

Online Driver Booking Service

Uttam Pandey*, Raghuwansh Kumar Singh*, Asst. Prof. Sanchi Kaushik*

*Department of Information Technology, Noida Institute of Engineering Technology, AKTU, Noida, India

ABSTRACT

Now days in India driver booking system is getting very popular and Most of the people want an ease of travelling using drivers. Instead of asking for auto rickshaw and taxis. Since there are lots of applications available for driver booking but they use centralized approach to maintain data. But if any failure in centralized server will cause whole system to go down. Our approach is to design a driver booking system using server based approach and also to maintain safety of passengers. And the driving patterns of driver using accelerometer. In this study, we design and implement the intelligent server based driver system for serving passengers using local information. The implementation and analysis of proposed approach are carried out by using an android-based web service based system framework. Simulation results manifest that our approach is able to encounter the shortcomings of the existing system.

Keywords— Case type, data type, data page, existing system, input/output design

Date of Submission: 10-07-2021

Date of acceptance: 26-07-2021

I. INTRODUCTION

Roads and Rides (R & R) is a large transportation company in India which offers fastest car booking services to their customers. They have decided to venture in to new business initiative, allowing their customers to hire a driver through phone or online for their travel needs. R & R has decided to implement a Pega solution to assist this initiative. They initially want this service to be available in Chennai and Hyderabad Cities. In future, they may extend it to other major cities in India. Note: For your deliverable you are not required to create an application profile or define usecases in the product. While these steps are critical for real-world projects simulating them in an environment where no business architect or business representative would not be valuable to the overall assessment and as such is not required

II. HIRING DRIVER

grocery shopping trips, pick kids from school or are looking for a relaxed ride back home or to a business meeting, we have you covered. Our drivers across the city would love to chauffeur you from wherever you are. So, let our drivers deal with the traffic, the signals or traffic rules, while you enjoy your ride.

Why wait for a long weekend for a relaxing trip to your favorite getaway? Let the pressure of driving long distWhether you need to go for your weekly ances, safety and taking care of the route be on our gentle chauffeur. Let your retreat start while you're on the road instead of when you reach your destination.

III. SYSTEM ANALYSIS

3.1 EXISTING SYSTEM:

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram, interviews, etc. Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the frame work of the solution. Thus it should be studied thoroughly by collecting data about the system. Then the proposed system should be analyzed thoroughly in accordance with the needs.

System analysis can be categorized into four parts:-

- 1.System planning and initial investigation
- 2.Information Gathering

3. Applying analysis tools for structured analysis.

In the current system there are few such facilities provided that customer can place order for booking their driver. so we have to go to avail the cab service offices and then wait in the long queues to book the cab order to book that cab which is very time consuming sometime and sometimes we do not get the cab because of the location issues and driver behavioural problems.

3.2 PROPOSED SYSTEM

In our proposed system we have the provision for booking the Drivers from our homes by adding few details in online application. After booking driver the customer start the journey and after the completion of the journey the payment process begins and could be done easily via cash or by card or by net banking Proposed system tracks the location and speed of car. Also maintains the drivers database and keep track of customers feedback. It gives the conditional offers to the driver as well as customer. Our system will mainly focuses on booking driver and providing safety to our customers here we save the customer details and order details so that we can track the order. All the conditions in the system are pre defined and reduce manual calculations and instructions.

Our proposed system has several advantages

User friendly interface

- Fast service
- Reduce manual work
- Track order
- Search Based on language preference
- Search based on location

IV. DESIGN

4.1 INPUT DESIGN

Input design is the process of converting user-oriented input to a computer based format. Input design is a part of overall system design, which requires very careful attention. Often the collection of input data is the most expensive part of the system. The main objectives of the input design are...

Produce cost effective method of input.

Achieve highest possible level of accuracy

Ensure that the input is acceptable to and understood by the staff.

Input Data

The goal of designing input data is to make entry easy, logical and free from errors as possible. The entering data entry operators need to know the allocated space for each field; field sequence and which must match with that in the source document. The format in which the data fields are entered should be given in the input form. Here data entry is online; it makes use of processor that accepts commands and data from the operator through a key board. The input required is analyzed by the processor. It is then accepted or rejected. Input stages include the following processes

- DataRecording
- DataTranscription
- DataConversion
- DataVerification
- DataControl DataTransmission
- Data Correction

One of the aims of the system analyst must be to select data capture method and devices, which reduce the number of stages so as to reduce both the changes of errors and the cost. Input types, can be characterized as.

- External
- Internal
- Operational
- Computerized
- Interactive

Input files can exist in document form before being input to the computer. Input design is rather complex since it involves procedures for capturing data as well as inputting it to the computer.

