Loot Goblin

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BS in Computer Science

Welcome to Loot Goblin!

- Loot Goblin is publicly deployed!
- Type the following URL into your browser's search bar:
  https://csu-lootgoblin.meteorapp.com
- Credentials:
  Username: meteorite
  Password: password

Definitions

- Tabletop role-playing game: A pen-and-paper game where each player plays a single, unique character.
- Game master: The person in charge of and running the tabletop role-playing game. The game master is privy to knowledge the players cannot know.

Statement of Purpose

- To create a free resource for tabletop role-playing games that players and game masters can use to streamline their experience.
- To provide a database for players to keep track of inventories.
- To allow game masters to discretely add and remove items from players' inventories.
- To provide an experience similar to a social media platform for tabletop role-playing games.

Research and Background

- Meteor and Web App Development
  - I was unfamiliar with full stack development. For my full stack development framework, I chose Meteor. I used tutorials to learn how to use the Meteor framework, but these were time consuming.
- Mongo Clusters and Deployment
  - This project utilizes Mongo, and learning how to create and attach a Mongo cluster to my project was vital to successfully deploying the app.

Project Languages & Software

- Languages
  - JavaScript
  - HTML
  - CSS
- Software
  - Virtual Box
  - Ubuntu 20.04
  - Meteor
  - Visual Studio Code

Project Hardware

- Web App Requirements
  - Internet connectivity
- Developed using…
  - AMD Ryzen 5 5600X
  - AMD Radeon RX 5700 XT
  - 32 GB RAM

Demo

URL: https://csu-lootgoblin.meteorapp.com

Username: meteorite

Password: password

Testing

- My testing was manual.
- I used Pass/Fail criteria for each test.
- I tested each piece of functionality. Please refer to the documentation to see all tests and their results.

Testing Results Pt. 1

- **Test 1: Login with Correct Credentials**
  - **Procedure:** Use the admin credentials to log into Loot Goblin.
  - **Expected Result:** Successful login.
  - **Actual Result:** Successful login.
  - **Status:** Passed
- **Test 2: Login with Incorrect Password**
  - **Procedure:** Use the admin username to log into Loot Goblin, but use the wrong password.
  - **Expected Result:** Unsuccessful login.
  - **Actual Result:** Unsuccessful login.
  - **Status:** Passed

Testing Results Pt. 2

- **Test 4: Add Item with Correct Input Types**
  - **Procedure:** Add an item to the database following the correct input types for each field.
  - **Expected Result:** Successfully add the item into database and display the item.
  - **Actual Result:** Successfully add the item into database and display the item.
  - **Status:** Passed
- **Test 5: Add Item with Incorrect Quantity Input Format**
  - **Procedure:** Add an item to the database following the correct input types for each field, but use a string for the quantity.
  - **Expected Result:** Insertion into database unsuccessful.
  - **Actual Result:** Insertion into database unsuccessful.
  - **Status:** Passed

Testing Results Pt. 3

- **Test 9: Use Weight Incremental Arrows with no Original Value**
  - **Procedure:** Use the incremental arrows to increase weight without a value in the field.
  - **Expected Result:** "1" now populates the field, and the arrows continue to increment or decrement the value.
  - **Actual Result:** "1" now populates the field, and the arrows continue to increment or decrement the value.
  - **Status:** Passed
- **Test 13: Use Price Incremental Arrows with Original Value**
  - **Procedure:** Use the incremental arrows to increase price with "5" as the initial value in the field.
  - **Expected Result:** "6" now populates the field, and the arrows continue to increment or decrement the value.
  - **Actual Result:** "6" now populates the field, and the arrows continue to increment or decrement the value.
  - **Status:** Passed

Testing Results Pt. 4

- **Test 14: Delete Item from Database**
  - **Procedure:** Remove an item from the database.
  - **Expected Result:** Item is removed from the database and is no longer displayed.
  - **Actual Result:** Item is removed from the database and is no longer displayed.
  - **Status:** Passed
- **Test 15: Logout**
  - **Procedure:** Use the "Logout" button to log out of Loot Goblin.
  - **Expected Result:** Successful logout.
  - **Actual Result:** Successful logout.
  - **Status:** Passed

Challenges Overcome

- Web App Development
  - Meteor's tutorials changed during the development of my project.
  - Errors and warnings were often not simply given to me. I would have to go searching through logs to find why my app was crashing.
- Technical Difficulties
  - My first VM bricked during Construction.
  - My second VM ran out of memory during Defense. I learned how to use Ubuntu's rescue shell!
  - My Github repository corrupted during Defense, but this was a quick fix.
- Deployment
  - Heroku and Meteor do not seem to work well together.
  - MongoDB Atlas took a bit of know-how to use and attach to my project.

Future Enhancements

- Small Fixes and Additions
  - Fix the user sign-up system.
  - Add methods to sort the database by name, weight, and price.
  - Add functionality to sum the weight of an inventory.
  - Add drag and drop sorting.
  - Add the option to have tables in the inventory database that are not counted towards the total summed weight.
- Intensive Implementations
  - Implement proper scaling for mobile devices.
  - Implement the campaign system.
  - Implement the friend system.

Questions?