BudgetBeam

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Description of BudgetBeam

BudgetBeam *is an expense tool, with the goal being to create a simple and effective way for users to track their expenses/income and to create a product that is easy to use for all demographics.* ***BudgetBeam*** *accomplishes the goal in several ways:*

Add Receipts

- Allows users to add receipts for different expenses/incomes
- Aggregate the data into a user-friendly dashboard for their account
- Breaks down expenses by month and category

Categories

- Allows users to assign budgets to specific categories for any given month for personal organization

Description of BudgetBeam Cont.

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Expense Reports

- Allows users to generate expense reports for the month of their choosing
- Ability to download report as a pdf which can be kept as a financial record

Profile Settings

- Allows users to change their username, password, and profile picture
- Allows users to delete their account

Methodologies Used

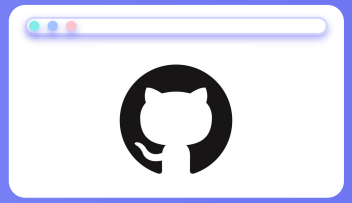
Agile

- Utilized the general principles of Agile methodology throughout the duration of the project
  - Broke up the project incrementally on a week-to-week basis
  - Met 1-2 times a week as a group and once a week with the TA to discuss any challenges team members faced
  - Worked on project plans for the following week

Peer Code Reviewing

- Used throughout the entirety of the project to ensure each team member was on track
- For example, if a team member runs into an issue, one or two other team members would examine and help debug and optimize the code

Tools



Github

Our team utilized GitHub to manage our VCS repository

Rating:

PostgreSQL

Our team used PostgreSQL to manage accounts, the users' receipts and the users' budgets in the project database

Rating:

VSCode

All team members used VSCode as their primary IDE for the entirety of the project

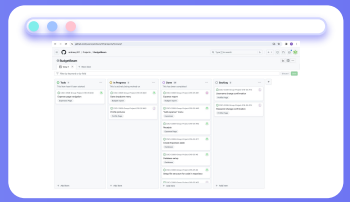
Rating:

NodeJS

Our team utilized NodeJS as our application server/JavaScript runtime environment

Rating:

Tools Cont.



Github Project Board

Used by all team members to organize and partition tasks among the team

Rating:

★★★★★

LucidChart

This was used by the team to create visuals such as use case diagrams

Rating:

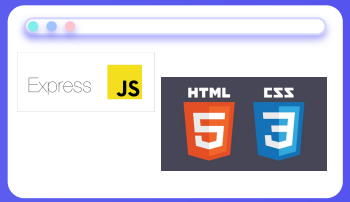
★★★★★

Microsoft Azure

Azure was used as the deployment environment to host the web application

Rating:

★★★★★



HTML, CSS, ExpressJS

These three tools were used in conjunction with one another throughout the project as primary tools for designing the UI

Rating:

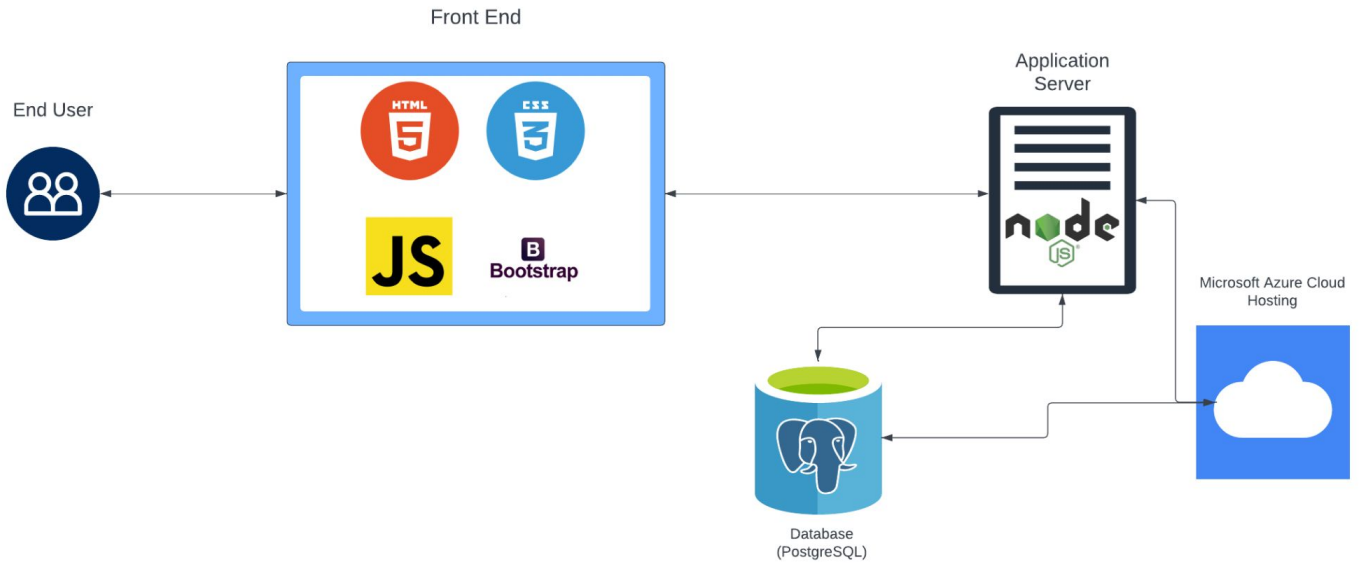
★★★★★

Tools Cont.

Mocha and Chai

Used by the team to test the project code

Rating:



Architecture Diagram

Challenges

Lack of Experience with Git/Github

Needed to update the main branch more frequently, otherwise one can easily fall behind or end up ahead

Database Setup

Began with 3 tables in our database and restructured to 5 tables after realizing how complicated database set up would be

User authentication with Mocha

Mocha by default does not store user sessions, which caused complications when testing the login endpoint for our website. Resolved issue by using cookies


Demo!

BUDGETBEAM

Thank You!