

Project report on
RANGO RIDE HAILING - ANDROID MOBILE APP

Submitted by
ABHINESH.V (R2014002)

Under the Guidance of
Mrs. MADHUPRIYA M.S.
(Assistant Professor)



In partial fulfillment of the requirements
for the award of the degree -
BACHELOR OF COMPUTER APPLICATION
BANGALORE NORTH UNIVERSITY
TAMAKA, KOLAR, BENGALURU – 560049



DEPARTMENT OF COMPUTER APPLICATION

EAST POINT COLLEGE OF HIGHER EDUCATION
Jnana Prabha East Point campus, Virgonagar Post, Avalahalli,
Bengaluru – 560049, Karnataka, India.

SEPTEMBER 2023

CERTIFICATE

This is to certify that the project work entitled “**RANGO RIDE HAILING ANDROID MOBILE APP**” is a bonafide record of work done by **ABHINESH.V (R2014002)** submitted in partial fulfillment of the requirement for the award of the degree **BACHELOR OF COMPUTER APPLICATION** of Bangalore North University, Tamaka, Kolar, Bengaluru under the supervision of **Mrs.MADHUPRIYA.MS.**

Date:

Signature of the Guide

Counter signed by

GUIDE

H.O.D

PRINCIPAL

External Viva-voce Conducted on

INTERNAL EXAMINER

EXTERNAL

EXAMINER

DECLARATION

I hereby declare that this project entitled “RANGO RIDE HAILING ANDROID MOBILE APP’ submitted to the Bangalore North University, Tamaka, Kolar, Bengaluru in partial fulfillment of the requirement for the award of the degree **BACHELOR OF COMPUTER APPLICATION** is a record of original work done by me during the period of study at **EAST POINT COLLEGE OF HIGHER EDUCATION** under the guidance of **Mrs.MADHUPRIYA.M.S.**

Date:

ABHINESH.V (R2014002)

ACKNOWLEDGEMENT

If words are considered as a symbol of approval and token of appreciation then let the words play the heralding role expressing my gratitude, The satisfaction that accompanies that the successful completion of any task would be incomplete without the mention of people whose continuous cooperation made it possible, whose constant guidance and encouragement crown all efforts with success. We are grateful to teacher **Mrs.MADHUPRIYA.M.S** for the guidance and constructive suggestions that helped us in the preparation of this project.

Date :

ABHINESH.V (R2014002)

SYNOPSIS

In the ever-evolving world of transportation and mobile technology, the development of a ride-hailing app using React Native represents a easy and efficient solution that brings convenience, efficiency, and real-time navigation to users.

Introduction:

Rango is an mobile application that aims to improve the ride-hailing experience by incorporating innovation and optimizing convenience for users. The app provides a efficient and user-friendly platform for individuals to easily request rides and navigate to their destinations to travel with efficiency and ease.

Nodejs with ReactNative would be used to develop the Mobile App, whereas the the server would will be coded with nodejs with a backend framework Expessjs. The Passenger's and Driver's data and the ride data would be stored in a MongoDB database. The database will be created and managed using Mongoose Library. The App would work on any Android device with version 5+.

Key Features:

- Passenger and Rider Authentication.
- Search for places using the mapbox forward-geocoding API.
- Using mapbox reverse geocoding API to get place coordinates.
- Implement the Maps function with Mapbox Maps services.
- Real-Time Driver Tracking.
- One-time-password Verification on start and end of ride.
- Real time ride booking.
- Review and Rating System.
- Driver and Vehicle Information.
- Fare Estimation.

CONTENT

| | |
|--|-----|
| 1. INTRODUCTION | 01 |
| 1.1. Purpose | 01 |
| 1.2. Scope | 02 |
| 2. SYSTEM ANALYSIS AND Requirements | 03 |
| 2.1. System Analysis | 03 |
| 2.2. System Requirements. | 03 |
| 3. SYSTEM DESIGN | 07 |
| 3.1. Use Case | 07 |
| 3.2. Data Flow | 09 |
| 3.3. Entity Relationship diagram | 11 |
| 3.4. Module Division | 12 |
| 4. IMPLEMENTATION | 14 |
| 4.1. Front-end Android App Source Code | 14 |
| 4.2. Back-end | 83 |
| 4.3. Project Implementation | 100 |
| 4.4. Project Snapshots | 103 |
| 5. CONCLUSION | 110 |
| 6. REFERENCES | 112 |