



# HOME GOODS INVENTORY MANAGEMENT

**Team: International Techies**

**Team Members:**

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Venukeswari ootla

# PROJECT DESCRIPTION



HomeGoods Inventory Management is a sophisticated web tool that helps store managers manage their inventory more efficiently. It has a secure login system so that only authorized individuals can access and control inventories. Managers can simply manage categories such as furniture electronics and home decor by adding, updating or deleting items. Each item has essential details such as Item, Category, Name, price, description, stock, Manufacturer, Dimension & Weight and Warranty for better management. The frontend built using ReactJS, provides a user-friendly responsive interface with dark mode support while the backend is powered by Firebase for real-time updates and safe data storage. This scalable system streamlines processes minimizes manual labor and boosts store managers' productivity.



The background of the slide is a grayscale image of a circuit board, showing intricate patterns of lines and circular components. The text is overlaid on this background.

# TECHNOLOGIES

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**Frontend: ReactJS**

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**Backend: Firebase**

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**Styling and Design: HTML/CSS**

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**Programming Language: JavaScript (ES6+).**

# PROJECT DEVELOPMENT PROCESS



- Set up the Project : Use Vite to initialize the project for efficient development and build configuration.
- Design UI Components : Create and style reusable components for the user interface.
- Implement Routing : Use react-router-dom to set up navigation for different pages and sections.
- Integrate Backend : Use Firebase for backend functionality, including authentication, database, and real-time features.
- Deploy the Application : Deploy the app for testing or production, using GitHub Pages.
- Document the Project : documentation for setup instructions, features, and usage guidelines.



# SOFTWARE REQUIREMENT SPECIFICATIONS

## Functional Requirements (FR):

**User Authentication & Account Management:** The system shall restrict unauthorized users from accessing the application.

**Navigation & Page Flow:** The system shall navigate to the "Item Categories" page after successful login.

**Inventory Management:** The system shall display a list of categories and allow store managers to add new categories.

**Buttons & Alerts:** The system shall display an alert message saying, "Are you sure you want to delete category? Yes or No" when a category is selected for deletion.

**Search & Header Features:** The system shall provide a Light/Dark theme button for switching between modes.



# SOFTWARE REQUIREMENT SPECIFICATIONS

## Non-Functional Requirements (NFR):

**Performance:** The system shall provide a response time of 2-3 seconds for any search functionality under normal conditions.

**Scalability:** The system shall allow seamless scaling of the backend infrastructure to support increased traffic as inventory grows.

**Security & Usability:** The system's interface shall be intuitive and user-friendly, requiring minimal training for store managers.

**Compatibility:** The application shall be compatible with various screen sizes.

**Availability & Data Consistency:** The system shall ensure seamless communication between the front-end and back-end components.

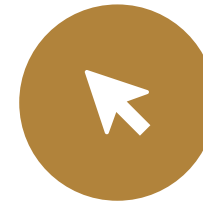
# SYSTEM WORKFLOW



Store managers can create accounts by entering the necessary information; duplicate or incomplete information will be prohibited. In order to guarantee secure access and prevent unwanted users, the system authenticates users at login. Registered users can reset their passwords by email.



Store managers can add, update or remove items with details like price, stock and description using the system to manage categories like electronics and furniture. For consistency, all modifications are updated in real time across sessions.



After logging in users are taken to the Dashboard where they can browse through categories and add or modify items. Actions such as adding, deleting or saving inventory are made clear with confirmation prompts.

