

Rocket Scientists

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Introduction

Team: Rocket Scientists

Members: Sahil, Justin, Kyran, Qiuyang, Jia, and Tahmina

Describe the APP

For who: for anyone

- For what: A basic chat application that allows communication between people for any purpose
- How does it work: Clients connect to our website, log in, and can chat in multiple different channels!

Challenges

Challenges We Faced:

- Adding our chat code to the main in order to get messages to send
- Learning React as a web framework to build a user friendly and dynamic UI
 - Working and converting between functional components and class components in React
- Scope was larger than expected
- Porting the app to Heroku

Overcoming the Challenges:

- Multiple people attempted to work on the same thing and we compared our results, meshed results together, and used what we thought would work best
- Youtube tutorials, step by step web page tutorials
- Read through documentation for multiple dependencies

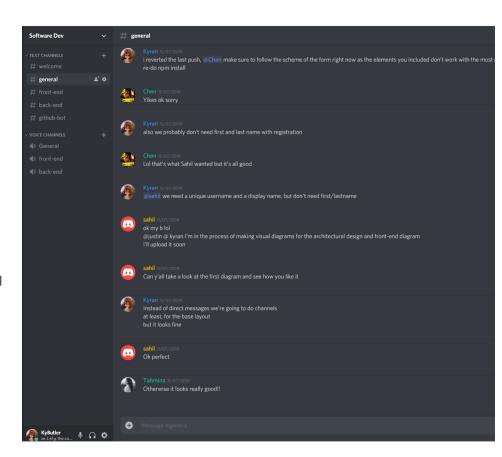
Technical Details

Tools

- Github, Heroku, Discord
- Atom, JSFiddle, LogoMakr, Visual Studio
- G Suite Slides (for presentation)

Meeting Time and Location

- Everyone: Tuesdays from 4-6pm in the Math building
- Front End: Sundays for 1-2 hours via Discord calls



Database Layout

users int UNIQUE id citext UNIQUE username text password hash timestamp with timezone created_at timestamp with timezone updated at text status text displayname bool admin

messages int from id text message timestamp with timezone time sent bool edited timestamp with timezone last edited text channel text UNIQUE messageid

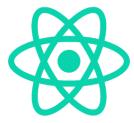
channels
text name
int position

Dependencies Used

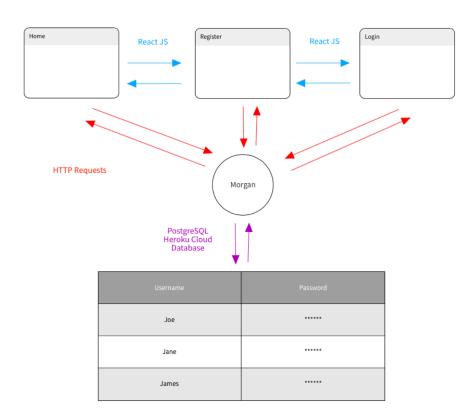
Server Side - bcrypt, bootstrap, cookie-session, dotenv, express, morgan, passport, passport-json, pg, sequelize, sequelize-cli

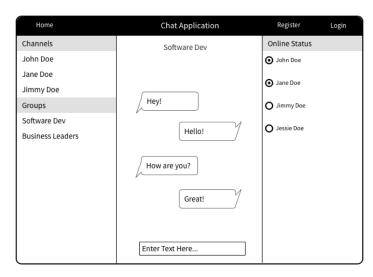
Client Side - fontawesome, lodash, react-bootstrap, react-scroll

Overall - Node.js, React, PostgreSQL

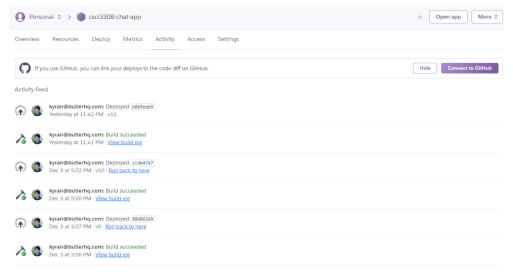


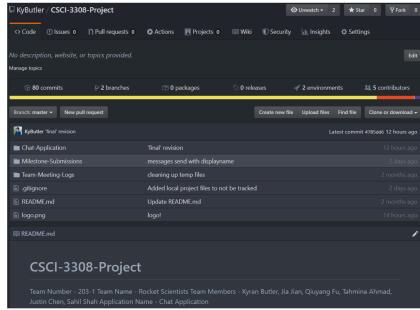
Architectural Diagram/Base Product





Github / Heroku Screenshots



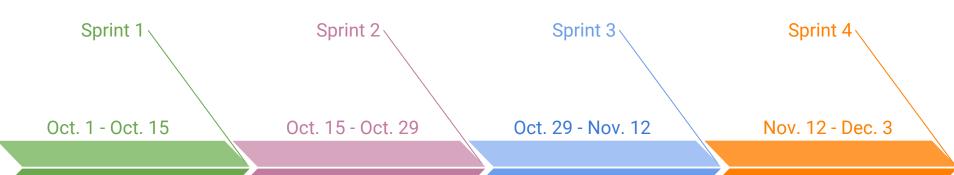


Project Management (PM) Method

Waterfall-Agile Hybrid

Waterfall	Agile	Our Method
Separate phases for analysis, design, etc.	Development based on work done in previous sprints	Separately named phases with work that can carry over in sprints
Scope is defined at the beginning of the project	Scope is variable throughout the project	Scope is variable throughout the project
Clear picture of the final product	Product changes throughout project	Clear picture of the final product
Monthly meetings	Daily meetings	Multiple Weekly meetings

PM Method (cont.)



Design Phase

Physical outline to visual webpage

Subgroup Phase

Frontend and backend teams

Team Phase

Connection of subgroup components

Evaluation Phase

Attend to overall backlog and assess development

PM Method (cont.)

Weekly Scrum Meetings & Work Time

- First 15 minutes
 - What have we done?
 - What do we need to do?
 - What are the challenges? How are we dealing with these?
- Remainder of meeting
 - Team development (broke into smaller groups)
 - Primarily worked in front in vs back end groups
 - Taught/told others the new things we learned in the past week

PM Task Tracking Tool

Tasks	Deadline
Group Tasks: - Bring a drawing/picture of what the main client page should look like - Install Visual Studio in Ubuntu	October 1
Group Tasks: - Turn the visual outline into our main client webpage (drawing → HTML/CSS)	October 8
Group Tasks: - Continue: visual outline into our main client webpage (drawing → HTML/CSS)	October 15
HTML/CSS Team:	October 22
HTML/CSS Team: - Continue: creating other webpages Javascript Team: - Continue: Dynamic functionality of main webpage	October 29
Group Tasks: - Dynamic functionality of other webpages	November 5

Group Tasks: - Continue: Dynamic functionality of other webpages	November 12
Group Tasks: - Clean & comment	November 19
Group Tasks: - Clean & comment	November 26
Group Tasks: - Prepare for presentation	December 3

Product Demo

Let's show you what we have!

j.mp/kyranchat



A chat app

Credits to:

ilikecuteboats - tester



Fin!