# GoServices - React Native (Android & iOS)

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**Abstract-This project will solve the problem of the traditional process of finding and booking a repair service for electronic devices, which can be time-consuming and inconvenient for users. By providing a user-friendly platform, users can quickly and easily find the nearest service centres and book a repair service. This will not only save time for the users but also makes it easy for them to find the best service centres nearby. Repair shop owners will also benefit from this app as it allows them to easily register and set up their accounts, providing information about their services and packages to potential customers. This will help repair shop owners increase their visibility and reach more customers, which will ultimately help them grow their business. Overall, this app will provide a convenient and efficient solution for users who need to repair their electronic devices, while also helping repair shop owners increase their visibility and reach more customers. This app will bridge the gap between the users and the repair shop owners and provide a win-win solution for both.**

**Keywords — Authentication, React Native, Cross-Platform Development, "Service Tracking", Online Services, "Mobile Repair Services"**

## I. INTRODUCTION

Nowadays we all are surrounded by electronic devices as Electronic devices have become an important part of our day-to-day life. It has become difficult for us to do work without using electronic devices. Maintaining the electronic devices properly is equally important and as time progresses, electronic devices need to be serviced or repaired.

For the ease of the user, there is an application named GoServices which will work on Android and iOS so that both android users and iOS users can check the services and book the service for their electronic devices. It helps the users to find the nearest stores/service centres to repair their mobile phones. Users can check services for the electronic devices provided by the different service centres and users can book a service. The app also empowers small repair shop owners by providing them with an online platform to expand their services and reach more customers. This will not only save time for the users but also makes it easy for them to find the best service centres nearby.

Therefore, this app provides users with a convenient and user-friendly way to book services for their electronic device and find the nearest service centres. This app can help to make the process of repairing electronic devices more efficient and reliable. It saves users time and helps mobile shop owners to grow their business and reach more customers.

## II. TECHNOLOGY USED

**JavaScript:** JavaScript, a widely-used programming language, has gained the attention of many individuals and organisations. Its ability to create dynamic websites and mobile applications has made it a preferred choice for client-side scripting

**React:** React JS, a widely-used JavaScript library, offers a seamless way to create interactive user interfaces for applications. It also supports a responsive layout for various devices including smartphones, laptops, and desktops. React JS allows for the creation of applications for multiple platforms such as iOS and Android, eliminating the need to learn other languages such as C++ and Java.

**React Native:** The React Native framework is an open-source solution that allows for the development of apps across multiple platforms such as iOS, Android, and the web using a single

codebase. This framework, which is built on React, brings the benefits of this technology to mobile app development.

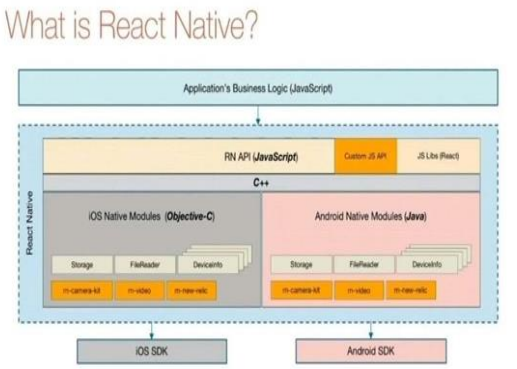


Fig. 1

**Firebase:** It is a Backend-as-a-Service (BaaS) platform that provides developers with a wide range of tools and services to efficiently build high-quality applications. One of the key features offered by Firebase is its real-time, cloud-hosted NoSQL database.

**Android:** Creating an application that runs on the Android operating system involves utilising the Android software development kit (SDK) on Android Studio. Android, as an open source platform, has a vast community of developers and a wide reach, making it a popular choice for app development.

**iOS:** The creation of mobile applications for Apple devices, such as the iPhone, iPad, and iPod Touch, is known as iOS application development. The programming languages utilised in this process are Swift or Objective-C, and the finished product is then made available for download through the App Store.

**Swift:** The Swift programming language, created by Apple, is a versatile, open-source programming language that is built with inspiration from Python, resulting in its speed and user friendliness. It is mainly employed for the development of applications for iOS and macOS platforms.

## III. OBJECTIVE

The Objective is to provide ease to the user to book a service to repair their electronic devices without physically going to every service centre and then comparing the prices individually. GoServices provides the service to the user so that they can compare the prices of the different service centres and then book a service according to their budget without stepping outside. Android users as well as iOS users both can book the services on their devices.

## IV. FEASIBILITY STUDY

A. Technical Feasibility:

The main Technologies and tools that are associated with GoServices are:

Each of the technologies are freely available and the technical skills required are manageable.

Tools **:**

- micro.com (Free version)
- VS Code
- Figma (Free version)
- Xcode
- Android studio
- Developers console

B. Resource feasibility:

Resources that are required for the GoServices project includes,

- Programming device (Laptop)
- Hosting space (freely available)
- Programming tools (freely available)
- Programming individuals

Technical issue risks:

- Software code will be freely available and the code documentation will be provided
- GIT will be used throughout the software implementation process.
- All the technologies are very well established.