# SYSTEM WORKFLOW



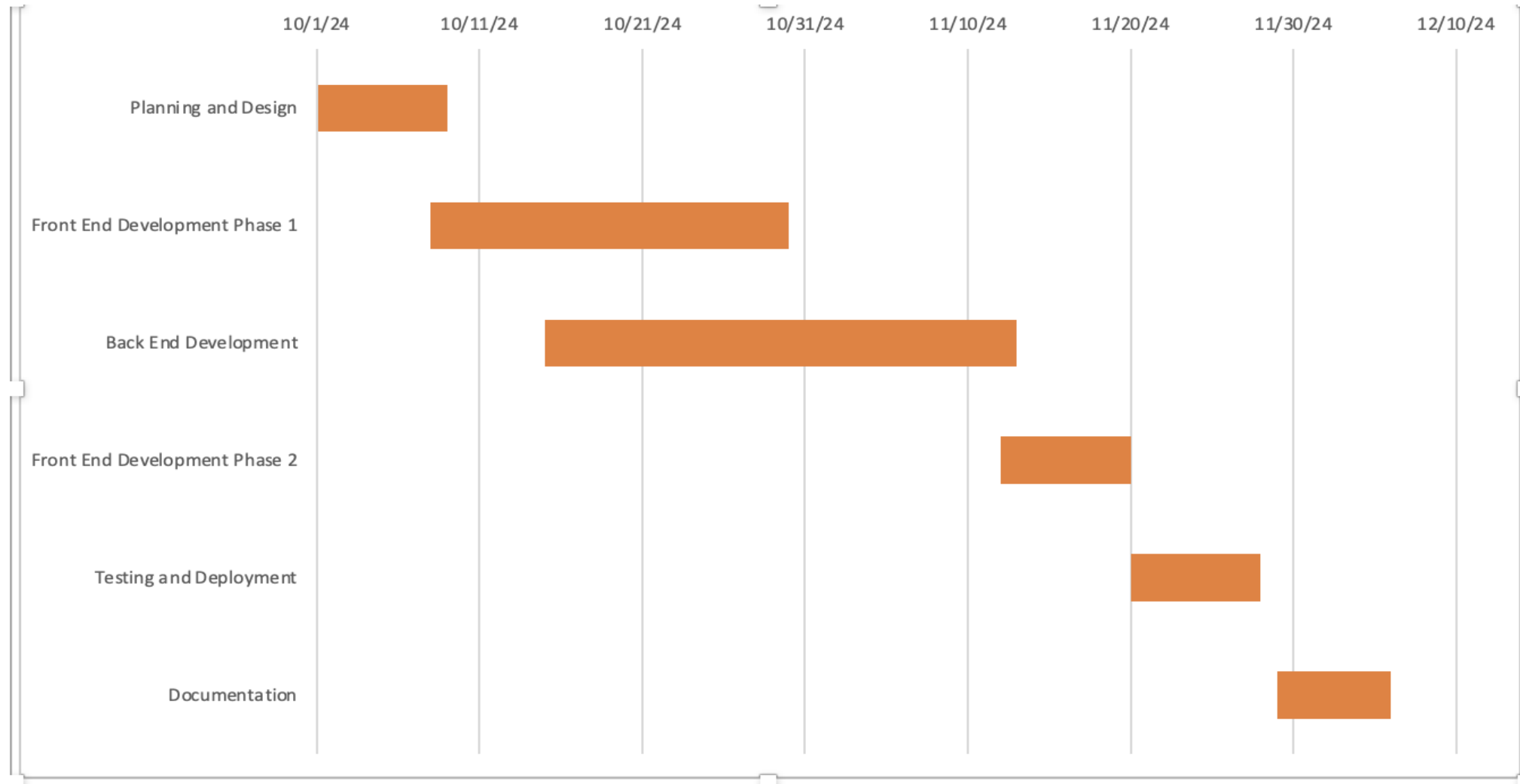
Store managers can search for inventory items or categories by name and view the inventory count by categories and items in categories. The system also has a light/dark mode option for a more customizable user experience.



