



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 Subsystem**
- 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**

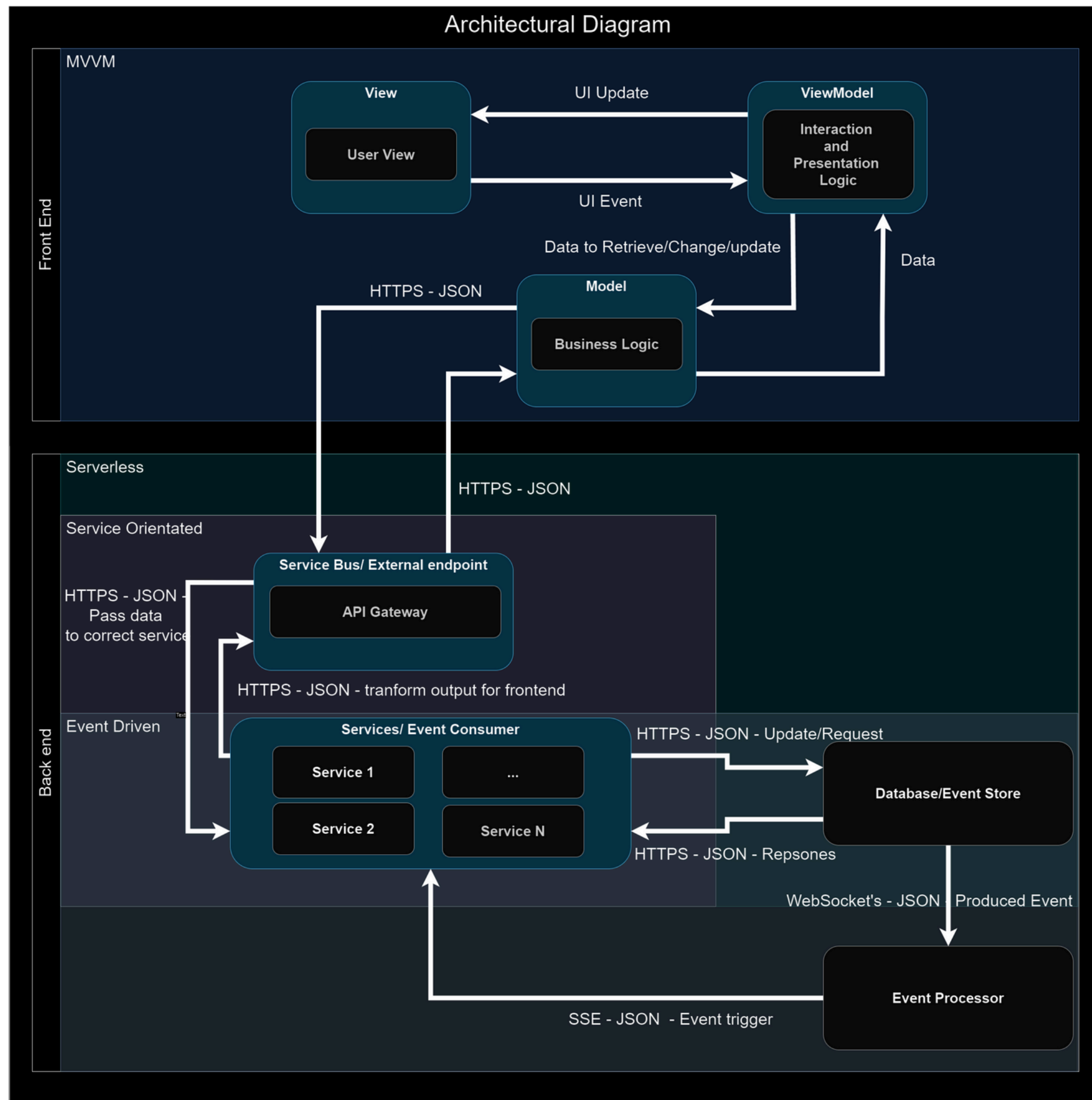
Architectural Design

Quality Requirements

- Reliability
- Scalability