4.2 OUTPUT DESIGN

Outputs from computer systems are required primarily to communicate the results of processing to users. They are also used to provide a permanent copy of these result for latter consultation. Computer output is the most important and direct source of information to the users. Designing computer output should proceed in an organized well throughout the manner. The right output must be available for the people who find the system easy o use. The outputs have been defined during the logical design stage. If not, they should defined at the beginning of the output designing terms of types of output connect, format, response etc,

Various types of outputs are

- External outputs
- Internaloutputs Operationaloutputs
- Interactiveoutputs
- Turn aroundoutputs

All screens are informative and interactive in such a way that the user can full fill his requirements through asking queries.

4.3 DATABASE DESIGN

The general theme behind a database is to handle information as an integrated whole. A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and effectively. After designing input and output, the analyst must concentrate on database design or how data should be organized around user requirements. The general objective is to make information access, easy quick, inexpensive and flexible for other users. During database design the following objectives are concerned:-

Controlled Redundancy

- Dataindependence
- Accurate and integrating
- More information at low cost
- Recovery from failure
- Privacy and security
- Performanc Ease

Data modeling involves relating a conceptual model of how data items relate to each other in an application. The data model in the Pega 7 Platform refers to a set of rules that work together to populate the data in your application. This data is displayed on the user interface to help the user process the case and can help automate decisions in your business processes. The following rule types constitute your data model:

Data types

The data type is another name for a class in your application that holds data the application uses. A data type has one or more data pages and several property definitions associated with it.

Properties

Properties define the format and visual presentation of data in your application.

Data pages

Data pages define the content of a clipboard page. Data pages also control the loading of that data from a source system

V.DIAGRAMS

USE CASE

A **use case** represents a small processing unit performed by one or more actors for a given work type within an application. A single use case implementation may correspond to an entire flow, a single flow action, a screen flow, an activity with the **May Start?** option enabled or the New harness of a flow.

WORK FLOW

A workflow diagram is a visual representation of a business process (or workflow), usually done through a flowchart. It uses standardized symbols to describe the exact steps needed to complete a process, as well as pointing out individuals responsible for each step.

VI.FURURE SCOPE

Proposed system tracks the location and speed of car. Also maintains the driver's database and keep track of customers feedback. It gives the conditional offers to the driver as well as customer. Our system will mainly

focus on booking driver and providing safety to our customers. It uses google maps, sensor and web services to implement our objectives. Sensors are used to detect the driving patterns of driver in order to evaluate driver's rating. Our system will be more secure and it will be more user friendly. And also protects data on server side. It also provides a way to manage driver data and to watch over them and their activities. Admin can Also view statistics of driver in order to analyze drivers pattern of driving. As it is based on nearest neighbor algorithm it can be consider as very powerful system to search driver.

ACKNOWLEDGEMENT

We would like to take this opportunity to express our deep sense of gratitude to all individuals who helped us directly or indirectly during this thesis work. Firstly, we would like to thank my supervisor, Prof. Sanchi kaushik, for being a great mentor and the best adviser I could ever have. His advice, encouragement and critics are source of innovative ideas, inspiration and causes behind the successful completion of this dissertation. The confidence shown on me by him was the biggest source of inspiration for me. It has been a privilege working with him from last one year. He always helped me during my project and many other aspects related to academics. His talks and lessons not only help in thesis work and other activities of college but also make me a good and responsible professional

VI. CONCLUSION

My project is only a humble venture to satisfy the needs in an Institution. In pega there is low code development approach is used so here we only used rules to develop this system. This package shall prove to be a powerful package in satisfying all the requirements of the organization.

The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses. Last but not least it is no the work that played the ways to success but ALMIGHTY

REFERENCES

- [1]. Sandeep Gupta, Attaullah Buriro*, Bruno Crispo, "DriverAuth: Behavioral biometric-based driver authentication mechanism for on-demand ride and ridesharing infrastructure", DISI, University of Trento, Trento, Italy, ICT Express (2018), <https://doi.org/10.1016/j.ict.2018.01.010>, 24 January 2018.
- [2]. Umberto Fugiglando, Emanuele Massaro, Paolo Santi, Sebastiano Milardo, "Driving Behavior Analysis through CAN Bus Data in an Uncontrolled Environment", IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, IEEE, 2018,
- [3]. Hemanth Kumar and K. Sentamilselvan, "Customer Satisfaction towards Call Taxi Services A study with reference to Chennai", International Journal of Pure and Applied Mathematics, Volume 119 No. 12 2018, 14919-14928.
- [4]. Dr. Ruchi Shukla, Dr. Ashish Chandra & Ms. Himanshi Jain, "OLA VS UBER: The Battle of Dominance", IOSR Journal of Business and Management (IOSR-JBM), VINC'17, 73-78.
- [5]. Dr. P. Kishore Kumar, Dr. N. Ramesh Kumar, "A Study on Factors Influencing the Consumers in Selection of Cab Services", International Journal of Social Science and Humanities Research ISSN 2348-3164, Vol. 4, Issue 3, Month: July - September 2016, pp: (557-561).
- [6]. <https://www.olacabs.com/rentals>
- [7]. www.driveu.in/Driver/Pune
- [8]. www.089drivers.com