Helix

Smart-Inventory Demo 3

Our Client

Amazon Warehouse Services

About Smart Inventory

What is Smart Inventory?

Smart Inventory is a user-friendly, web-based application that streamlines and automates core inventory processes.

Who?

- Business Owners/Managers (Administrators):
- Employees (Inventory Controllers/End-Users):

Links To Documentation

ReadMe

Requirement Specification

Architectural Specification

Design Specification

User Manual

Coding Standards

Testing Policy

Installation Manual

Demo

Subsystems

1. Authentication and Authorization Subsystem
2. Team/User Management Subsystem
3. Reporting Subsystem
4. Inventory Management Subsystem
5. Stock Request Subystem
6. Supplier Management Subsystem
7. Order Placement Subsystem

Major New Features

- Order Placement
- Order Management
- Web portal
- Low stock event handling
- Automated ordering
- Inventory report(Metrics, Graphs, etc.)
- Supplier report(Metrics, Graphs, etc.)
- Activity report(Metrics, Graphs, etc.)
- Supplier communication

Features to finish

- **Dynamic graphing for reporting**
- **Real time notifications for real time reports and autonomous ordering decisions**
- **Overall beautify of UI**
- **Automation Machine Learning algorithm to:**
  - **Work out best supplier**
  - **Predict inventory deficits**
  - **Order the predicted deficits ahead of time saving costs of orders**