Therefore, it's clear that the project GoServices is feasible.

## V. METHODOLOGY

For any projects to be successful, it needs to be well managed. In order to manage projects efficiently, managers as well as development teams need to choose the appropriate project methodology

approach that goes best with the project. So, we have taken an agile methodology approach for our development of applications.

1. Planning our application

Stage 1: Choosing Framework

To solve this problem we need an application for both platforms android & iOS. So, to create an app we are moving forward with react native framework. React Native is great for mobile apps. It provides a slick, smooth and responsive user interface, while significantly reducing load time.

Stage2: Choosing Approach

There will be different development stages to develop this application and make it more efficient for the end user. Before we start developing we need to design the application and for that we will use tools like figma to create pixel perfect designs.

2. Develop

For development for our application we need to create a first list of features and their requirements needed to develop those features.

Stage 1: Frontend of our Application

We will develop this application's frontend in react native framework as it is much faster and cheaper to build apps in React Native as opposed to building native ones, without the need to compromise on quality and functionality.

Stage 2: Backend of our Application

To build APIs which are responsive, efficient, and lightweight, using NodeJS with Express would be the best choice. JavaScript when used at both the front-end and back-end makes communication easy via REST APIs.

Stage3: Database

For Database, we will be using noSQL databases as they were created to handle big data as part of their fundamental architecture.

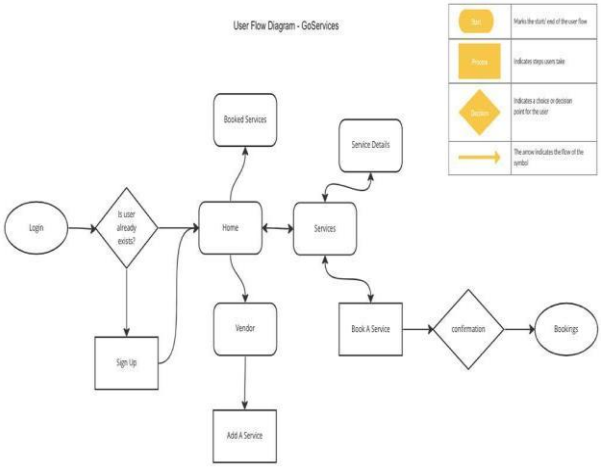


Fig. 2 User Flow Diagram

## VI. APPLICATIONS

This app can be used for electronic device repair services, including fixing common issues such as screens, battery replacement and software issues.

The app can also be used for electronic device repair services such as laptops, tablets and other consumer electronics.

It can also be used as an online repair booking and management platform for repair shop owners to manage their appointments and services.

This app can also be beneficial for small repair shop owners to expand their services and reach more customers online.

## VII. CONSLUSION

In conclusion, this app project is designed to provide a convenient and efficient solution for users who need to repair their mobile phones and other electronic devices. The app aims to make the process of booking repair services and finding the nearest service centres easy and user-friendly. Additionally, the app also empowers small repair shop owners by providing them with an online platform to expand their services and reach more customers.

Overall, this app project is a valuable solution for addressing the pain points of users who are looking to get their electronic devices repaired. It also provides an opportunity for small repair shop owners to expand their services and reach more customers. By providing users with a convenient and user-friendly way to book repair services and find

the nearest service centres, this app can help to make the process of repairing electronic devices more efficient and reliable.

## VIII. FUTURE SCOPE

The scope of the project is expansive, with numerous opportunities for growth and innovation. By providing a platform that connects users with nearby electronic repair services and enables them to book services without physical visits, the project addresses a significant pain point in the market.

The future scope of the project includes the following:

1) Expansion to other cities/ regions: If the app proves successful in one area, we can consider expanding its coverage to other cities or regions. This would allow more users to benefit from the convenience of your service.
2) In-app payment and transaction system: Integrating a secure and convenient payment system within the app can streamline the booking process. This feature would allow users to pay for services directly through the app, eliminating the need for cash transactions or multiple payment platforms.
3) Adding a rating and review system: A rating and review system can be added to the app, which will allow users to rate and review the service centres they have used. This will provide other users with a better understanding of the level of service they can expect.
4) Creating an on-demand service: The app can be developed to offer on-demand services, where users can book repairs and have technicians come to their location to fix their device.
5) Developing a mobile app: A mobile app version of this project can be developed to provide an even more convenient and user-friendly experience for users.
6) Integration with other platforms: The app can be integrated with other platforms such as, social media platforms, and other online marketplaces to reach a wider audience and increase visibility.

Overall, this project has a great potential to grow and evolve as it addresses a common point for many people, and by keeping in mind the users and repair shop owners needs, the app can be tailored to provide a more comprehensive solution.

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