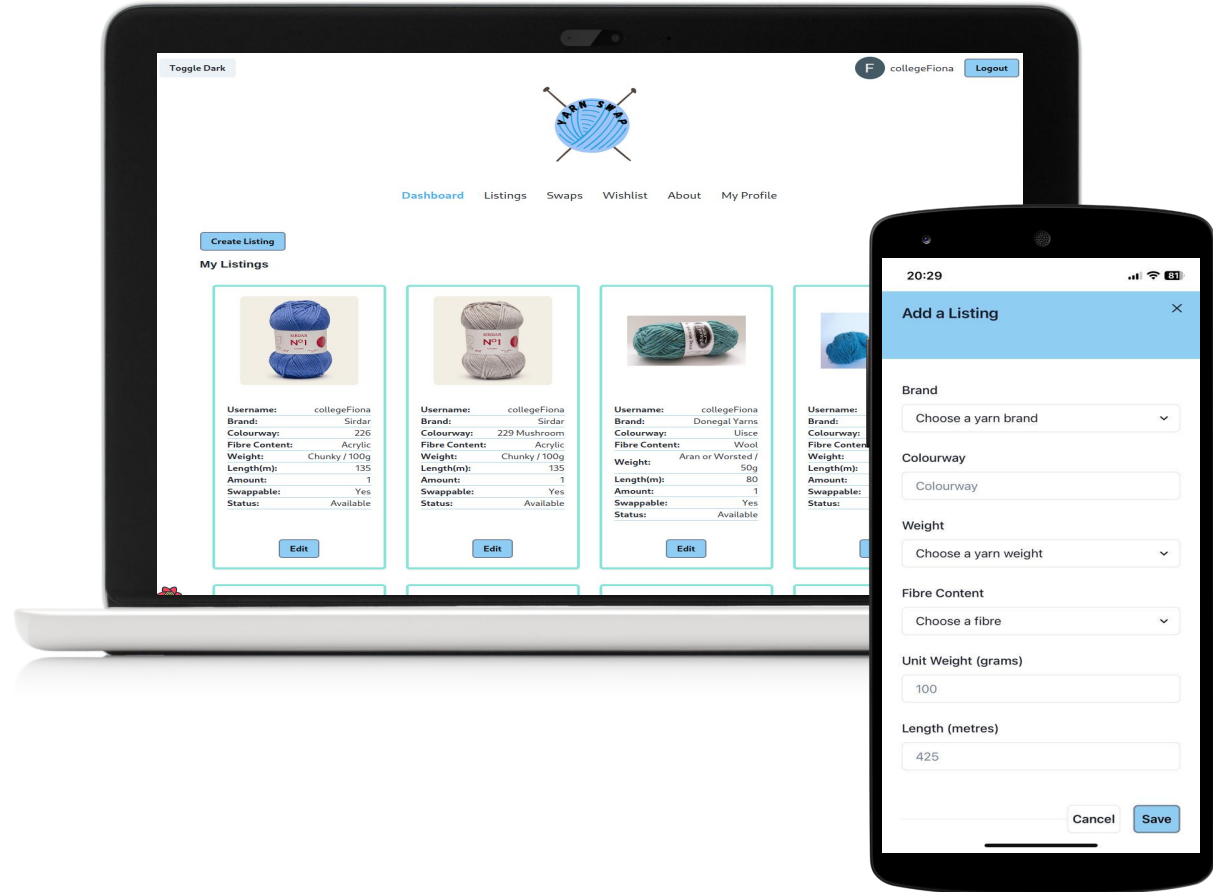


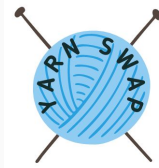
Progressive Web App Community Swap Platform