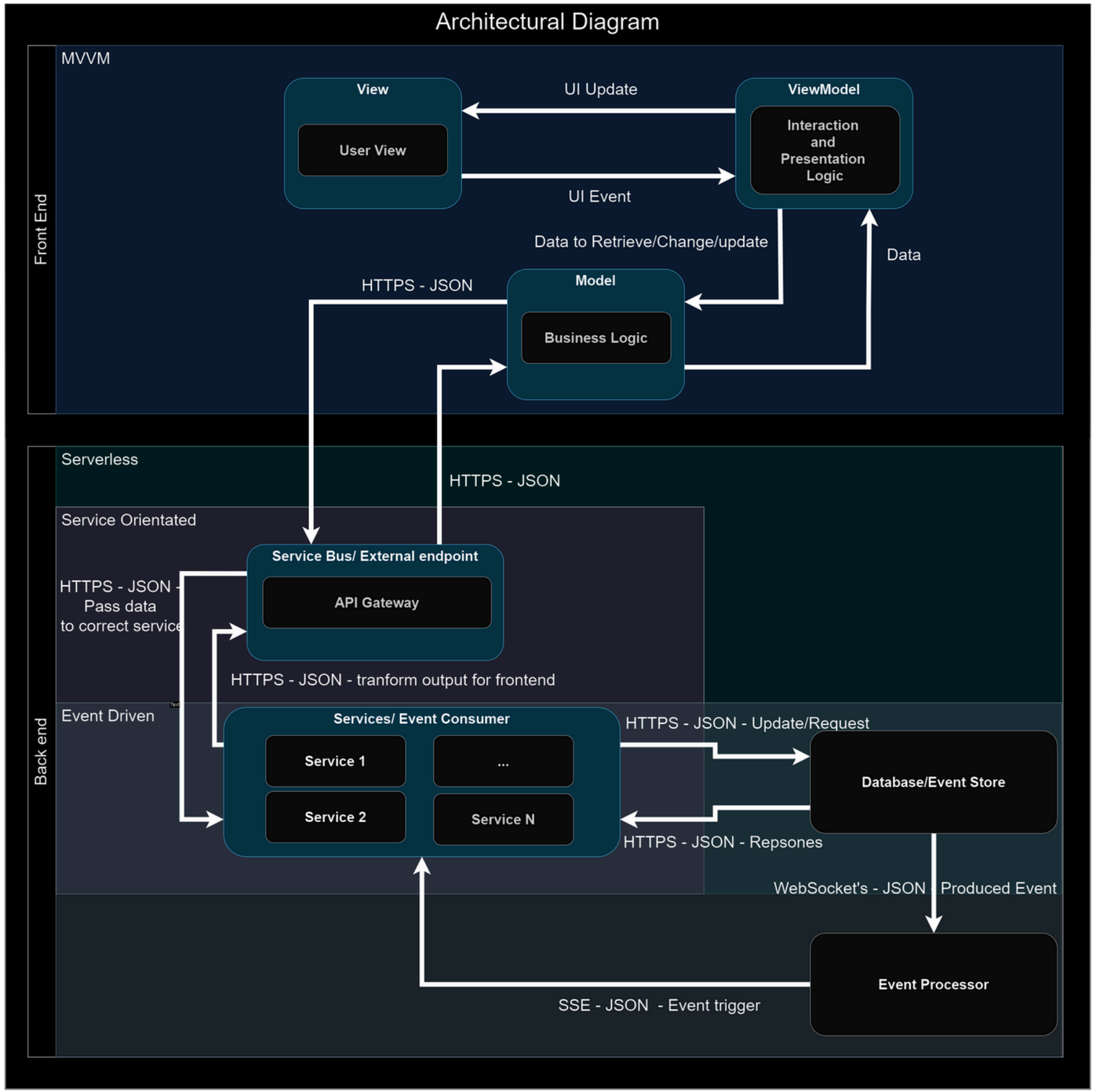
Architectural Design

Quality Requirements

- Reliability
- Scalability
- Security
- Usability
- Maintainability

Architectural Contraints

A core architectural constraint for this project is the requirement to utilize only open-source libraries.