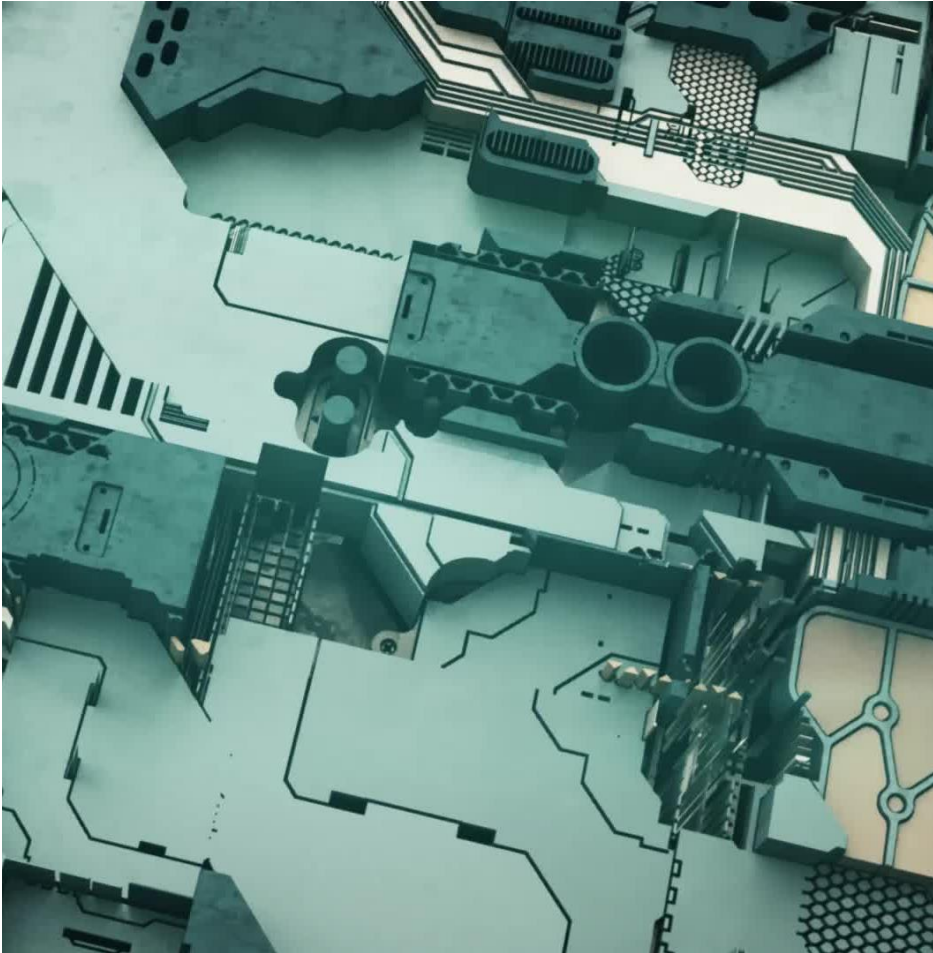
Store managers can access full item information including pricing, description and stock levels as well as confirmation prompts for operations such as adding or deleting goods. Users can reject unsaved changes by clicking the Cancel button ensuring that no changes are made accidentally.



# GANTT CHART




# POST MIDTERM PROJECT MODIFICATIONS



The project has made significant progress since the midterm. Inventory item, category, and detail management pages are currently part of the frontend development. To facilitate database operations, authentication and real-time changes, Firebase has been used to set up the backend. Store managers will have effective inventory management through the connection of the frontend and backend. To complete the HomeGoods Inventory Management System, more features including search capabilities, alert notifications and dark mode have been included.



 **Firestore**

Project Overview

Generative AI

Build with Gemini

Project shortcuts

Authentication

**Realtime Database**

Product categories

Build

Run

Analytics

All products

Related development tools

Spark

Upgrade

Home Goods Inventory System

# Realtime Database


Need help with Realtime Database? Ask Gemini



DataRulesBackupsUsageExtensions

https://home-goods-inventory-system-default-rtdb.firebaseio.com


https://home-goods-inventory-system-default-rtdb.firebaseio.com/

- categories
  - OBveXWDvnXqNAToPiP8: "Furniture"
  - OBve\_XPcmPVuS2YVqkc: "Tools"
  - OBvecaf1MGszs8n10eI: "Kitchen Ware"
  - OBwVsGEheRUw45E9Hq8: "Appliances"
  - OCFFaryU4MoEjZpLTnL: "Electronics"
  - OCG6SM7va\_085TEcpxf: "Decor"
  - OCGGUD0ytoFSdbfRzN8: "Textiles"
  - OCHF-yIQX5bNcWZCAZ3: "Lighting"
  - OCHE4...: "Clothing supplies"


