

Vivekanand Education Society's Institute of Technology  
Department of Information Technology



# RECIPE APP

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D15B/11

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# Introduction

- ▶ The recipe app, developed in Flutter, is designed to revolutionize the way users plan meals, access different recipes, and track their nutrition using BMIcheck.
- ▶ With a user-friendly interface and robust features, the app aims to simplify meal planning and promote healthier eating habits.



# Problem Statement

- ▶ The traditional methods of meal planning and recipe management are often time-consuming and inefficient.
- ▶ Users face challenges in finding and organizing recipes based on their preferences and dietary requirements.
- ▶ There is a lack of integrated solutions that combine recipe discovery, meal planning, and nutritional analysis in a single platform.
- ▶ This project addresses these challenges by developing a comprehensive recipe app that simplifies the process of meal planning and recipe management, making it easier for users to adopt healthier eating habits.

# Objectives

- ▶ To provide access to different recipes to users.
- ▶ To help users plan healthier meals
- ▶ To provide nutritional information
- ▶ To simplify meal tracking



# Features

- ▶ API integration for fetching recipes
- ▶ A meal planner for organizing daily meals
- ▶ A BMI calculator for assessing meal plans' healthiness.
- ▶ Secure login and signup authentication using Firebase, ensuring user data privacy and security.

# Requirements

## Software Requirements

- ▶ Flutter Environment
- ▶ Firebase
- ▶ Android Studio
- ▶ Dart
- ▶ Android Emulator
- ▶ API : Edamam

## User Requirements

- ▶ Processor : Dual-core or higher for better optimization
- ▶ Memory : 4GB RAM

# Implementation

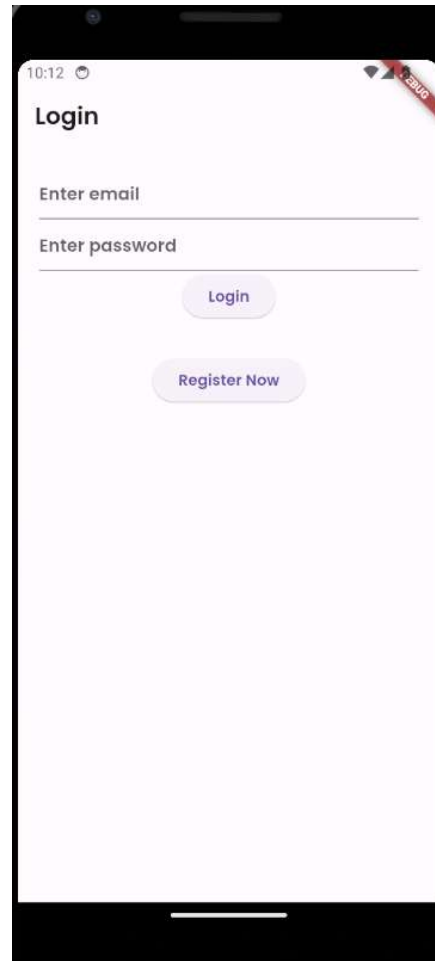




## Login Screen

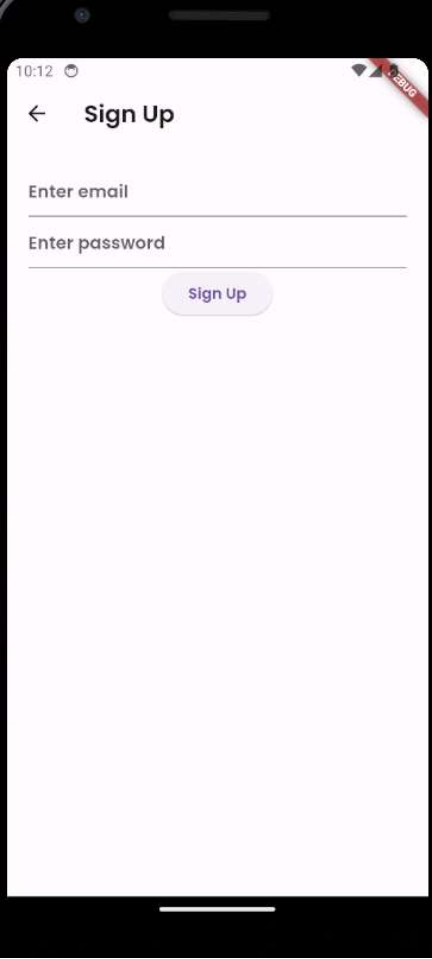
This is a login screen with routes:

- a) If the user is already registered, proceed with login
- b) Else, go to signup



## Sign-Up Screen

Create username and password, then click on register



10:12

← Sign Up

Enter email

Enter password

Sign Up

## Home Screen UI

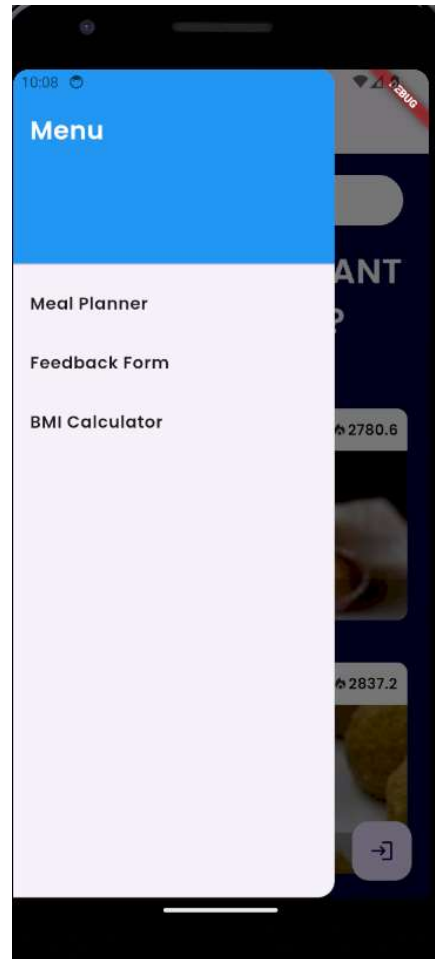
Different Recipes fetched using API and accessible using search bar



## Home page

A menu bar having three features accessible to users:

- a) Meal Planner
- b) Feedback Form
- c) BMI check



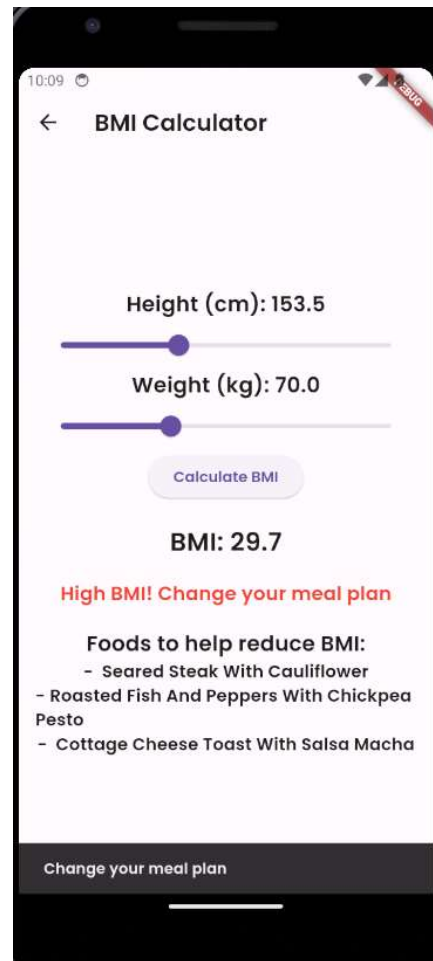
## Meal Planner Screen UI

User can plan meals for everyday.



## BMI check Screen UI

If the BMI is greater than 25, it suggests some nutritional foods or recipes. Also, a message is display “Change your meal plan”.



10:09

← BMI Calculator

Height (cm): 153.5

Weight (kg): 70.0

Calculate BMI

BMI: 29.7

High BMI! Change your meal plan

Foods to help reduce BMI:

- Seared Steak With Cauliflower
- Roasted Fish And Peppers With Chickpea Pesto
- Cottage Cheese Toast With Salsa Macha

Change your meal plan

## Feedback Form Screen UI

Three fields:

- a) Email
- b) Name
- c) Comments

10:11

← Feedback Form

Name  
Mitesh

Email  
dalvimitesh19@gmail.com

Feedback Type  
Bug

Comments  
Lag Issue

Submit

Issue Issues Issued

q w e r t y u i o p

a s d f g h j k l


z x c v b n m

?123 , .