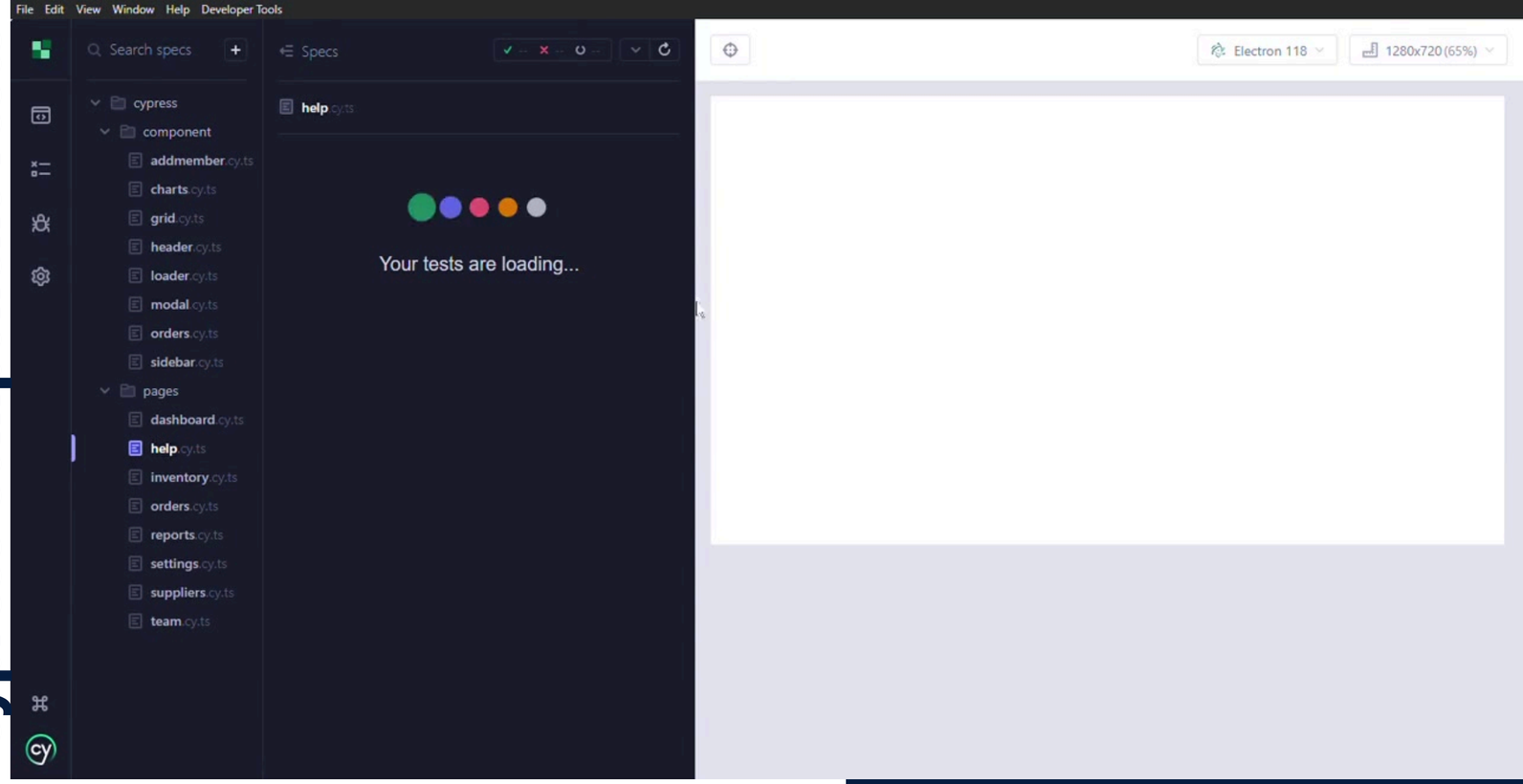
Architectural Styles

- Model View ViewModel(MVVM)
- Service-Oriented Architecture (SOA)
- Event-Driven Architecture (EDA)
- Serverless Architecture