Created by Fiona Waters
Student No: 20095357



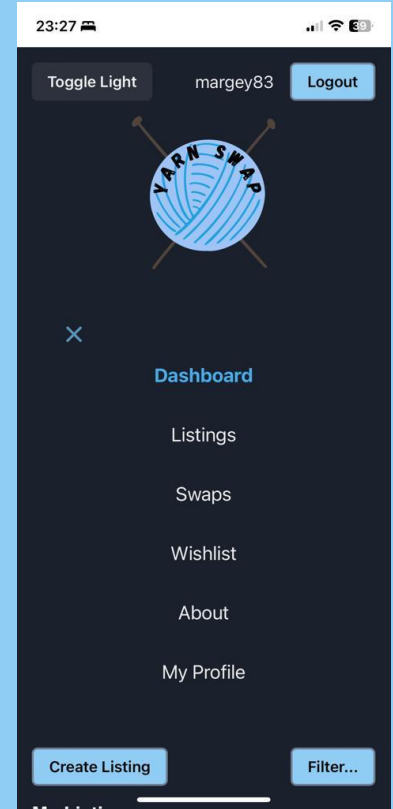
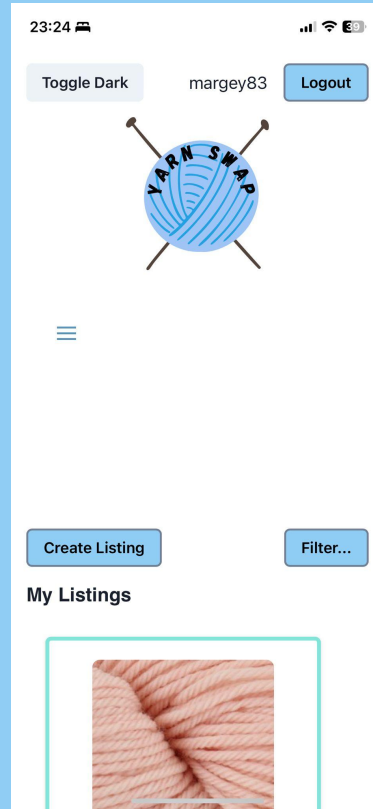
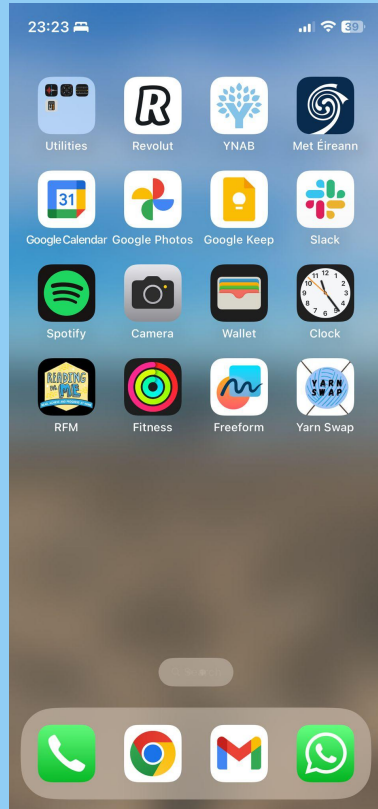
Introduction

- Progressive Web App - Installable.
- Allows community members to exchange/swap yarn.
- Front end - React, Vite.js, ChakraUI.
- Back end - Golang, Gin.
- Storage - Firebase
- Deployed to Red Hat Openshift.



Demonstration

Demonstration - Installed on iPhone - Responsive Design

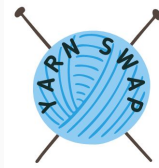


Background

Problem: Too much yarn, but not the right yarn!

Solution: Yarn Swap

Project Goal: To create a progressive web application with CI/CD Pipeline.



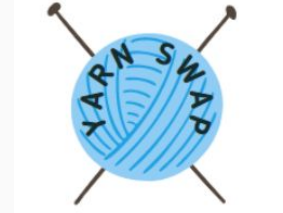
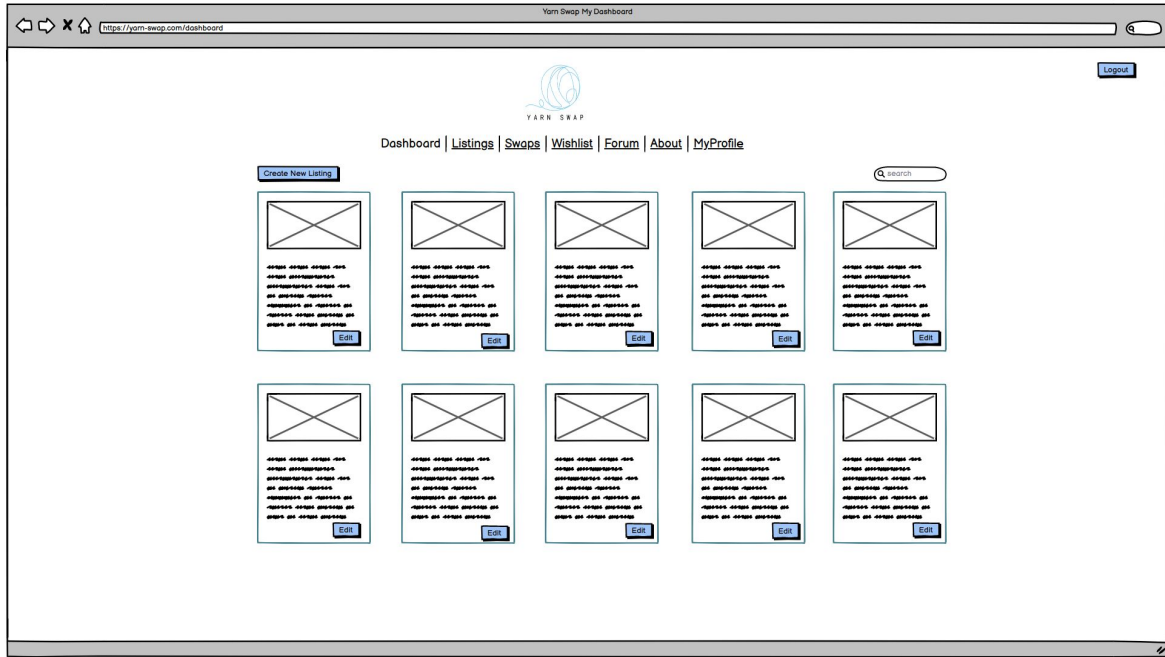
Research & Analysis

