

A decorative graphic on the left side of the slide, consisting of white lines and circles on a blue gradient background, resembling a circuit board or a stylized tree structure.

CSCI 3308 PROJECT SCHEDULE ME

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PROJECT DESCRIPTION



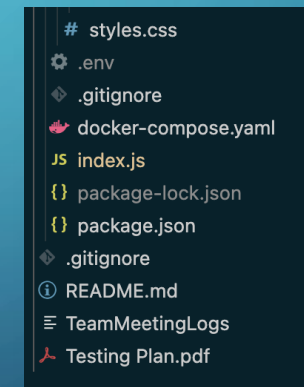
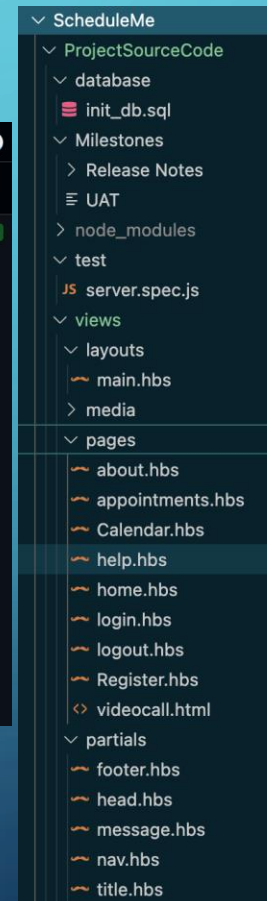
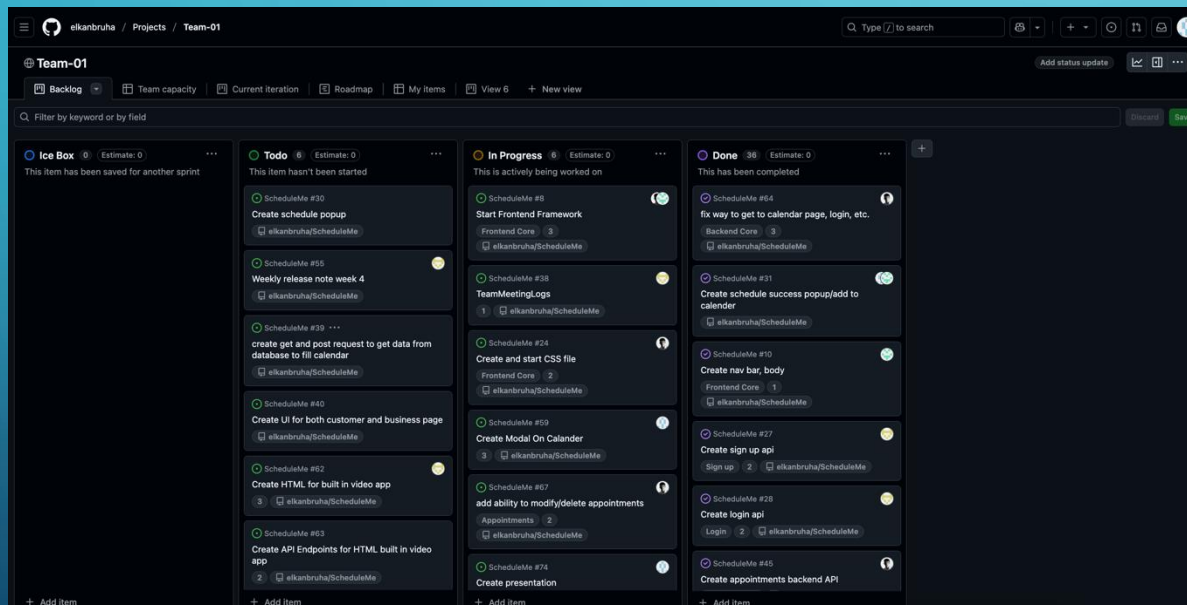
ScheduleMe is a website designed to connect customers with businesses by streamlining the scheduling process. With separate login portals for customers and businesses, our platform features an in-website calendar that ensures an efficient and visually appealing scheduling experience. Businesses can list available time slots for a range of services – from moving assistance to interviews – while employees can review, approve, or decline reservation requests with ease.