- Security
- Usability
- Maintainability

Architectural Constraints

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



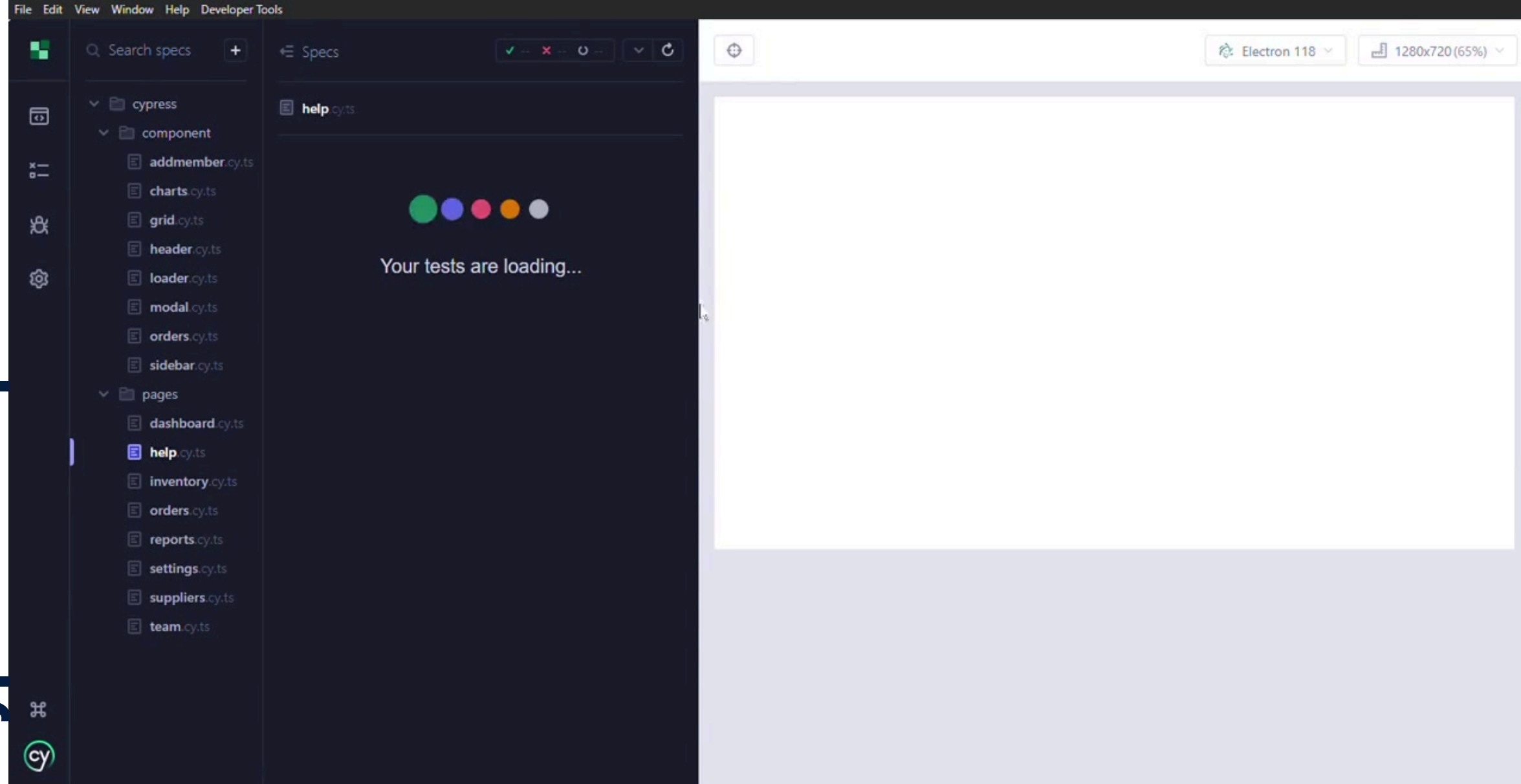
Architectural Styles

- 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.