Tests - Cypress

Cypress E2E

Cypress Component Tests



Deployment

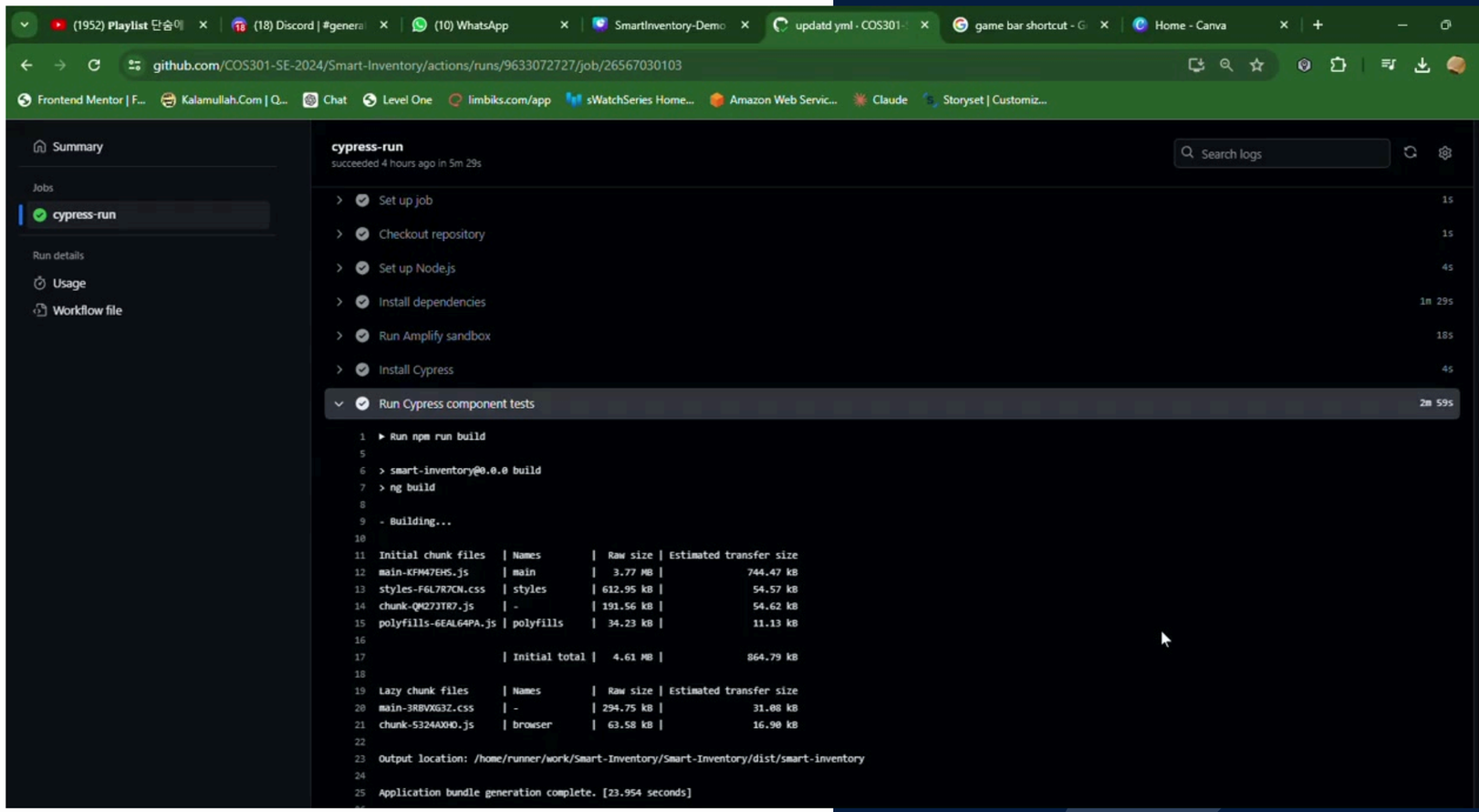
Deployment

- Set Trigger to deploy on push to main.
- Preview deployments through amplify sandbox to help enhance API and web app testing, creation and maintenance.

Testing

Tests

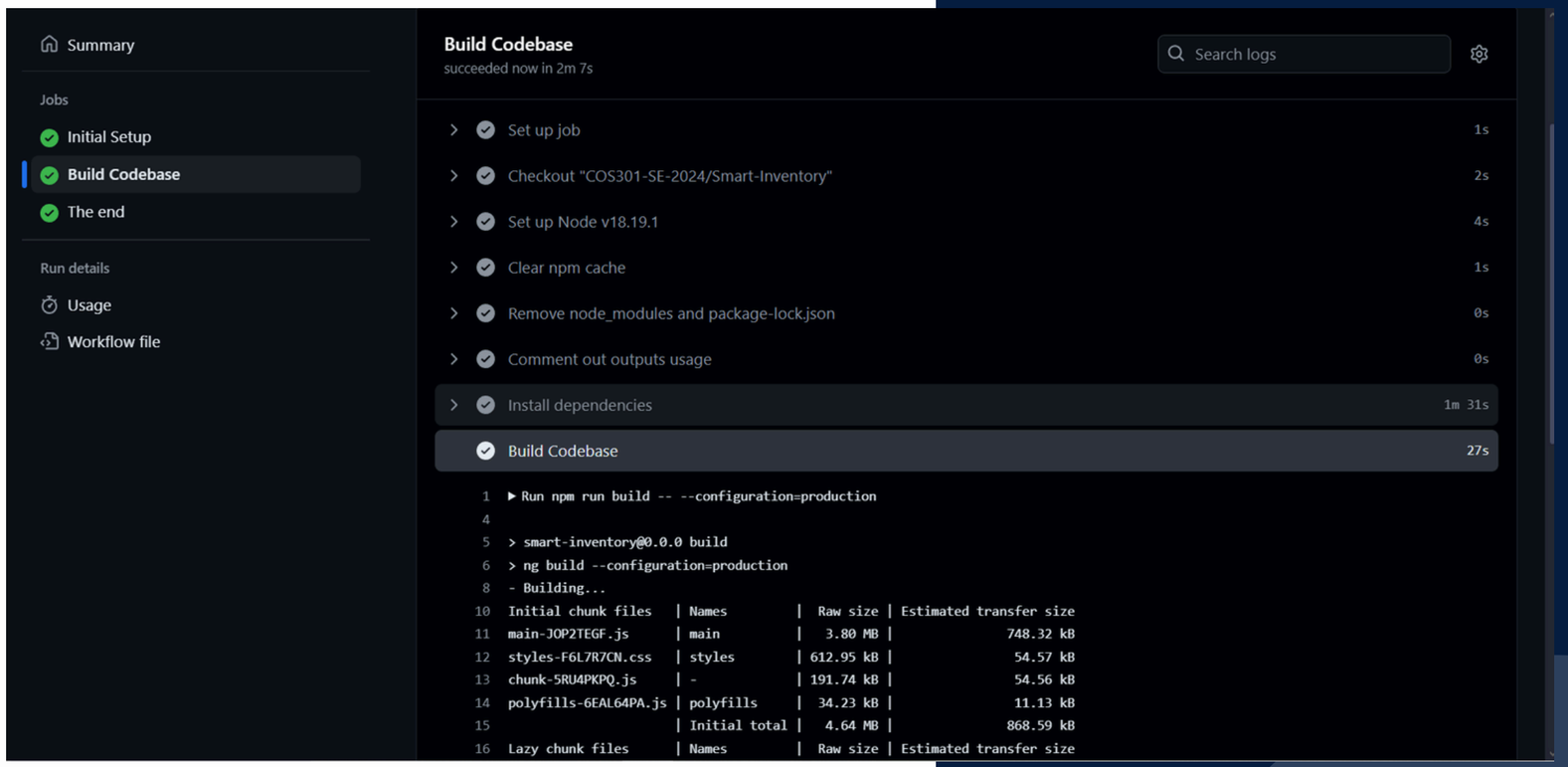
- Set Trigger on merge to all main and develop.
- When the trigger event is triggered it will run unit tests and e2e tests.