FEATURES

- 1) Calendar with two login portals, one for users and one for businesses
- 2) Appointments can be seen through both the business and customer side and can be added, edited, and deleted
- 3) Video Call feature to easily do meetings through the website
- 4) Calendar Download for iCal
- 5) Time zone syncing

TOOLS - VCS REPOSITORY

We used Git for our VCS repository and it was also used to help keep track of tasks and who was doing what. **Group rating 5.0**



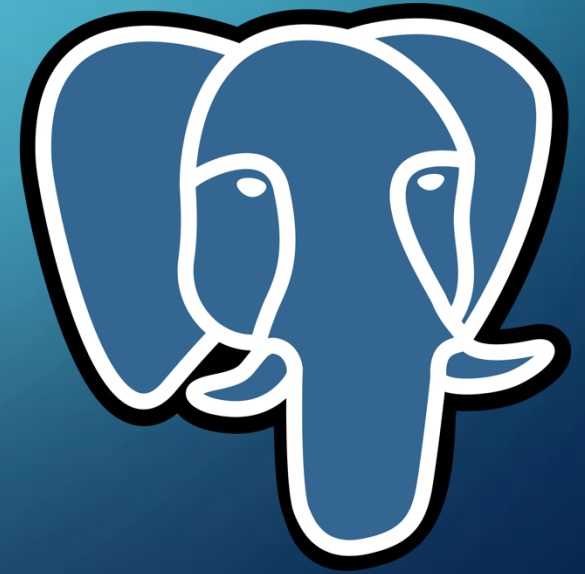
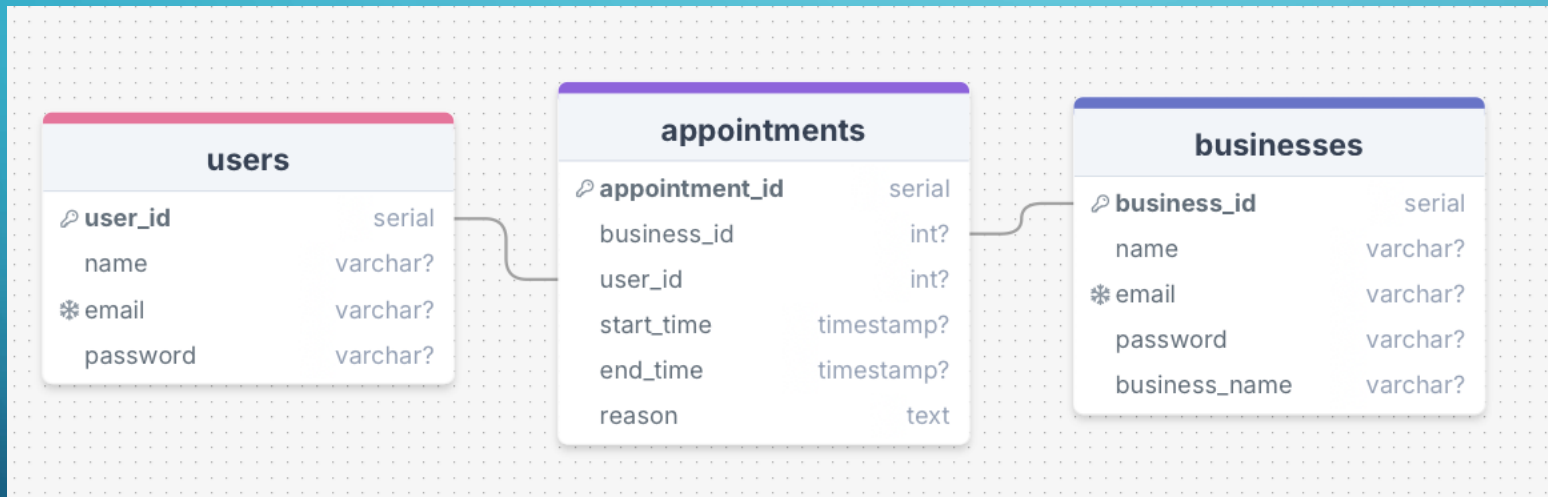
TOOLS – DEPLOYMENT