 **Firestore**


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 **Realtime Database**

Product categories

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Run 

Analytics 

 All products


Related development tools

Spark No cost (\$0/month) Upgrade NEW

Home Goods Inventory System ▾

# Realtime Database

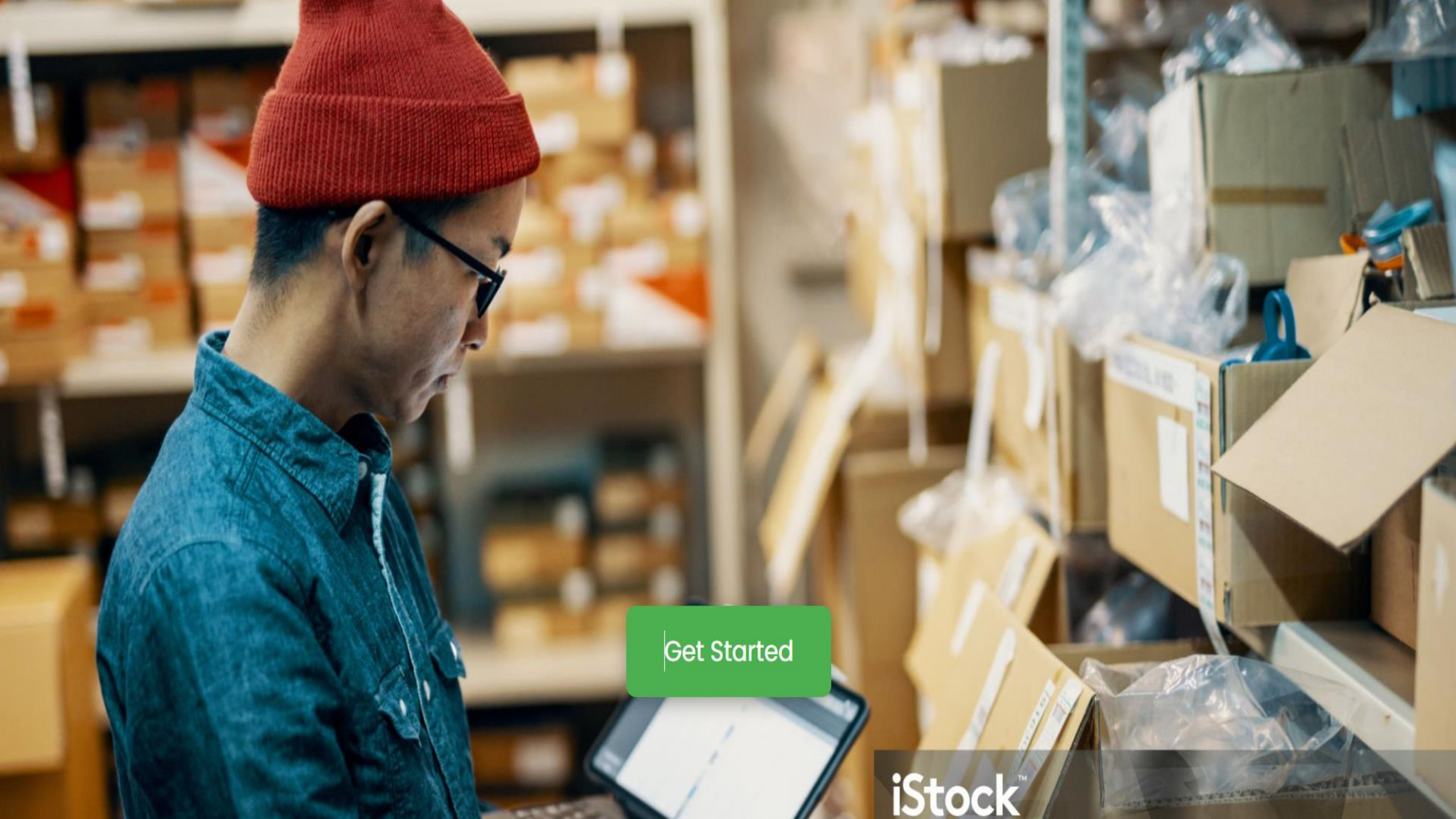
📄 Need help with Realtime Database? Ask Gemini

Data Rules Backups Usage  Extensions

<https://home-goods-inventory-system-default-rtdb.firebaseio.com>

```
https://home-goods-inventory-system-default-rtdb.firebaseio.com/
├── categories
└── items
    ├── Appliances + 🗑️
    └── -ODTzSB9MLur12EBmjBT
        ├── category: "Appliances"
        ├── desc: "Front Load Washer, Automatic Machine, Vibration Control, Pre-Soak, Speed Wash, 10 Cycles, Energy Star Certified, White"
        ├── dimension: "6*5*6 50lbs"
        ├── image: "https://cdn.pixabay.com/photo/2016/01/28/22/07/washing-machine-1167053_640.jpg"
        ├── manufacturer: "Samsung"
        └── name: "Front Load Washing Machine"
```

