A Centralized Multipurpose Transportation System

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Project Stage-II



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Introduction

The project focuses on:

- Developing a system that has no barrier to Native Languages.
- Developing a centralized application so that no need to download multiple applications for various day-to-day transportation routines.
- Monitoring the methodologies of availabe applications for transportation and enhance the existing features to satisfy the customer.

Objectives and Scope

- To understand the use and the limitations of various modes of transportation.
- To improve the customer satisfaction rates by 90-100 percent by providing flexible customer services and security.
- To Compare the existing technologies(applications available) for transportation and enhance the features and satisfiability of the customers.

Problem Statement

 To develop a centralized system for the use of multipurpose transportation facilities using Dijkstra's shortest path algorithm to enhance the customer usability.

Literature Survey(1/2)

Title	Author,Publication, Year	Technique	Remark
A Research On Mobile Applications For Location Tracking Through Web Server and SMS.	Abdul Wali Khan July-August, 2015	Android platform	Automatically send current locations and OTP to user.
A Secure Tracking Mobile App Development	Bharath Sai Pochampally and Jiangbo Liu 2017	Security and Data Mining	To provide users with the security applications to manage the data in their personal smart phones.
Success Story of a Start-up – A Case Study of OLA Cabs	1.Dr. Ashok Kumar Panigrahi, 2 ShambhaviShahi, 3 AmarsinghRathore February. 2018	Risk and Obstacle Management	Startups havehigh mortality rate, often due to a lack of strategic planning, wrong marketing investments or inefficient resource allocation.

Table 1:-Literature Survey

Literature Survey(2/2)

Title	Author,Publication, Year	Technique	Remark
Research And Application Of A Transportation Information System Using Ubiquitous Terminal.	Junhan WANG, Fei QIAO, Jianfeng LU IEEE Publications 2013	Intelligent Transportation, GPS, Ubiquitos Network	Implementation of Intelligent system using Ubiquitous networks.
Transportation Problems : Applications	Professora Cecília Maria Nogueira Alvarenga Santos do Vale, Professora Isabel Cristina da Silva Martins Ribeiro.	Logistics platforms; Network optimization.	Study of various obstacles and performing logistics for route optimization.

Table 2:-Literature Survey

Architectural Diagram

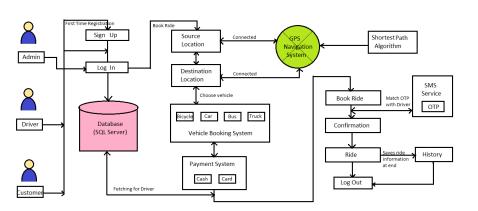
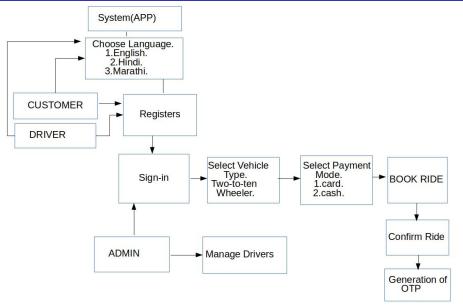


Figure: 1.System Architectural Diagram.

Flow of application



Algorithmic Approach

Let S be the Whole system which consists:

S= IP, Dr, A, Pro, OP, L

Where,

- **A.** IP is the input of the system.
- **B.** Pro is the procedure applied to the system to process the given input.
- **C.** OP is the output of the system.
- **D.** L is the Language of the system.
- 1. Registration:
- U=U1, U2, U3, Un

U Is the user set that register in our system.

OTP = otp1,otp2,otp3,otp4,....otpn



Algorithmic Approach

OTP is the set of OTP Send for system after Registration to verify location.

L=L1, L2, L3,Ln

L is the set of language to select for the user and Driver.

R= R1,R2,R3,....Rn

R is the set of Ride

User add pickup and drop location, select vehicle, book vehicle.