- Used Docker to easily deploy the website locally Rating – 4.0



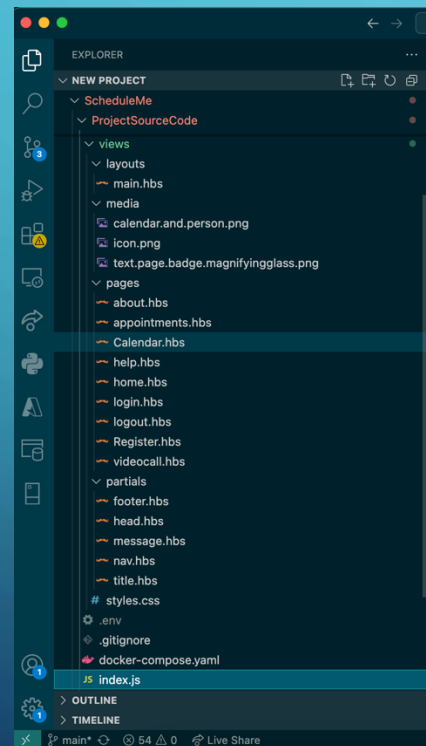
TOOLS - DATABASE

We used PostgreSQL for our database. This was to store users, customers, and appointments. **Group Rating – 4.0**



TOOLS - IDE

We mostly used VSCode as this was most familiar to our group, as we have used this in many of our previous classes. **Group Rating – 4.0**

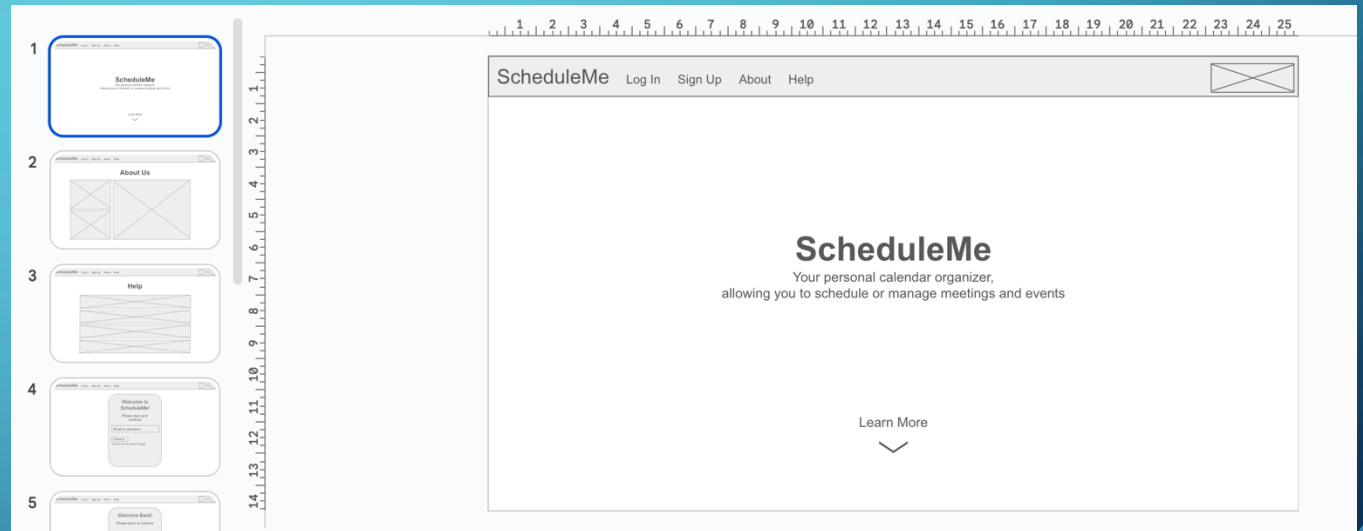


TOOLS - UI TOOLS

We used Google Slides to create our wireframes to prepare an outline of what we wanted the actual website itself to look like. We also used mostly handlebars for the project pages themselves. This allows our pages to be more dynamic and lets our code work throughout the project with less effort.