The screenshot shows a GitHub Actions workflow run for the 'cypress-run' job. The workflow is titled 'cypress-run' and succeeded 4 hours ago in 5m 29s. The left sidebar shows the 'Summary' tab, with 'Jobs' listed as 'cypress-run'. The 'Run details' section shows 'Usage' and 'Workflow file'. The main content area displays the workflow steps and logs.

Workflow Steps:

- Set up job (15s)
- Checkout repository (15s)
- Set up Node.js (4s)
- Install dependencies (1m 29s)
- Run Amplify sandbox (18s)
- Install Cypress (4s)
- Run Cypress component tests (2m 59s)

Log Output for 'Run Cypress component tests':

```
1 ▶ Run npm run build
5
6 > smart-inventory@0.0.0 build
7 > ng build
8
9 - Building...
10
11 Initial chunk files | Names | Raw size | Estimated transfer size
12 main-KFM47EHS.js | main | 3.77 MB | 744.47 kB
13 styles-F6L7R7CN.css | styles | 612.95 kB | 54.57 kB
14 chunk-QM273TR7.js | - | 191.56 kB | 54.62 kB
15 polyfills-6EAL64PA.js | polyfills | 34.23 kB | 11.13 kB
16
17 | Initial total | 4.61 MB | 864.79 kB
18
19 Lazy chunk files | Names | Raw size | Estimated transfer size
20 main-3R8VXG3Z.css | - | 294.75 kB | 31.08 kB
21 chunk-5324AXH0.js | browser | 63.58 kB | 16.90 kB
22
23 Output location: /home/runner/work/Smart-Inventory/Smart-Inventory/dist/smart-inventory
24
25 Application bundle generation complete. [23.954 seconds]
```

Linting

Linting

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

The screenshot shows a GitHub Actions workflow run for the 'Build Codebase' job. The left sidebar shows the workflow steps: 'Initial Setup', 'Build Codebase' (selected), and 'The end'. The main panel shows the 'Build Codebase' job details, including a search bar and a list of steps. The 'Install dependencies' step took 1m 31s, and the 'Build Codebase' step took 27s. The logs for the 'Build Codebase' step show the following commands and output:

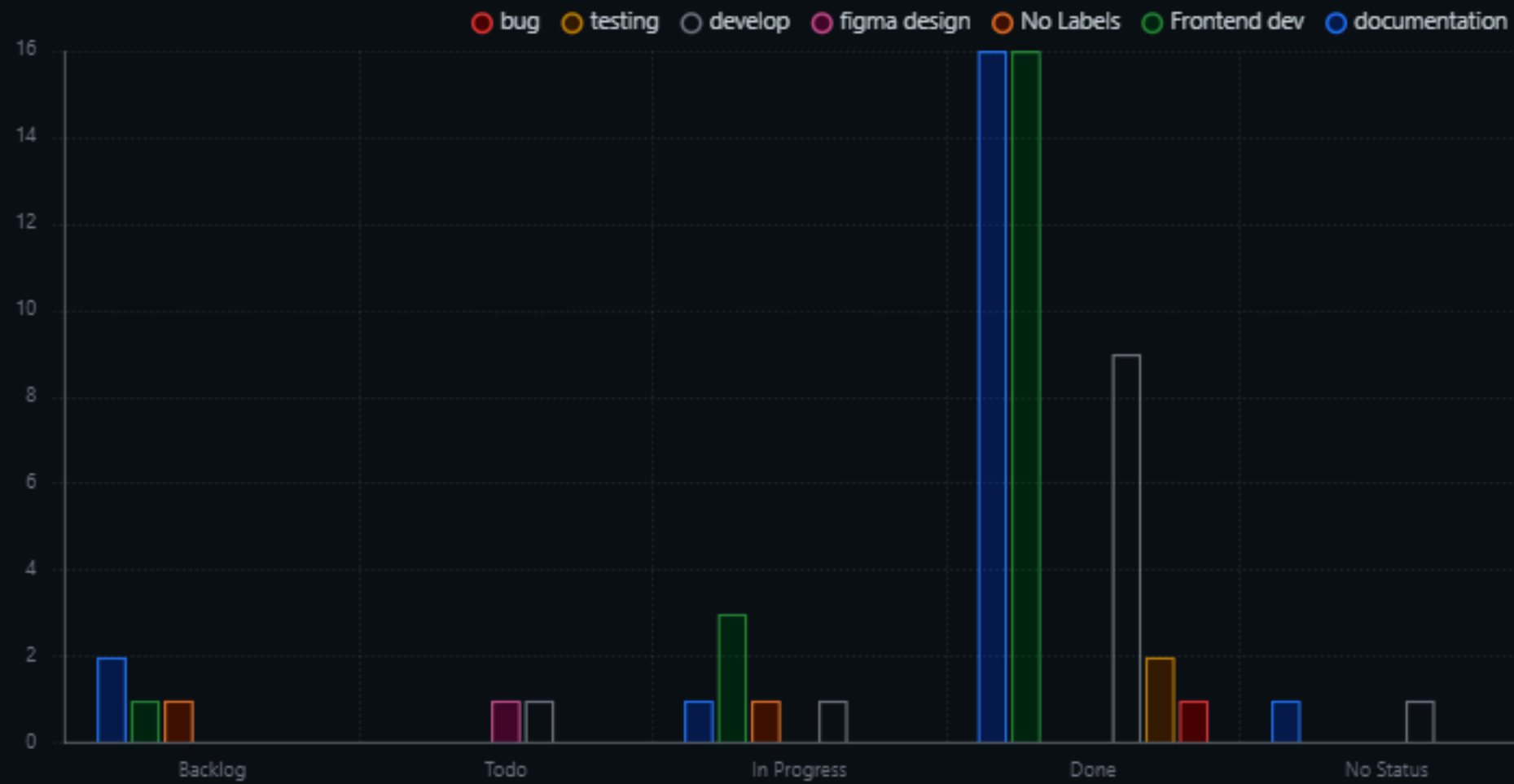
```
1 ▶ Run npm run build -- --configuration=production
4
5 > smart-inventory@0.0.0 build
6 > ng build --configuration=production
8 - Building...
10 Initial chunk files | Names | Raw size | Estimated transfer size
11 main-JOP2TEGF.js | main | 3.80 MB | 748.32 kB
12 styles-F6L7R7CN.css | styles | 612.95 kB | 54.57 kB
13 chunk-5RU4PKPQ.js | - | 191.74 kB | 54.56 kB
14 polyfills-6EAL64PA.js | polyfills | 34.23 kB | 11.13 kB
15 | Initial total | 4.64 MB | 868.59 kB
16 Lazy chunk files | Names | Raw size | Estimated transfer size
```


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



No Status 0 / 0 Estimate: 0

Smart-Inventory #9

develop: Set up app for compatibility for different devices

Smart-Inventory #72

User manual add your individual page and explain functionality and how to use it

+ Add item

Backlog 4 / 15 Estimate: 0

Smart-Inventory #70

Create Help tutorial to navigate system

P0 Iteration

Smart-Inventory #16

documents: wireframe updates

Smart-Inventory #25

Modify/Create Sidebar

Smart-Inventory #71

Coding standards reduction and improvement

+ Add item

Todo 2 / 10 Estimate: 0

This item hasn't been started

Smart-Inventory #30

Figma design for Report page

Smart-Inventory #68

Team Page

+ Add item

In Progress 6 / 10 Estimate: 1

This is actively being worked on

Smart-Inventory #10

develop: light and dark mode

Smart-Inventory #32

Dashboard Page

Smart-Inventory #28

Help button

Smart-Inventory #5

documents: Coding standards Update according to finalised serverless approach

Smart-Inventory #89

Dashboard revamp

+ Add item

Done 43 / 100 Estimate: 0

This has been completed

Smart-Inventory #40

Review: SRS document

Smart-Inventory #18

documents: Design Spec

Smart-Inventory #67

Inventory page

Smart-Inventory #69

Order Page

Smart-Inventory #88

Frontend Testing

+ Add item

THANK YOU!

QUESTIONS?