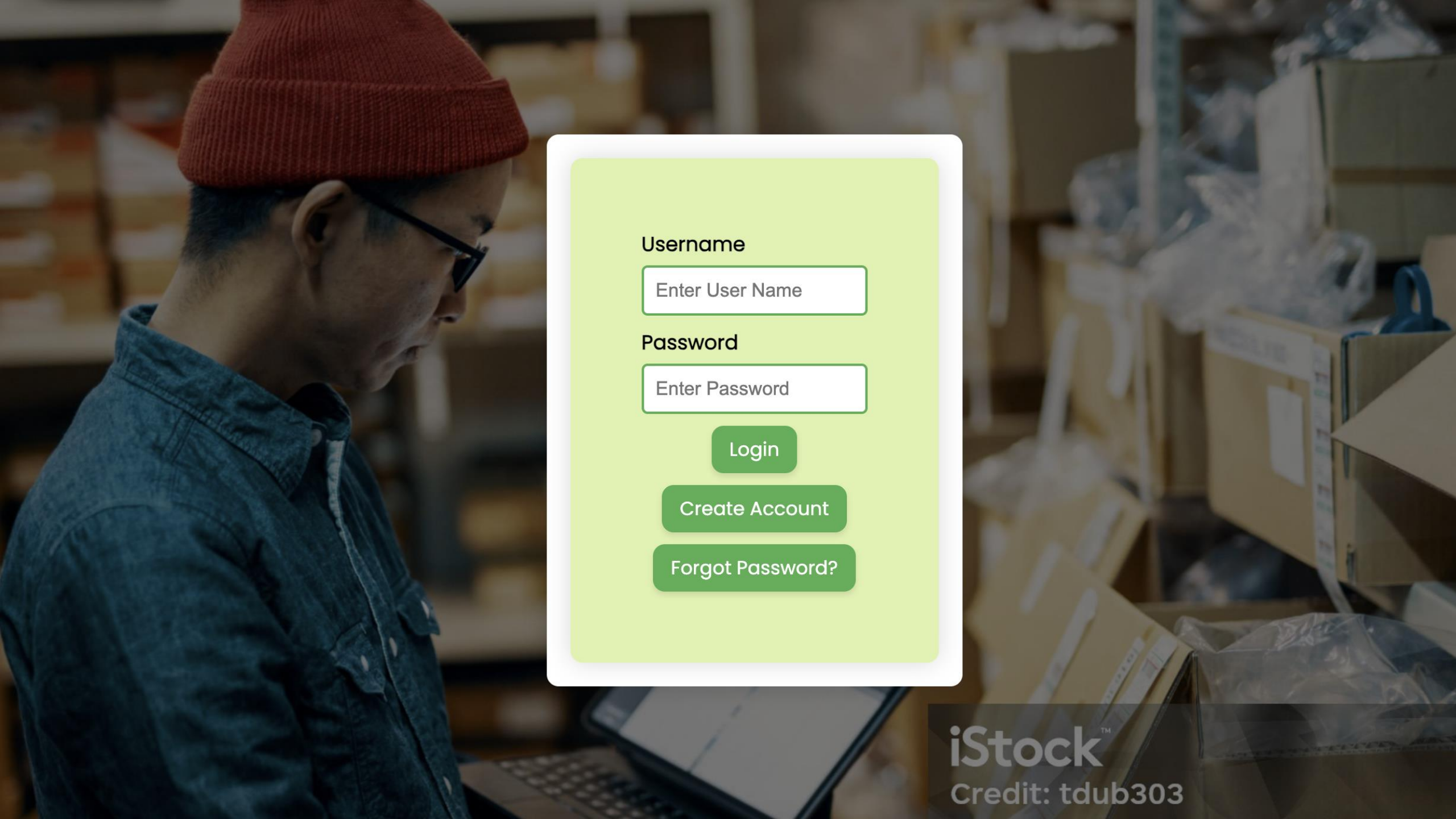




Get Started

iStock™





Username

Password

Login

Create Account

Forgot Password?

iStock™

Credit: tdub303



First Name \*

Last Name \*

E-mail \*

Enter a valid Mail

Create Password \*

Password should be at least 8 characters long

Re - Enter Password \*

Create Account

Back

Username

venu@mail.gvsu.edu

Password

.....