Group Rating – 4.5

handlebars



TOOLS - APPLICATION SERVER

We used Node.js as this enables the server-side execution of JavaScript and is the basis of how the database is connected with the website. Group Rating – 5.0



TOOLS - DEPLOYMENT ENVIRONMENT

- We used render to utilize fully managed PostgreSQL and Redis-compatible datastores.
- Create a database with one click
- Connect it to our app
- Deploy updates automatically
- Group Rating 3.0



TOOLS – EXTERNAL API'S

We used iCal to export the calendar from ScheduleMe to an iCal file, which can be put into any phone or computer that supports iCal. This is to allow the user to have easier access to the schedule of ScheduleMe.
Group Rating 4.0

We also used Jitsi as a way for customers and businesses to have an integrated way to have a video call through our website. Group Rating - 5.0



TOOLS - TESTING TOOLS

- We used **Mocha** and **Chai** as testing libraries to help ensure that our backend routes and logic were working correctly. **Mocha** runs the test cases, while **Chai** provides readable assertions to check if the output matches what we expected. Group Rating - 2.0



TOOLS - FRAMEWORK (EXPRESS IN NODE)

- We used **Express.js** to help manage the routes and server-side logic. It made it easy to handle form submissions, connect to our database, and serve dynamic pages using Handlebars. Group Rating – 5.0



METHODOLOGIES

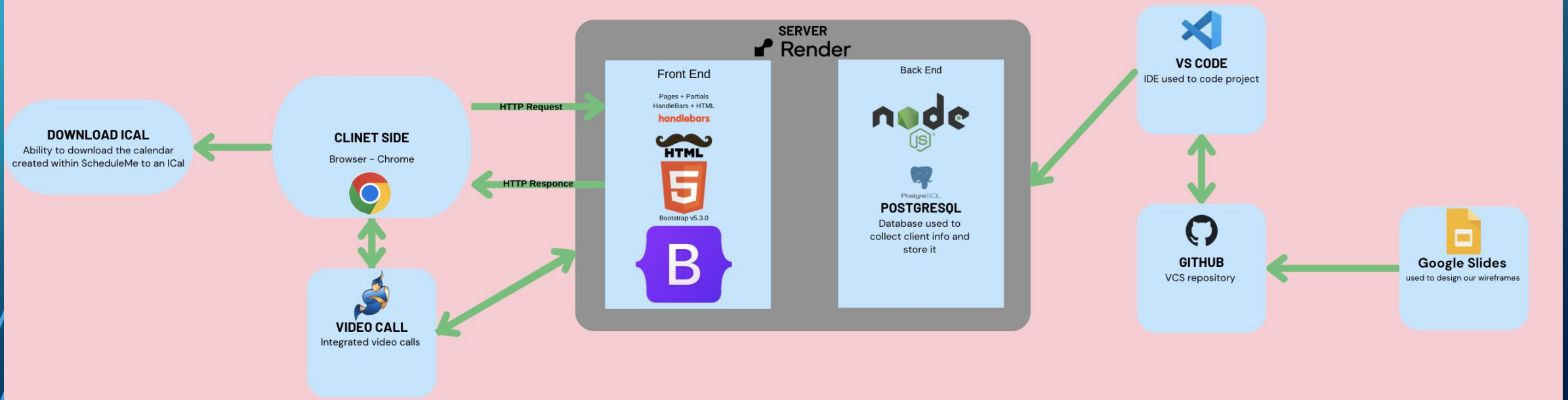
- We took an iterative approach to most of the features that we implemented, slowly implementing and testing as we went.
- We also took an agile approach to this project, with each week of the project being a short sprint to develop and implement features.

ARCHITECTURE DIAGRAM

- This diagram shows how our website uses some of the tools that were previously mentioned and how they aid us in creating the final product.

ScheduleMe Architecture Diagram

Visualizing our website and the tools used for the features



CHALLENGES

- The first challenge that we faced during this project that affected us the most would be the Database schema, as we went back and changed that a few times to meet the needs for our project.
- Second challenge was the connection of the database to the rest of the website and getting that to work correctly. We just had to fix the connection functions that we wrote in the Index.js and the .env file. This did not affect our original plans just took more time than expected.
- Another challenge was merge conflicts, and while it was a challenge at first, we quickly adapted and used individual branches for each feature implementation. Paired with increased cooperation, it eliminated the issue.

FUTURE SCOPE/ENHANCEMENTS

- 1) **Smart Availability Matching:** This would allow you to sync to your own calendar and then automatically filter the appointments that you could fit into your schedule, and the application only shows you those.
- 2) **Automated Reminders:** This could come in the form of either a text message or email, and it would alert you before your appointment, and you could set the amount of time before. (We are still actively attempting this)
- 3) **Build an analytics dashboard:** This could allow businesses to see the frequency that people are scheduling appointments and see what their busiest hours are, and things like no-show rates, top services, and revenue estimates.

PROJECT DEMO