# Literature Survey

Papers	Authors	Year	Key Findings
Healthy Personalized Recipe Recommendations for Weekly Meal Planning	Konstantinos Zioutos , Haridimos Kondylakis, and Kostas Stefanidis	2023	The system suggests recipes by evaluating their ingredients and cooking techniques. Freyne et al. [18] put forward a collaborative filtering approach for recipe suggestions, suggesting recipes to users based on the preferences of similar users
Food recipe application	Hanish Punamiya, Mitesh Jain, Saumil Mavani, Ajay Dhruv	2018	A content-based recommendation system that will learn from user's inputs and provide the user with refined recommended recipes which suit the user's needs.





Papers	Authors	Year	Key Findings
Food Recipe Finder Mobile Applications Based On Similarity Of Materials	Gusti Pangestu, Ahmad Afif Supianto, Fitri Utaminingrum	2018	In the current era of gadget technology, innovations have been created to help people gather and search for the recipes they want, including a mobile-based app like Cookpad that features to search for recipes based on the name desired by the user.

# Conclusion & Future Scope

- ▶ In conclusion, the recipe app developed in Flutter provides a comprehensive solution for users to plan, organize, and track their meals effectively. By integrating all the features, the app aims to revolutionize the way users approach meal planning and nutrition tracking.
- ▶ Moving forward, we plan to enhance the app by adding more features such as personalized recommendations, social sharing options, and integration with wearable devices for real-time health tracking.



# References

- ▶ <https://developer.edamam.com/edamam-recipe-api>
- ▶ <https://www.mdpi.com/2073-431X/13/1/1>
- ▶ <https://www.ijariit.com/manuscripts/v4i2/V4I2-1896.pdf>
- ▶ [https://www.researchgate.net/publication/332524872\\_Food\\_Recipe\\_Finder\\_Mobile\\_Applications\\_Based\\_On\\_Similarity\\_Of\\_Materials](https://www.researchgate.net/publication/332524872_Food_Recipe_Finder_Mobile_Applications_Based_On_Similarity_Of_Materials)



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# PROGRESSIVE WEB APP

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WOODEX – FURNITURE APP

PRESENTED BY MITESH DALVI (D15B)


SUBJECT TEACHER: DR. RAVITA MISHRA

# Introduction

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Woodex is a Progressive Web App (PWA) designed to provide a seamless e-commerce experience for buying furniture products. With its user-friendly interface and robust features, Woodex aims to revolutionize the way users shop for furniture online.

## **Features:**

- Fast loading times.
  - Offline access to previously viewed products.
  - Add to home screen feature for easy access.
  - Service worker events for improved performance.
- 

# Problem Statement

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**Problem:** Traditional e-commerce websites often suffer from slow loading times and poor user engagement, especially on mobile devices.

**Challenges:**

- Limited offline functionality.
- Lack of native app-like experience.
- Poor performance on slower networks.

**Solution:** Develop a PWA that offers fast loading times, offline access, and a responsive design for a seamless user experience.

# Objectives

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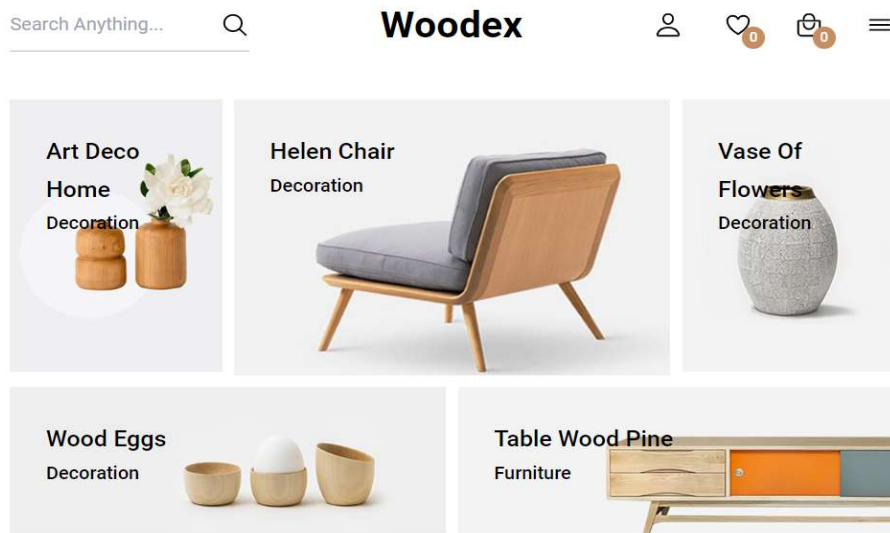
1. Develop an e-commerce Progressive Web App (PWA) for selling furniture products.
2. Implement PWA features to enhance user experience and performance.
  - A) Write metadata of E-commerce PWA and add to home screen feature.
  - B) Code and register service worker and complete install and activation.
  - C) Implement service worker events like fetch, sync and push for E-commerce.
3. Deploy the PWA on GitHub Pages for easy access and testing.
4. Use Google Lighthouse PWA analysis tool to evaluate and optimize the PWA's performance.