D= D1,D2,D3,....Dn

D is the set of driver.

Driver accept request send confirm request perform ride.

Input: Request

Output: Accept/reject

2. Admin:

Input: check driver Request

Output :accept/reject



System Specifications

The Software Requirements of the system are:-

Sr.no	Software	Description
1	Operating System	Windows 8.1 and above
2	Language Used For Implementation	Java SE 9
3	Development Environment	Android Studio 3.2
4	Database	MySQL 8.0

Table: 5.Software Requirements

The Hardware Requirements of the system are:-

Sr.no	Hardware	Description
1	RAM	4GB and above
2	Processor	intel CORE i3 and above

Table: 6. Hardware Requirements



Input / Dataset

- Input Dataset = [Language, Transport mode, current location, destination location.]
- Processing Dataset = [Input Interpretation, Algorithm analysis, OTP generation, Verification.]
- Output Dataset = [Route,Fare.]

Result(1/4)



Result(2/4)

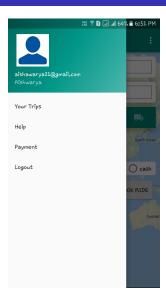


Figure: 2.User Login.

Result(3/4)

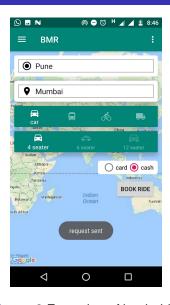


Figure: 3. Execution of book ride.

Result(4/4)



Figure: 4.Execution in native language i.e.in Marathi

Conclusion

This system would provide:

- A centralized approach for consumers to access all types of vehicles.
- Increase the usability.
- The drivers/consumers who are unable to communicate in English also can use the system efficiently.
- The system is organization specific so can be transformed as per the need.

Paper Published

- Name of publisher-International Research Journal Of Engineering and Technology(IRJET).
- Title of the paper-A Centralized Multipurpose Transportation System.
- Authors-Akansha Gore, Sakshi Gatagat, Aishwarya Dekhane.
- Guide-Mr.Santosh Nagargoje.
- Paper Download linkhttps://www.irjet.net/archives/V6/i5/IRJET-V615277.pdf

References I

- [1] "A secure tracking mobile app development". Bharath Sai Pochampally; Jiangbo Liu 2017 12th IEEE Conference on Industrial Electronics and Applications (ICIEA) Year: 2017
- [2] "A Research On Mobile Applications For Location Tracking Through Web Server And Short Messages Services (SMS)" November 2015.
- [3] "Research And Application Of A Transportation Information System Using Ubiquitous Terminal." Junhan WANG, Fei QIAO, Jianfeng LU CIMS Research Center of Tongji University, Shanghai 200092, P. R. China.IEEE -2013
- [4] Transportation Problems: Applications. ANDRÉ VILAÇA MOREIRA .Thesis July 2012
- [5] IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 20, Issue 2. Ver. II (February. 2018), PP 30 www.iosrjournals.org

References II

- [6] Han, Jiawei, Kamber, Micheline Pei and Jian, "Data Mining: Concepts and Techniques", Elsevier Publishers.
- [7] de Melo, L.L., Zorzo, S.D. (2012). PUPDroid Personalized user privacy mechanics for android, Systems, Man, and Cybernetics (SMC), 2012 IEEE International Conference on, 14-17, 1479,1484.
- [8] Stirparo, Pasquale., Fovino, Igor Nai., Taddeo, Marco., Kounelis, Ioannis. (2013). In-memory credentials robbery on android phones, Internet Security (WorldCIS), 2013 World Congress on , 88, 93, 9-12.
- [9] Mabroukeh, Ezeife,"A Taxonomy of Sequential Pattern Mining Algorithms," ACM, 2010.
- [10] Ezeife C,Liu Y,"Fast Incremental Mining of Web Sequential Patterns with PLWAP Tree," *Data Mining and Knowledge Discovery, vol. 19, no. 3. Springer*, 2011.