- Tools and Technologies
 - React/ChakraUI
 - Golang/Gin
 - Quay/GitHub Actions/Docker/Red Hat OpenShift
 - Firebase
- Market Analysis
- Feature Analysis



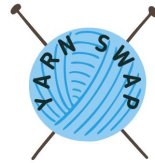
Design

- Wireframes using Balsamiq
- Splash of colour
- Logo change



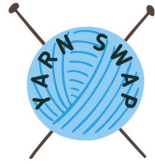
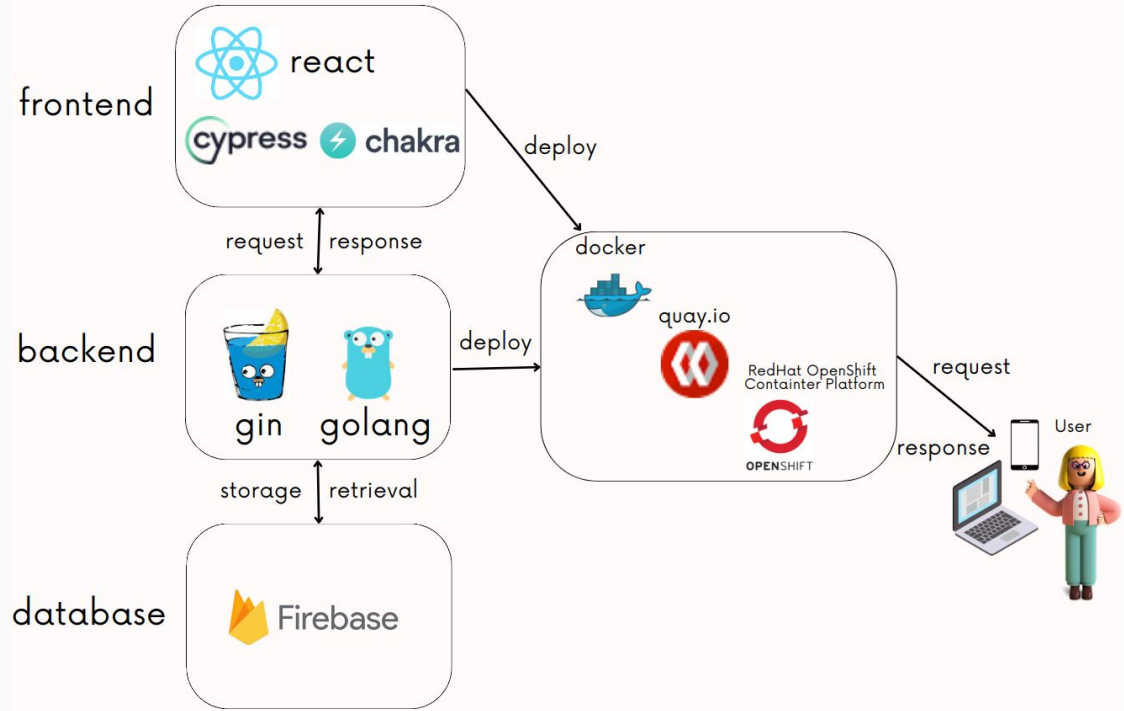
Planning

