



Vivekanand Education Society's Institute of Technology

(Autonomous Institute Affiliated to University of Mumbai, Approved by AICTE & Recognised by Govt. of Maharashtra)
NAAC accredited with 'A' grade

Semester: VI MPL Presentation

Title of the Project:
Flutter App - LifeLine and PWA project - Festival Combo

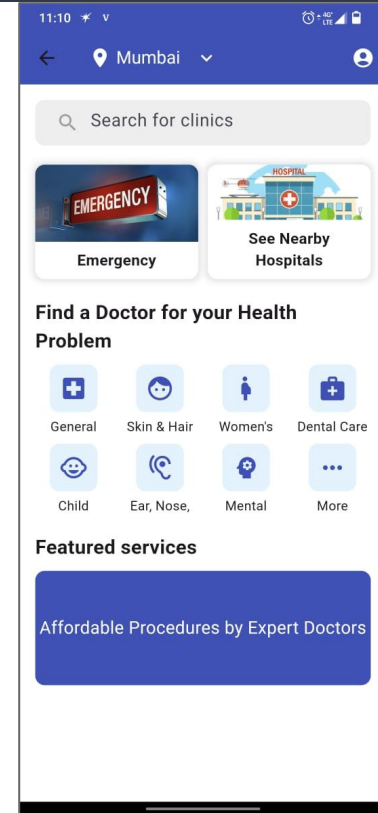
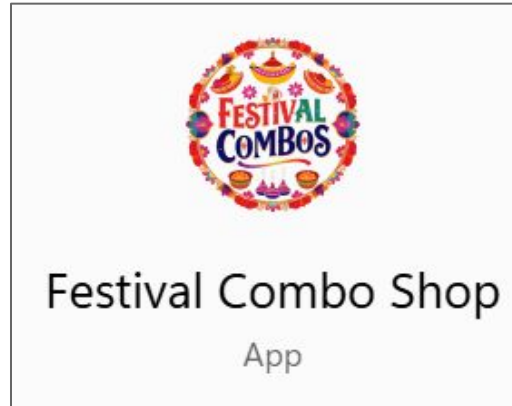
Domain: Dart, JavaScript, Flutter

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Introduction to Project

Flutter App - LifeLine

Lifeline is your digital companion in times of health emergencies. Built with Flutter, Lifeline helps users locate nearby hospitals, make instant emergency calls, and seamlessly book medical appointments — all with a few taps. In critical moments, time is life, and Lifeline is built to save both.

In today's fast-paced world, immediate access to healthcare information and emergency services can mean the difference between life and death. Smartphones are everywhere, but most people still waste valuable time during emergencies figuring out where to go and whom to call. **Lifeline** solves this by becoming the bridge between urgency and action — connecting users with nearby hospitals and emergency services in real-time.

PWA App - Festival Combo

Festival Combo is a vibrant and festive-themed Progressive Web App (PWA) that delivers exclusive combo deals tailored to Indian festivals like Diwali, Holi, Raksha Bandhan, and more. With offline capabilities, push notifications, and a custom manifest file, it brings the joy of festivals to your fingertips — even without an internet connection!



Problem Statement

LifeLine

Despite the prevalence of smartphones, there's no universal solution that consolidates hospital search, emergency calling, and appointment scheduling into a single app. Many users are forced to juggle between maps, contact lists, and healthcare portals during crises — a luxury they can't afford when time is critical.

Most available apps are either too specialized — focusing only on hospital directories, appointment bookings, or health tips — or too complex, requiring multiple steps and user interactions. As a result, users often find themselves navigating through different platforms: searching for hospitals in one app, dialing emergency numbers manually, and checking appointment slots in another. This fragmented experience is not only inconvenient but potentially dangerous in critical situations where every second counts. In high-stress scenarios like accidents, medical emergencies, or sudden illnesses, users need a **single, intuitive platform** that consolidates these essential services.