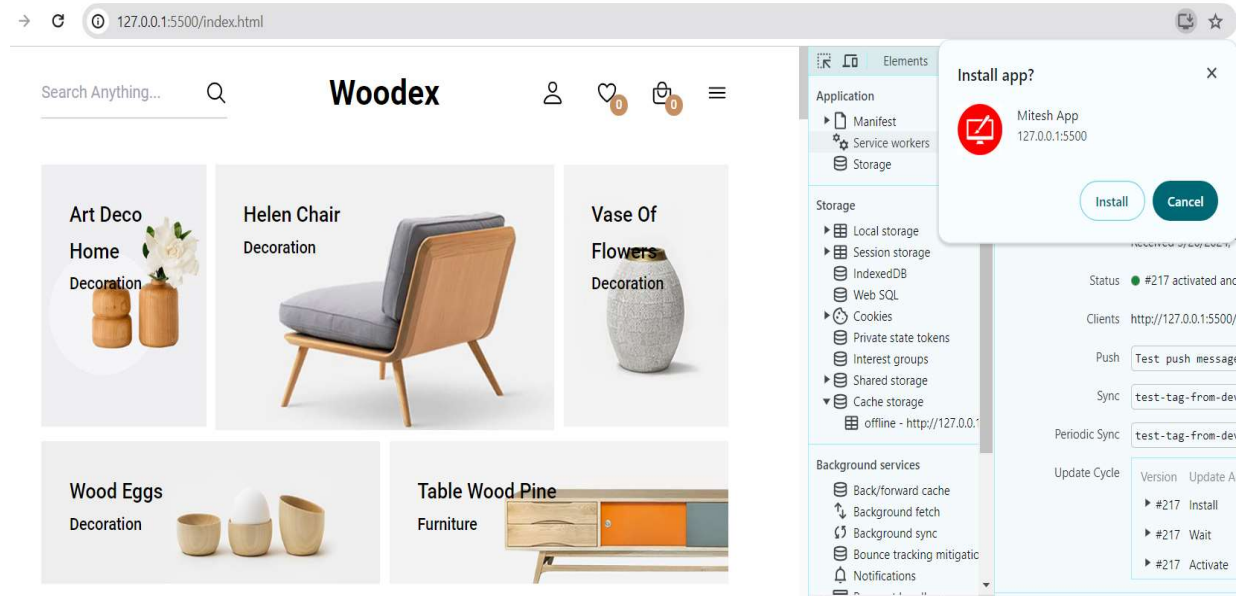
# Implementation

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Before performing PWA tasks:



Add to home  
screen feature



# Registration of Service Worker

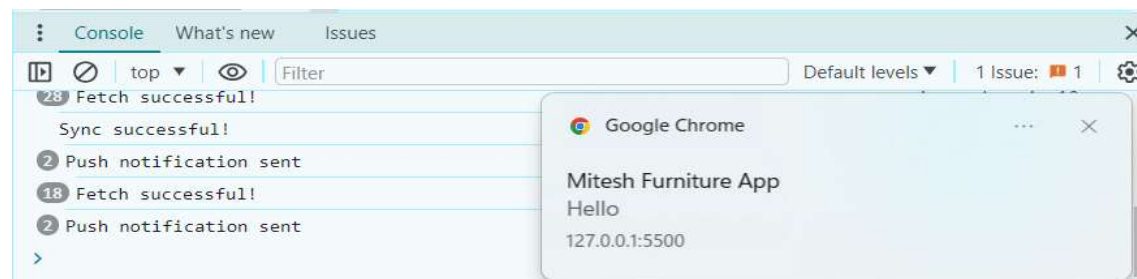
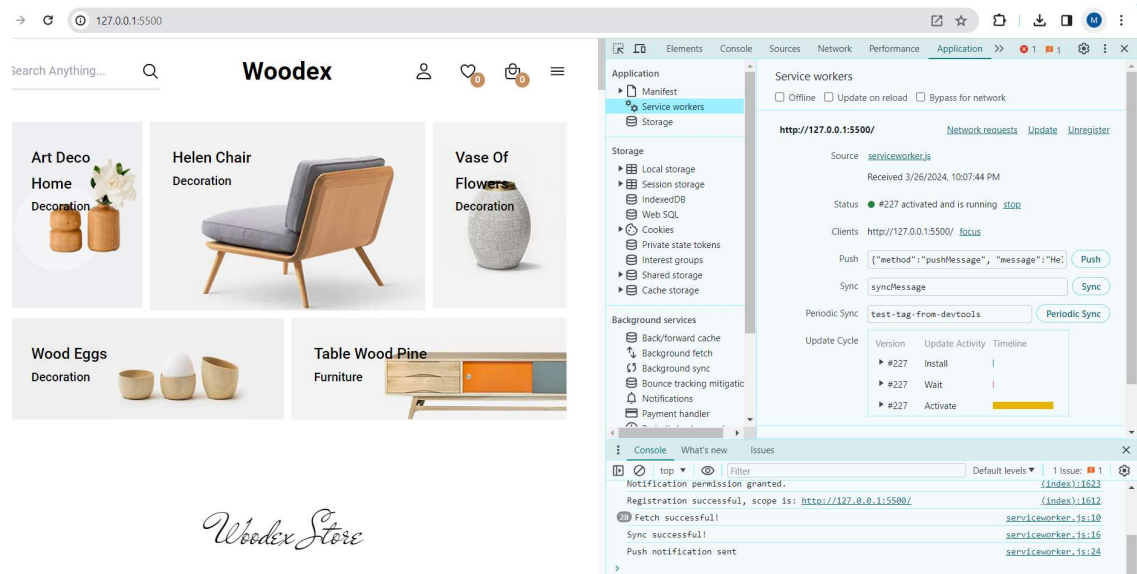
The screenshot shows the Application tab in Chrome DevTools. The left sidebar lists the following categories:

- Application
  - Manifest
  - Service workers
  - Storage
- Storage
  - Local storage
  - Session storage
  - IndexedDB
  - Web SQL
  - Cookies
  - Private state tokens
  - Interest groups
  - Shared storage
  - Cache storage
    - offline - http://127.0.0.1:5500
- Background services
  - Back/forward cache
  - Background fetch
  - Background sync
  - Bounce tracking mitigation
  - Notifications

The main panel displays the details for the offline cache at `http://127.0.0.1:5500`. The origin is `http://127.0.0.1:5500`. The bucket name is `default`. The cache is not persistent and has a relaxed durability. The quota is 0 B and the expiration is none.

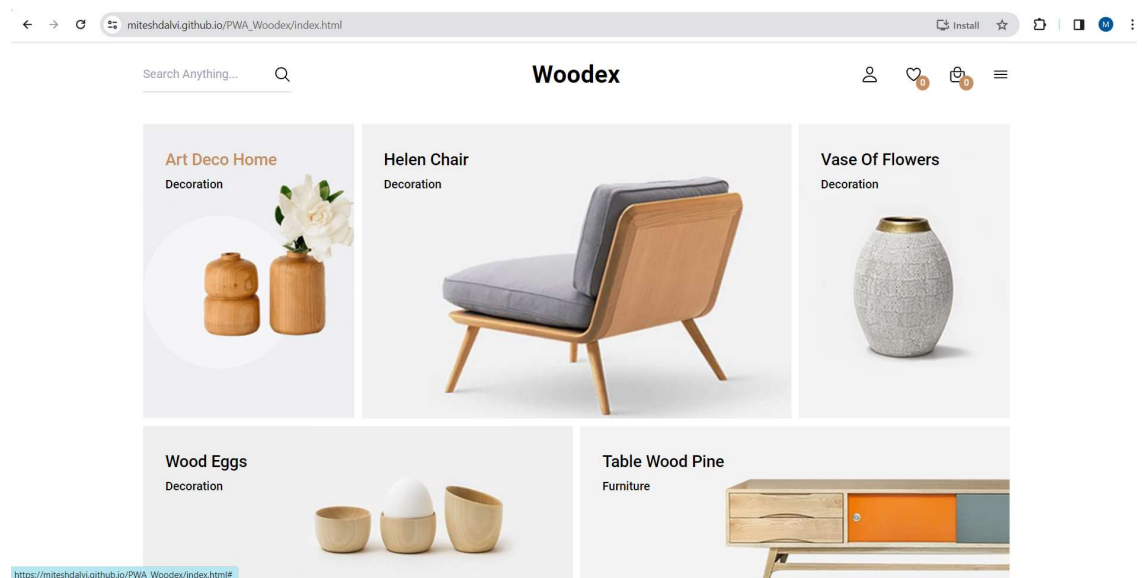
#	Name	Resp...	Cont...	Con...	Tim...	Vary...
0	/	basic	text/...	53,9...	3/26...	Origin
1	/assets/css/style.css	basic	text/...	17,6...	3/26...	Origin
2	/assets/images/about-banne...	basic	ima...	23,1...	3/26...	Origin
3	/assets/images/hero-produc...	basic	ima...	16,3...	3/26...	Origin
4	/assets/images/hero-produc...	basic	ima...	29,3...	3/26...	Origin
5	/assets/images/hero-produc...	basic	ima...	13,8...	3/26...	Origin
6	/assets/images/hero-produc...	basic	ima...	10,9...	3/26...	Origin
7	/assets/images/hero-produc...	basic	ima...	17,6...	3/26...	Origin

