BSMASH HatHub

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Description of Project

- Ecommerce web app for hats
- Users have the ability to do the following:
 - Create their own accounts
 - Edit their profiles
 - Add funds
 - Add hats to cart
 - Order hats
 - Cancel orders
 - Save hats for later
- Database will be used for storing information about the customers, carts, orders, and hats
- Wide selection of hats
- Email is sent to users after they place an order

Tools, Logos, Rating, Why

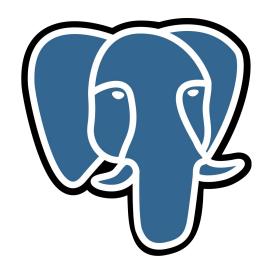
GitHub for VCS Repository and Project Board

- 5 for repository function
 - Easy to use, central hub for code, charts and other documents, and milestone submissions
- 4 for project board
 - Sometimes unwieldy, not easy to find even when linked to a specific repository

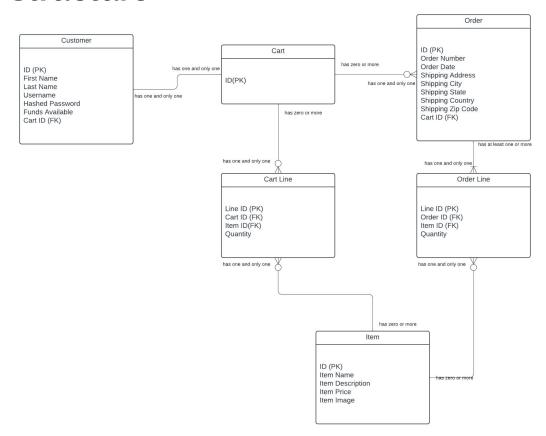


PostgreSQL for Database

- 5 for database functionality
 - Easy to use, great CLI usage, easy to set up a database



Database Structure



Visual Studio Code for IDE

- 5 for IDE functionality
 - Easy to use, easy to add plugins, universal usage, intuitive



EJS for UI Tools

- 5 for UI functionality
 - Seamless integration of JavaScript into front end, pairs nicely with Node.js routes



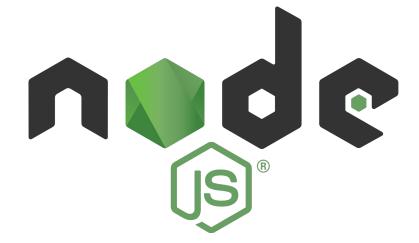
CSS for UI Tools

- 5 for UI tools
 - Made the site visually interesting, easy to add outside resources



NodeJS for Application Server

- 5 for application server functionality
 - Intuitive, lots of helpful built in tools, easy to use



Microsoft Azure for Deployment Environment

- 5 for deployment environment
 - Many helpful built in features for deployment, good for students



Chai for Testing Tool

- 4 for testing tool
 - Some unintuitive parts, but overall good integration to test Node.js routes



LucidCharts for Diagramming Tool

- 4 for diagramming tool
 - Unintuitive controls at times but overall great for a free chart service

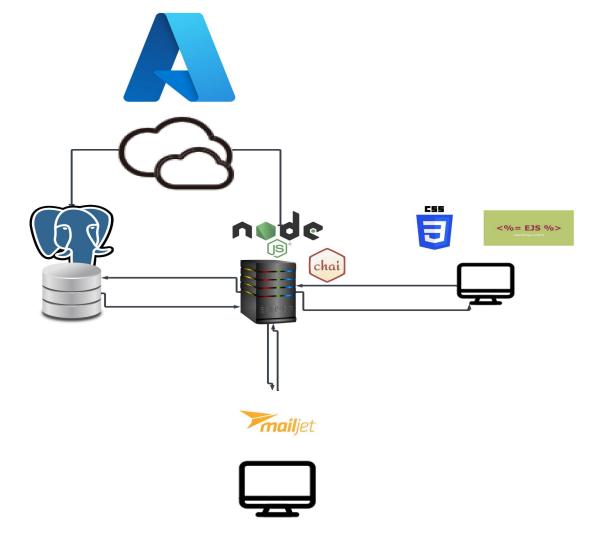


MailJet for External API

- 4 for external API
 - Difficult to set up and did not have all the features we wanted, but got the overall job done



Architecture Diagram



Challenges

UI Challenges

- Making the site visually appealing through CSS
- Gathering and transforming data correctly from forms
- Displaying data gathered from database to the site correctly
- We used EJS and CSS documentation along with peer code review to overcome challenges
- Would have liked to have a search feature, but UI challenges made us change directions

Emailing after checkout

- Struggled to link email to send out and then connect the functionality to placing an order
- Used documentation on MailJet and peer code reviews to overcome challenges
- o This did not change our plans, as this was a very early feature we wanted on our site

Login and registration tests

- Having them properly implemented, and needing one for the other
- Chai assertions sometimes were unwieldy to use
- Were able to use documentation on Chai to overcome
- o Did not change our site plans though

Database Challenges

- Writing SQL for some of the routes, especially related to the cart were challenging
- To overcome these challenges, we tested statements on the SQL server and ironed out bugs with documentation and peer code reviews
- o This did not change the direction of our site plan

Demonstration

https://cuboulder.zoom.us/rec/share/nbuQH7jjPakcslw9zqIrRDjeYCfONNnm6T7oCkYk-xqeJZT1XClMINgif IBV9il.V8kXQgbHTHb-EnfE?startTime=1701900243000

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