Festival Combo

Shopping during festivals is part of the Indian culture — whether it's sweets for Diwali, colors for Holi, or gifts for Rakhi. However, users often miss the best combos simply because they're unaware or too late. **Festival Combo** solves this by offering curated festive combos in a delightful PWA that works anytime, anywhere.

Despite the rise of online shopping, there's no centralized platform that delivers **festival-specific combo offers** in a lightweight, mobile-friendly, and offline-accessible format. Apps are bulky, and websites often lack responsiveness or speed on slower networks. Festival Combo bridges this gap using the power of PWAs.



Objectives of the project

LifeLine App

- Provide users with a quick view of nearby hospitals using Open Maps API.
- Enable **one-tap emergency calls** to helplines or ambulance services via url_launcher.
- Allow appointment bookings with hospitals directly via calls.
- Ensure secure and scalable user authentication and data handling using **Firebase**.

Festival Combo

- Offer an engaging and responsive interface for viewing **festival-based combo deals**.
- Enable offline access using service workers and manifest configuration.
- Provide **push notifications** for new deals and festival reminders.
- Deliver a seamless installable app-like experience through PWA standards.



Requirements of the system (Hardware, software)

LifeLine

Technologies Used:

- **Flutter** – Frontend framework
- **Open Maps API** – For location and nearby hospital data
- **url_launcher** – For initiating emergency calls
- **Firebase Authentication** – For user login/signup
- **Firebase Firestore** – For database storage and appointment data (future scope)

Festival Combo

Technologies Used:

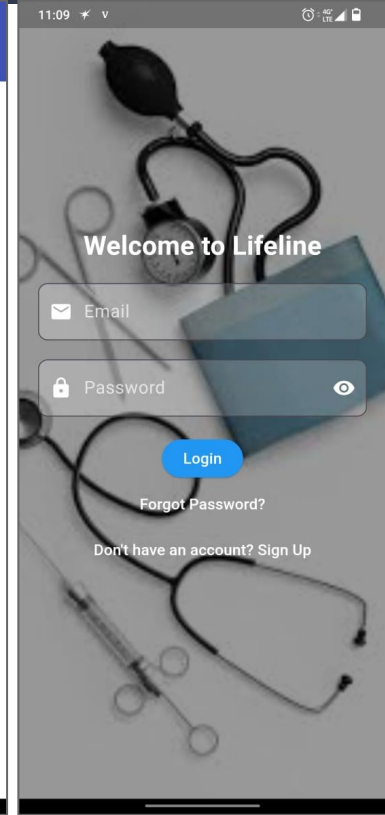
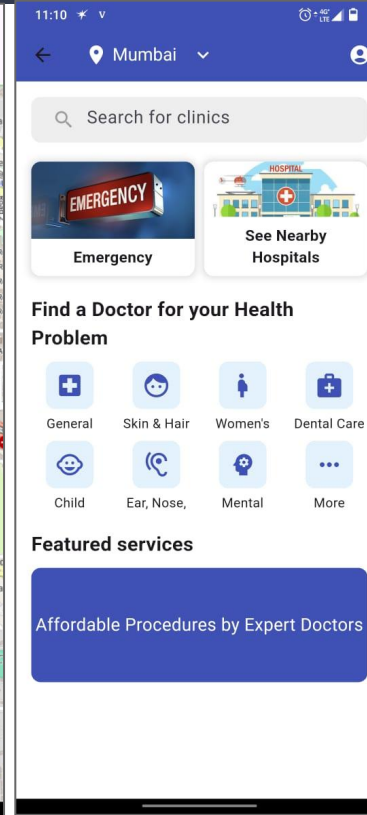
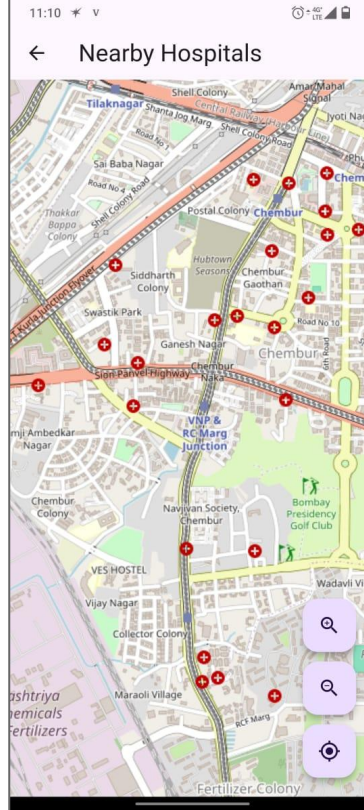
- **HTML5, CSS3, JavaScript** – Core web technologies
- **PWA Service Workers** – For offline access
- **Web App Manifest** – For app install capability
- **Push API & Notifications** – To engage users with timely updates