# Fetch, Sync and Push Events

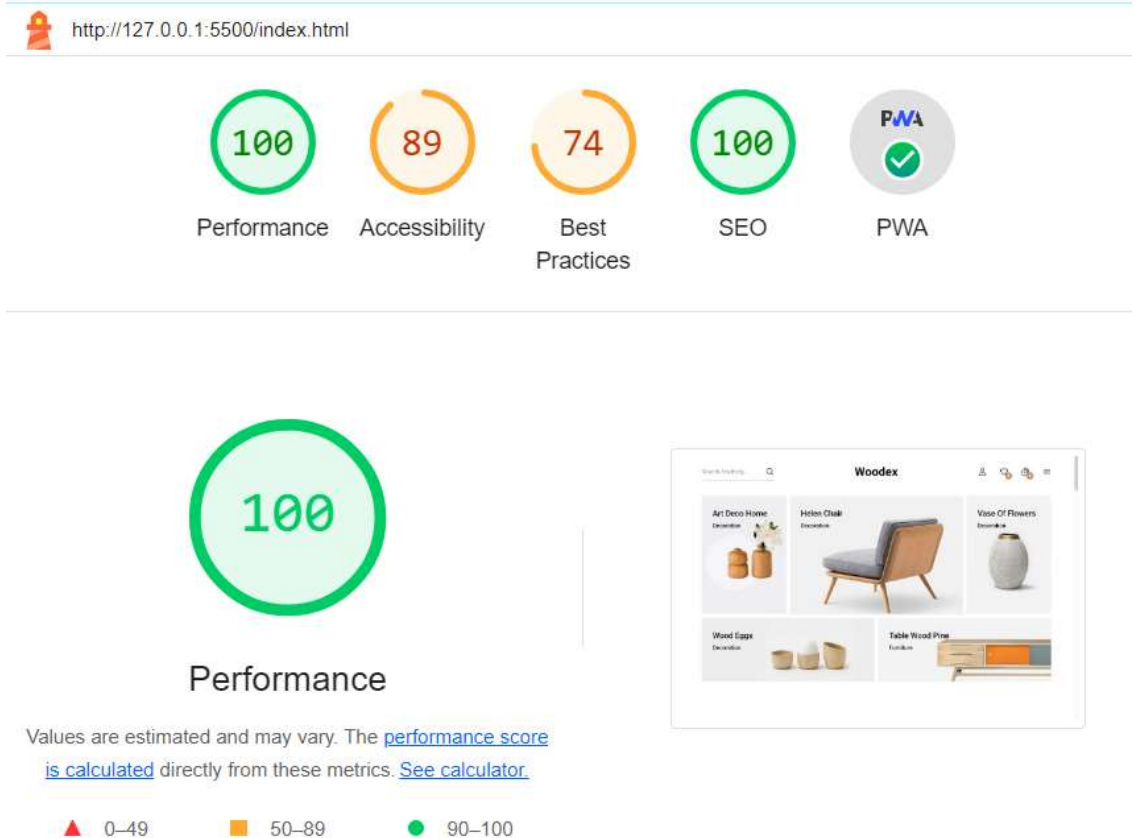


# Deploy to Github Pages

[https://miteshdalvi.github.io/PWA\\_Woodex/index.html](https://miteshdalvi.github.io/PWA_Woodex/index.html)



# Test PWA performance on Google Lighthouse



# Conclusion

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In conclusion, the development of Woodex - A Furniture App as a Progressive Web App (PWA) has been a significant step towards enhancing the e-commerce experience for furniture buyers. By implementing PWA features such as fast loading times, offline access, and a responsive design, Woodex offers users a native app-like experience while maintaining the accessibility of a web app.