- Agile Methodology
- Sprints
- Jira



Implementation

System Architecture Diagram



Implementation

Features

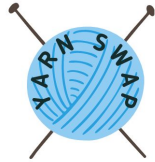
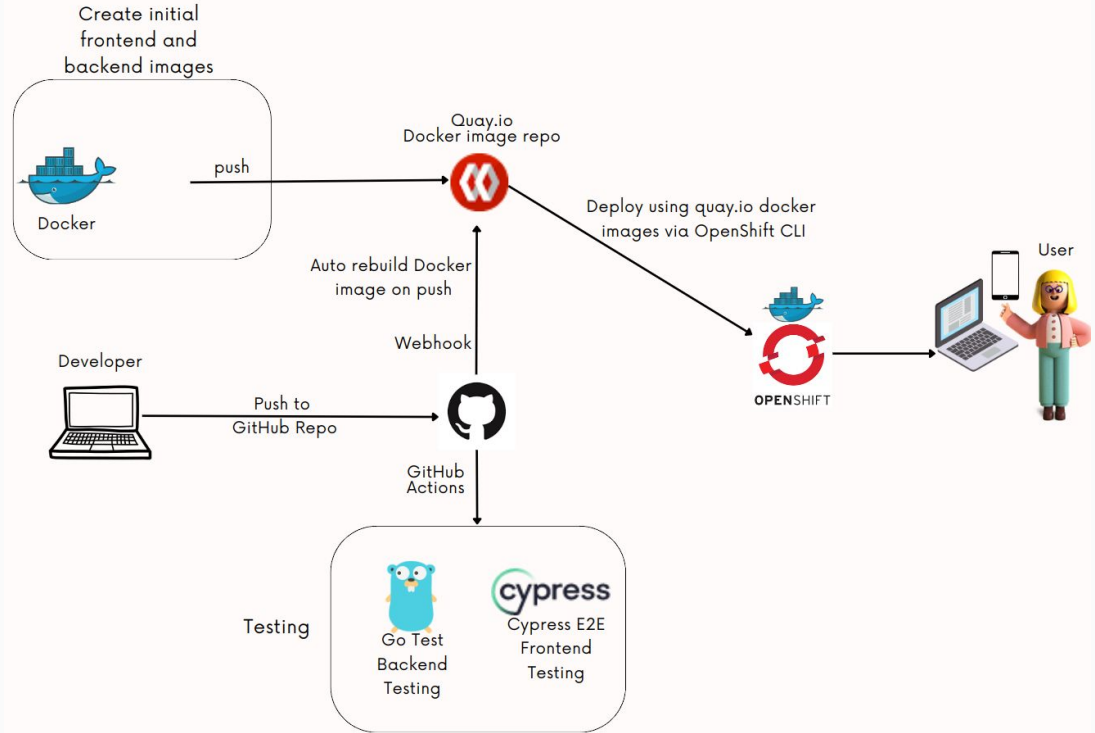
- Register/Login
- CRUD Listings
- Tokens
- Swap, Chat
- Search/Filter
- My Profile
- About - Guidelines/FAQs
- Admin



Implementation

CI/CD

Yarn Swap CI/CD



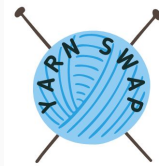
Future Features

- Wishlist, Projects
- Forum
- Enhanced User Profile
- Notifications
- Enhanced Token functionality
- User Ratings
- Enhanced PWA



Problems & Solutions

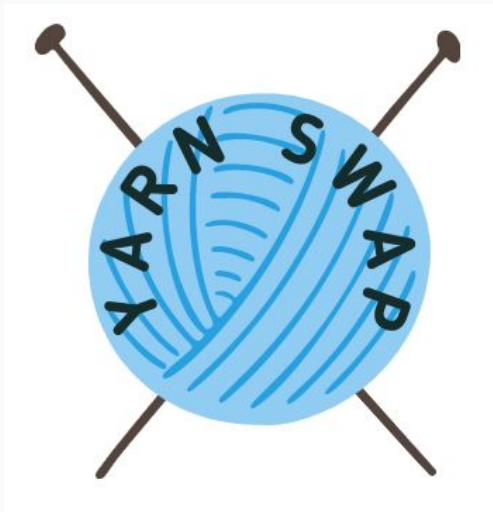
- Testing
 - TDD
- CI/CD Pipeline
 - Alternative Technologies
- Firebase Credentials/OpenShift Cluster
 - Volume



Learning

- Personal
 - Backend Development
 - Planning
 - Time
 - Explanation
- Technical
 - Webhooks
 - GitHub Actions
 - React
 - Cypress
 - Wireframes
 - OpenShift Deployment





Thank you for listening...

Questions?

Give it a try

User: bart@simpson.com

Password: password