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A Mobile Application for supporting Small and Medium-scale Enterprises (SME)

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Abstract

Nowadays for any services like Textile companies (tailors, cutting master), construction workers, decoration, vehicle cleaners, and dress stitching workers, Customers who wish to use these facilities will do so through a personal meeting or a phone call. In an emergency, it is difficult for a customer to locate any service at any time or place. As a result of this initiative, consumers will be able to use an Android app to find solutions to problems relating to tailors, cutting master construction workers, decoration, car cleaners, and dress.So, thinking about that aspect of life, designing and developing a framework that delivers several services at your doorstep in just one click is a good idea. This application has many benefits in today's society because it makes people's everyday lives more convenient. Safety, online payment, map navigation, and advertising will all be available as part of this project.

Keywords: Smart Appointment Booking, Mobile Application, Map Navigation, Customers

1. Introduction

People still have to make appointments with people who solve problems relevant to our everyday lives, such as stitching related problems, construction staff, decoration, car cleaners, and dress stitching workers, in this fast-growing technology.

1.1 Project Summary

The project's aim is to provide consumers with services at an affordable cost. Customers will be able to register and access the service provider's profile as a result of this initiative.

1.2 Purpose

Our purpose in developing this project is mainly to get workers online using an android application.

- We have observed the limitations in the existing system.

- Records are difficult to manage; there is no time limit for delivering service; and there is no guarantee of service.
- There is no 24-hour service available.
- There is no defence.

Our goal is to solve this limitation by providing the following features:

- These services are readily available; they can be provided at any time.
- Getting things done faster
- Saving time

1.3 Scope:

The aim of our project is to create a complete environment for online service booking that is both secure and user-friendly. The main goal of the project is to create an easy-to-use framework for customer services.

2. System Requirement Specification

Software Requirement:

- Flutter
- Flutter SDK
- Firebase Database

Hardware Requirement

- RAM: 8GB
- Hard disk: 40GB
- Intel Processor

2.1 Flutter:

Flutter is a cross-platform UI toolkit that allows applications to interact directly with underlying platform resources while allowing code reuse across operating systems such as iOS and Android. The aim is for developers to be able to create high-performance apps that feel normal across platforms, while respecting differences where they exist and sharing as much code as possible.

2.2 Firebase:

Backend-as-a-Service (BaaS) software development framework Firebase offers hosted backend services including a real-time database, cloud storage, authentication, crash reporting, machine learning, remote configuration, and static file hosting.

2.2.2 What is the mechanism behind it?

The Firebase Real-time Database helps you to build rich, collaborative applications by allowing secure access to the database from client-side code. Data is saved locally, and real-time events continue to fire even when the user is not connected, ensuring a secure experience.

2.3 Google Map:

So you've got Google Maps in your smart phone, but you're probably looking for something more fun to do with it. What about attaching position markers to the plot, placing Flutter widgets on top of it, or altering the map's appearance? You can do it all!
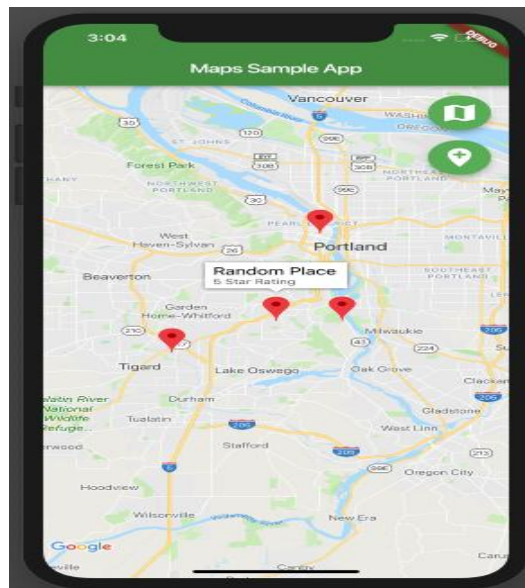

Fig.1. Google Map 1

3. Analyze the System

3.1 Feasibility Study:

When there is a complicated issue or opportunity, a feasibility study is conducted. It is the primary investigation that focuses on the "Look Before You Loop" approach to every project. A feasibility analysis is carried out to see whether the current system can be improved or whether a whole new system can be developed.

3.1.1 Technical Feasibility:

In this form of research, the current technology in use in an enterprise, such as existing software, hardware, and personnel, is examined to see whether it can fit with the proposed system or

whether completely new systems must be implemented.

3.1.2 Operational Viability:

Operational feasibility refers to the system's ability to function after it has been installed. That is, some programmers may dislike changes in their usual working method or be concerned about losing their peer group. The proposed project would have operational feasibility in the following fields. This system has been accepted by the company as their working method.[1-4].

3.2 DatabaseSchemaDesign
Table:1 Service Registration

COLMUN	DATATYPE
S_REGIS_ID-	INT(10)
S_NAME	VARCHAR(50)
ADDRESS	VARCHAR(50)
CITY	VARCHAR(20)
STATE	VARCHAR(10)
MOBILENO	VARCHAR(10)
EMAIL_ID	VARCHAR(20)
PROFILE DESCRIPTION	VARCHAR(250)
SERVICE RATE	INT(10)
STATUS	INT(1)

4. Implementation

4.1 Testing:
Code testing is an important part of software quality assurance since it is the final evaluation of the specification, design, and generation of code. Any system or project must include testing as a component. If a system is introduced without being thoroughly checked, it can result in incorrect operation and customer dissatisfaction. It would also be detrimental to the organization's image.

Conclusions
"A mobile application for helping small and medium scale enterprises (SME)" is a personalised Mobile Application that uses cutting-edge technology for Android Application Creation such as Flutter SDK (Software Development Kit), Flutter, Dart, and Firebase.This application offers domestic small and medium-sized business utilities, such as electrical, plumbing, and carpentry. Unlike the existing "Facility-kart" app, this one uses GPS to calculate the user's position and dynamically assigns the nearest service provider from that location. As a result, this programme appears to be more dynamic.

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