Firestore: Error (auth/invalid-credential).

Login

Create Account

Forgot Password?

## Forgot Password

Email

Send Reset Email

[Back to Login](#)



Home

Count

Dark Mode

Logout

## Item Categories

Add New Category

Furniture



Tools



Kitchen Ware



Appliances



Electronics



Decor



Textiles



Lighting



Cleaning supplies



Bathroom & laundry



Pet storage



Tech & Accessories



Outdoor & garden



Bedding and Linens



Home Improvement



Personal Care



Seasonal Items



Security and Safety



Fitness Equipment



Window Treatments



Home

Count

Dark Mode

Logout

## Add Item Category

Enter Category Name :

Save

Home

Count

Dark Mode

Logout

Back

## Items in Furniture

Search the item

Add New Item

Couch



\$599



Basic King size bed



\$699



Round dining table



\$99



Chair

Basic Full size bed

Sofa



## Add New Item

Category Name:

Item Name:

Item Price:

Item Stock:

Decription:

Manufacturer:

Dimensions and weight:

Warranty:

Image URL:

Add New Item

Cancel

[Back](#)[Edit Item Details](#)

## Item Details: Basic Full size bed

Item Category: Furniture

Item Name: Basic Full size bed

Item Price: 799\$

Item Stock: 29

Description: Full Platform Bed Frame with Fabric Headboard and Wooden Slats Support

Manufacturer: Purple

Dimensions & Weight: 80"L x 59"W x 42"H

Warranty: 2 years



## Edit Item Details

Item Name:

Basic Full size bed

Item Price:

799

Item Stock:

29

Description:

Full Platform Bed Frame with Fabric Headboard and Wooden Slats Support

Manufacturer:

Purple

Dimensions and Weight:

80"L x 59"W x 42"H

Warranty:

2 years

Image URL:

[https://cdn.pixabay.com/photo/2023/07/27/05/47/furniture-8152531\\_1280.jpg](https://cdn.pixabay.com/photo/2023/07/27/05/47/furniture-8152531_1280.jpg)

Save

Cancel



[Home](#)[Count](#)[Dark Mode](#)[Logout](#)

Total Categories: 24

Total Items in Inventory: 105

Items by Category:

- Appliances: 8 items
  - Front Load Washing Machine: Stock - 30
  - Washing machine: Stock - 40
  - Split Air Conditioner: Stock - 40
  - Air Conditioner: Stock - 30
  - Stainless Steel Refrigerator: Stock - 31
  - Refrigerator: Stock - 38
  - Ceiling Fan: Stock - 100
  - Cradle Floor Fan: Stock - 99
- Bathroom & laundry: 5 items
  - Cotton towel: Stock - 200
  - Rain shower: Stock - 100
  - Towel rack: Stock - 100
  - Laundry Detergent: Stock - 97
  - Hangers: Stock - 100
- Bedding and Linens: 1 items
  - Comforter: Stock - 50
- Cleaning supplies: 10 items

[Home](#)[Count](#)[Light Mode](#)[Logout](#)