Linting

Linting

- Set Trigger on merge into main and develop.
- The automated linter ensures:
  - No syntax errors.
  - No coding standards violations.
  - Styling is readable.

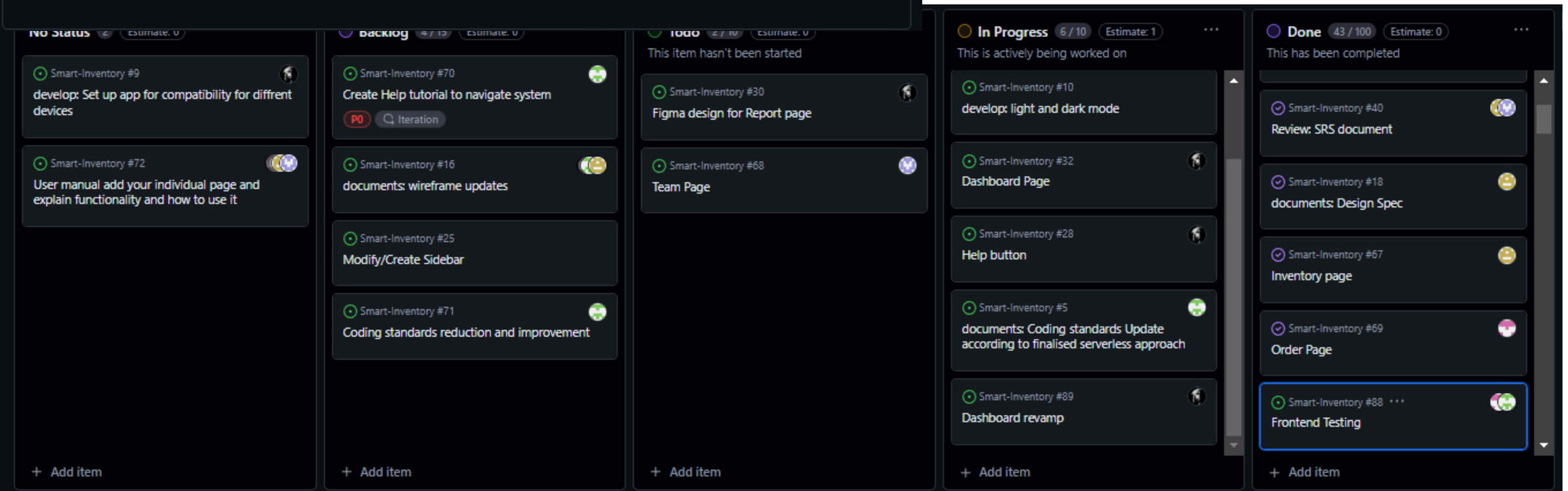


Building

Building

- Set Trigger to build on push to main or develop branch.
- This helps ensure that no issues are around before the web app is deployed.

Project Board



THANK YOU!

QUESTIONS?