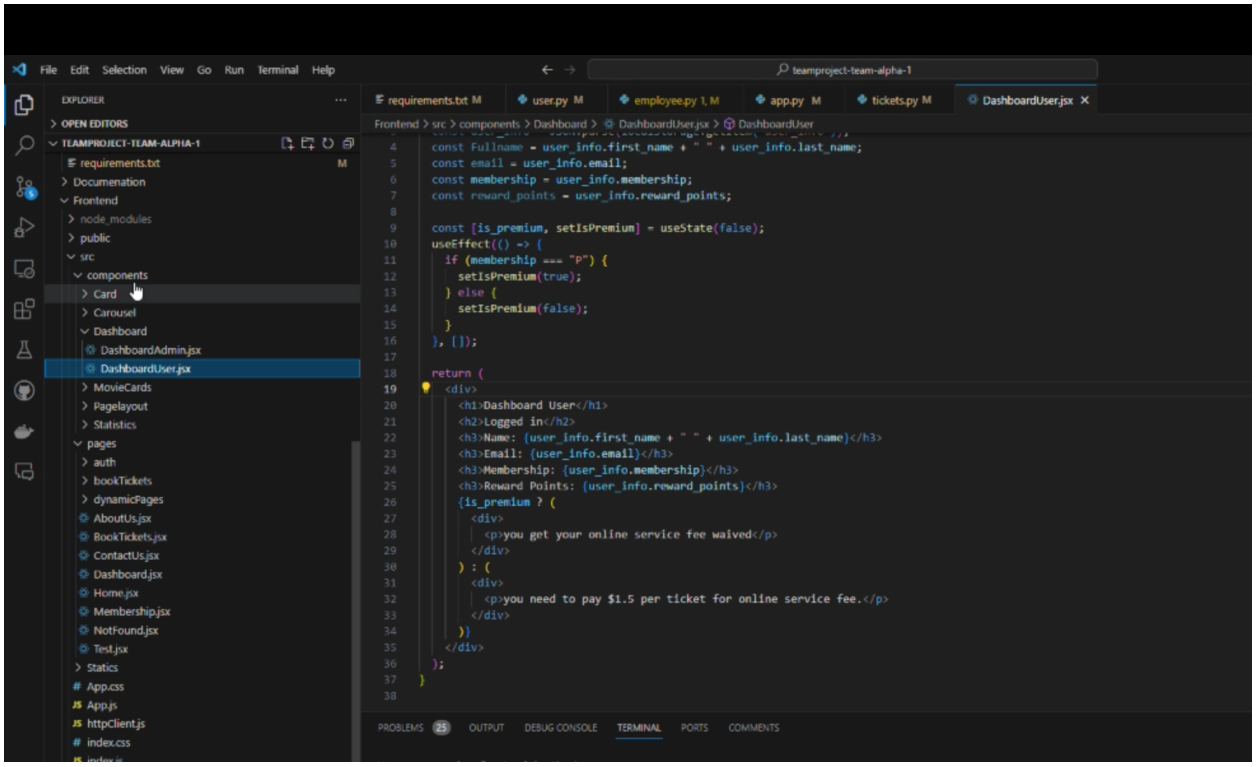
Notes:

- Jai + Yifu helped get Jenna + Tony up to date with MySql and new frontend/backend utilizing the database

- auth.py has blueprint example
- Import new route to app.py and can test it on the test page

- Get backend working, then can work on front end for user profile





Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
    - Updated UML diagram, working on Employee Dashboard
- Jai
    - Finished movie scheduling and seat map and employee scheduling, will help answer questions because blocked by Anthony's backend queries
- Anthony
    - Finished backend query functions, will try to figure out how to make frontend requests that the backend responds to
- Jena

Backlog

Remaining Effort Total: 37 hours

- Maintain Scrum Journal (~10 minutes / week)
- Membership page (2 hour)
    - Need upgrade button to update backend
- Regular vs. Premium user dashboard (20 hours)
    - Info about user
- Employee dashboard (10 hours)
    - Change # seats
- AWS (5 hours)

Crunch Standup Meeting #8
11/28/23

Standup notes:

- Time:
    - 9-12p
- Attendance:
    - Jiajun Dai
    - Yifu Fang
    - Anthony Zunino

Notes:

- Jai + Yifu put in skeleton code for backend APIs to grab data for POST and GET and DELETE responses to frontend requests
- Tony finished these backend query methods
- Jai + Yifu pushed major changes for Book Tickets and Employee actions (change seats, schedule new movies)
- Jai + Yifu helped Tony with new MySQL database

Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
    - Delegating simpler tasks to Anthony - Finished Employee Dashboard, working on User Dashboard
- Jai
    - Finished movie scheduling and seat map and employee scheduling, help Anthony update to latest main branch merge and continue working on improving frontend
- Anthony
    - Finished backend query functions for user, and still trying to figure out how to make frontend requests that the backend responds to - easier task is add buy membership functionality
- Jena
    - N/A

Backlog

Remaining Effort Total: 22 hours

- Maintain Scrum Journal (~10 minutes / week)
- Membership page (2 hour)
    - Need upgrade button to update backend
- Regular vs. Premium user dashboard (5 hours)
    - Info about user
- Employee dashboard (10 hours)
    - Change # seats
- AWS (5 hours)

Crunch Standup Meeting #9
11/30/23

Standup notes:

- Time:
    - 9-12p
- Attendance:
    - Jiajun Dai
    - Yifu Fang
    - Anthony Zunino

Notes:

- Tony finished buy membership button for front end requesting to upgrade or downgrade and updating database
- Yifu finished User Dashboard

Weekly Scrum Report (What we worked on, what we plan to work on, what is blocking):

- Yifu
    - Finished User Dashboard, working on updating UML and About Us page
- Jai
    - Updating database with minor inconsistencies, will work on cleaning up repo and AWS
- Anthony
    - Finished Upgrade Membership frontend request to backend response to update db, will work on project deliverables
- Jena
    - N/A

Backlog

Remaining Effort Total: 13 hours

- Project deliverables (3 hours)
- Cleaning up repo (5 hours)
- AWS (5 hours)

Reference Material And Availability:

Helpful Links:

- Github link:
  - https://github.com/gopinathsjsu/teamproject-team-alpha-1
- Syllabus:
  - https://sjsu.instructure.com/courses/1570055/files/74025430?wrap=1
- Excel of team info:
  - https://docs.google.com/spreadsheets/d/1qowXku9R0LjOND2gilTmbdbIUMP-fOhZU7j70APLi4w/edit#gid=0

Tutorial help:

- Apache server video tutorial
- React video tutorial

Availability:
Looks like weekends are

Jai:

- Mon, Wed 10am - 12pm
- Friday
- weekend

Tony:

- Mon/Tu/Wed/Th 10-1p, after 630p
- Friday 10-1p, after 5p
- Weekends

Yifu:

- Friday before 4pm
- Monday, wednesday before 12pm
- Any time tuesday thursday

Jena:

- Mon, Wed: 10-12pm, 4-5pm
- Friday: before 4pm
- Weekend: 12-2pm