PUSL2021

COMPUTING GROUP PROJECT PROPOSAL

Project name: Labor Hiring Mobile Application

UNIVERSITY OF PLYMOUTH - BATCH 11

GROUP DETAILS

GROUP NO - 74

10898748 - G.D.M.S Dayarathne

10898787 - M.B.J.M.M.M Jayasekara

10898815 - M.P.H Manoli

10900326 - W.S.S De Mel

10898911 - H.S.C Silva

10899284 - W.P.R.R Fernando

CONTENT

1. Project Overview

- Introduction

  In today's changing economy there is a growing need of seamless and efficient platform that connects people in need of labor service with skilled workers. We have developed an app that seeks to address this issue by transforming the process of hiring professionals, for various tasks such, as cleaning, repairs, plumbing and more.

  In this application laborers, skilled professionals can create their own profile to showcase their expertise and provide their service to the customers. Also, customers can easily find the right person for their need through this app.

- Main Functionalities

1. User profiles and registration:

Workers: Make thorough profiles that include details about your qualifications, experience, availability, and fees.

Clients: Register and supply your location, contact information, and requirements.

For security and trust, profile verification via email and phone numbers is used.

2. Lookup and Compilation:

Workers can look up job postings based on date, location, and category.

Clients can look for workers based on availability, location, and particular skill sets.

For every job posting, an intelligent matching algorithm recommends suitable workers.

3. Jobs on Post:

Clients can post jobs online with specifics regarding the assignment, time frame, place, and cost.

Workers can submit their resumes and proposals to apply for job postings.

Direct communication between customers and laborers via in-app messaging.

4. In-App Purchases:

Integration of a secure payment gateway so that clients can pay workers.

Funds are held in an escrow account until the job is finished to the customer's satisfaction.

5. Evaluations & Reviews:

After a job is finished, workers and clients can evaluate and rate one another.

accountability and transparency through public comment.

6. Services for Geolocation:

Integrated maps to find nearby laborers and follow their arrival.

Geofencing for tracking attendance and verifying work locations.

7. Notifications via Push:

alerts for messages, applications, and job postings in real time.

Notifications about impending tasks, invoices, and assessments.

8. Timetable Administration:

A calendar function to help laborers organize their workdays.

automated alerts regarding impending tasks and conflicts.

9.Control Panel:

An extensive admin dashboard for tracking and controlling user behavior.

Customer service and the ability to settle disputes.

10.Security and Privacy:

Encrypting data to safeguard user privacy.

reporting improper behavior or content within an app.

11.Multilingual Assistance:

Make the program usable for a wide range of users.

12.Mechanism for Feedback and Improvement:

Encourage users to provide comments and ideas for ongoing enhancements.

13.Promotions and Marketing:

In order to encourage user acquisition and retention, a referral program was put in place.

Run sales and discounts to draw in more customers.

In summary, the suggested mobile application for labor hiring will close a large gap in the market by giving customers and laborers an easy-to-use platform to connect, which will improve the dynamics of the labor market and increase job opportunities. Our goal in adding these features is to give every user a smooth and reliable experience.

2. Objectives of the project

- To create a platform which connects users(customers) with local professional laborers who do various tasks such as cleaning, repairing, furniture assembling, home improvement, plumbing, handyman services, and electricians.

- To provide a platform with a safe environment for customers to hire laborers for their needs. Customers can give their ratings & reviews/comments about the services. (what others say about the laborers)

- To find a suitable job easily for laborers based on their skills and availability.

- To provide information about nearest laborers based on the customers' location.

- To make money when people use it to pay for the laborers through this application.

- Create special deals and discounts to keep people with the app and increase the user base & services.

- To see if the money paid by the customers is properly paid for the laborers. (confirm the payments)

- Make this app easy to use even by disabled people.

- Give good protection to the information which people put into this app.

- To provide information of nearest workers based on the users'(customers') location.

3.Target Users

[1] Laborers

Skilled laborers like cleaners, craftsmen, handymen, electrical technicians, painters, plumbers, landscapers, and artisans. They can seek job opportunities suitable for their skills and earn income.

[2] Customers

People who need labor services. They can be an individual or a company.

[3] Application Administrators

Administrators are the ones who are responsible for resolving the problems of the people who use this app, and care about the clients' requests. They also ensure the application runs smoothly and manage updates.

[4] Service Providers

They are specialized agencies or companies that provide labor services like help to get a job.

[5] Trainers

Professionals who provide training or certification to workers. They help laborers to learn more skills and make them better at what they do.

4. Propose Technologies and Tools

Frontend

Flutter: Flutter is a tool that we use to create applications.

Dart: We use Dart as the programming language, with Flutter to define the applications behavior, like app logic and user interface design.

Backend

Node.js: If we decide to have a server, we can still opt for Node.js.

Database

Firebase: This offers a real time database and cloud services .

Authentication

Firebase Authentication: This is for signup and login purposes.

Payment Integration

Stripe or Braintree: This is how we pay for things like Stripe or Braintree to securely manage app transactions.

Cloud Hosting

Google Cloud Platform (GCP): GCP can host services or store data for the application.

Development Tools

Visual Studio Code: We choose to use Visual Studio Code as the development environment since it supports both Flutter and Dart.

Version Control

GitHub: GitHub, for version control and collaborative work just like we would do with programming languages. It’s kind of a safe place to keep our application’s work.

5.Time Plan

2023-2024	Oct 25	Nov 30	Dec 30	Jan 30	March 20	Apr 21
Project Initiation						
Requirements Gathering						
Project Planning						
Design						
Study and Development						
Testing						
Deployment and User Training						
Final Submission						

6.Reference

Kumar, D. N., & Sinha, S. P. (2019). A Survey of Project Management Practices in the Software Industry. International Journal of Project Management, 37(1), 1-15.

PMI. (2020). A Practical Guide to Project Management.

Wysocki, R.K., Cooke, R.E., & Wideman, P.M. (2013). Effective Project Management: Traditional, Agile, Extreme. John Wiley & Sons.

Upwork. (2023). Upwork. [Online]. Retrieved from https://www.upwork.com/

Toptal. (2023). Toptal. [Online]. Retrieved from https://www.toptal.com/