Implementation

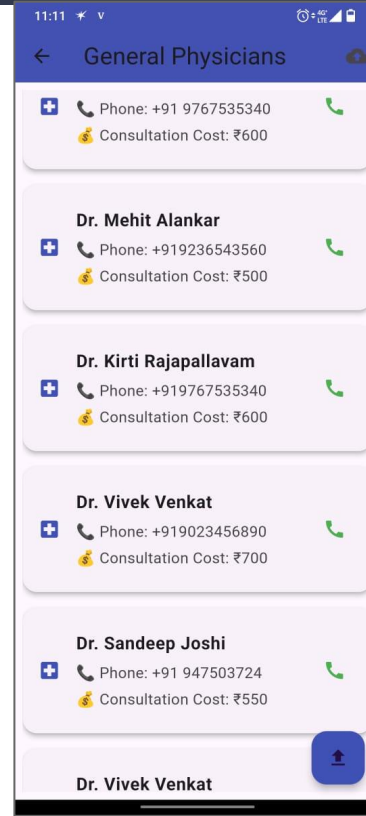
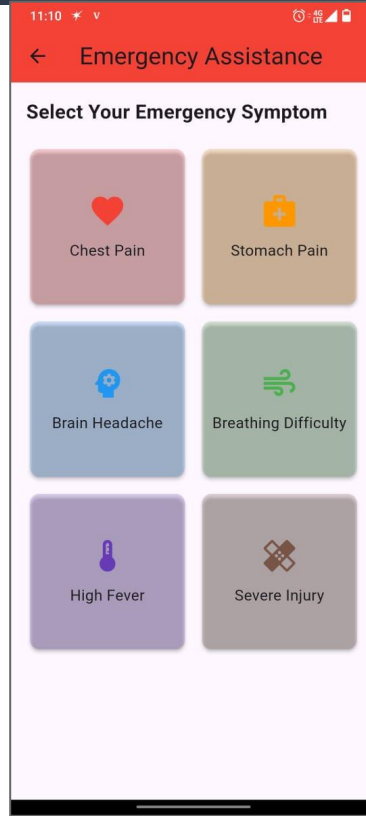
Implementation

- **Firestore Integration:** Handles user authentication and stores data securely.
- **URL Launcher:** Initiates emergency calls and appointment calls instantly.
- **Open Maps API:** Displays nearby hospitals using map integration.
- **UI/UX:** Clean and minimal with easy-to-navigate screens for urgent situations.





Implementation





Implementation

Designed a **clean and colorful UI** optimized for mobile-first experience.

Built a web app manifest with app name, icons, splash screen, and install support.

Implemented **service workers** for caching static content and enabling offline navigation.