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Home

Count

Dark Mode

Logout

## Item Categories

Search The Item

Add New Category

Furniture



Tools



Kitchen Ware



Appliances



Electronics



Decor



Lighting



Cleaning supplies



Bathroom & Laundry



Pet storage



Tech & Accessories



Outdoor & garden



Bedding and Linens



Home Improvement



Personal Care



Seasonal Items



Security and Safety



Fitness Equipment



Window Treatments

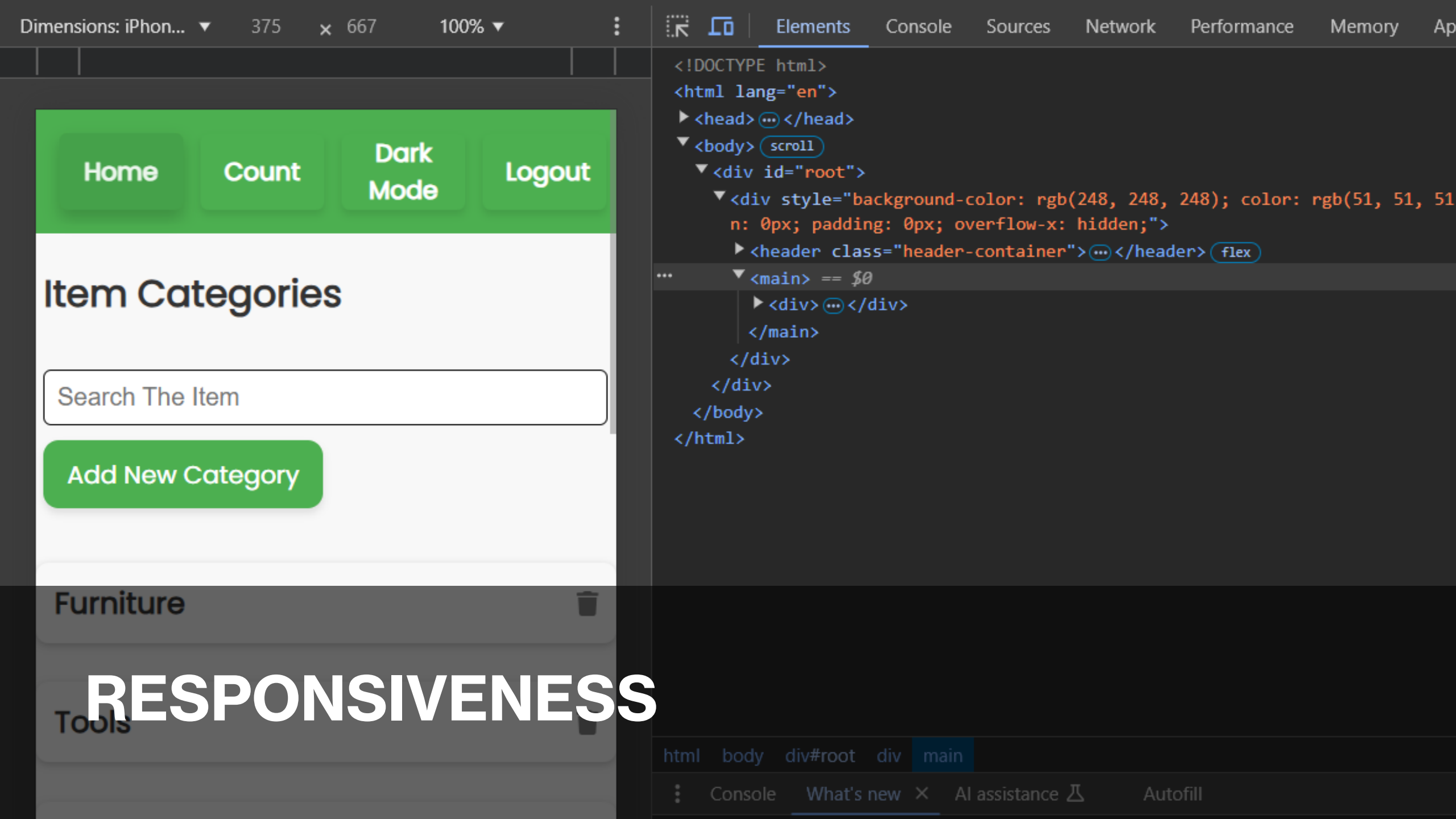


Are you sure you want to log out?

Yes

No





RESPONSIVENESS

# DEPLOYMENT LINK

[https://prashanthivelpula.github.io/CIS\\_641\\_Final\\_Project/](https://prashanthivelpula.github.io/CIS_641_Final_Project/)

# CONCLUSION

The HomeGoods Inventory Management System is a comprehensive system that makes inventory management easier for store managers. It improves efficiency by providing real-time updates, easy navigation and user-friendly features. With features such as search and detailed item management, the system eliminates manual effort and enhances operational workflows. This project successfully meets the requirements of modern inventory management while being flexible for future expansion.

Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_



A modern office interior featuring a large, light-colored wooden conference table surrounded by leather chairs. The room has large windows on the right side, providing a view of a city skyline. In the background, there is a bar area with a glass display case and a wall-mounted plant. The ceiling is white with several woven pendant lights hanging from it. The overall atmosphere is bright and professional.

Thank you