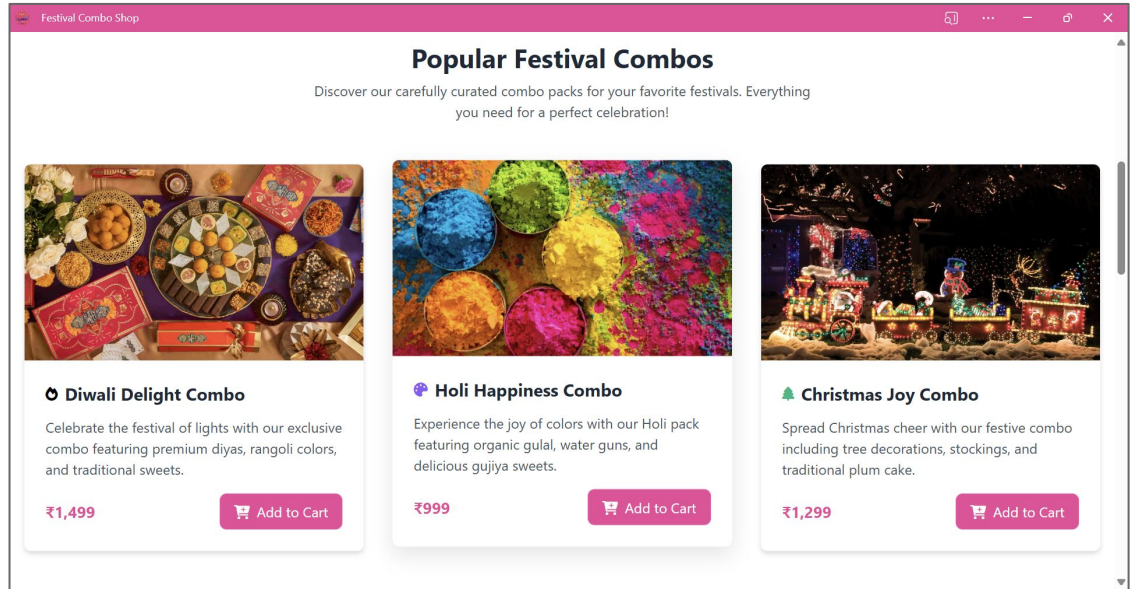
Set up **push notifications** using browser APIs and test server to simulate deal alerts.

Festival-specific combos were categorized and loaded dynamically based on festival calendar.



Festival Combo Shop

App



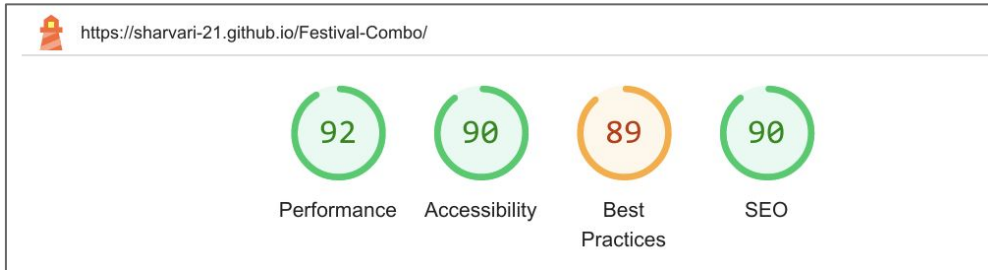


Result Analysis

LifeLine

- Users were able to locate hospitals within **2 seconds** of app launch.
- Emergency calls could be made in **1 tap**, reducing the action time drastically.
- Firebase login was fast and secure, with session persistence for user convenience.
- Appointments could be made just through a phone call

Festival Combo





Conclusion

LifeLine

Lifeline is more than an app — it's a mission to simplify healthcare accessibility. In emergencies, every second matters. By leveraging modern technologies like Flutter, Firebase, and location APIs, Lifeline ensures help is never far away. Future upgrades may include live ambulance tracking, voice commands, and multilingual support.

Festival Combo

Festival Combo redefines festive shopping by combining culture and technology. Built as a PWA, it brings speed, offline access, and user engagement together in a single elegant platform. With push alerts and app-like feel, Festival Combo ensures you never miss a festive deal again!



References

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