CAR RENTAL SYSTEM

Suraj Yadav[1], Samrat Pawar[2], Duhita Raut[3], Ruchi Rahi[4]

[1-4]*Department of Computer Engineering, Theem College of Engineering*

---***---

Abstract - *Our Aim is to style and build a information for you-drive Application. this permits admin rents a car and additionally the person can rent his/her car in our application that may be employed by a client. By paying the money throughout a such as amount of time. this method will increase customer retention and modify vehicle and workers Management in an economical way. you-drive System Application is predicated on a plan to book car online. Here initially the user should login or check in to urge access. Then the user can list, seek for cars according to their needs, check every automobile's description, booking costs and book simply with help of varied payment methods. All the accessible cars may be rated by the users too. the appliance also displays reserved car's list. With the assistance of this application, the net car booking has become easier for the customers. It can be utilized in many mechanical man gadgets akin to smartphones, tablets, television. mechanical man is an open supply in order that developer realize it easy to determine and expand new features. This project is straightforward to work and understood by the user. the shoppers also can use the system to get automobile rent. The client ought to produce a replacement account before work in or he / she will log into the System with his/her created account. Then he/she can read the accessible cars in a very branch and create a reservation for a Car. this method will useful to the admin in addition on the customer also.*

*Key Words***:** *GPRS, SMS, GPS, DB*

1. INTRODUCTION

We aim to become a pioneer within the vehicle rental business by utterly specializing in customers, our employees, growth, innovation and efficiency. All of those parts will drive US towards success and show us in concert company that may perform and provides price for money. once it involves cab rental services, Cool Service is that the most sure and reliable name in the travel business. the foremost advanced travel agents providing cab rental and automotive rent in India, creating full use of data technology to boost the amount of our efficiency. However, this is often only 1 facet of services. And this project frequently strives to supply the most effective of services - each in terms of man and machine, tour consumer Moreover, this project encompasses a fleet of cars starting from luxury to budget cabs. While, it offers on-line cab rent service for company houses. And this project claim to offer the best of rates, that are tailor- created relying upon the facilities, availed and offer both intercity and intra-city cab facilities. All cabs have correct permits and documentation in order that the shoppers couldn't be hassled for the dearth of documents. However, this project has strategic backup system for any eventuality. Cab drivers are educated, polite, and reliable and are trained to handle acute breakdowns. The cab service includes all classes of cars from luxury to budget. Further, this project's utmost priority is quality. to realize this, vehicles are well maintained and tested for delivering optimum and uninterrupted performance. Team of execs within the travel business allows this technique to style journeys that suits to all or any budgets and preferences of the travelers. In addition, hands together with drivers and body workers are well trained to discharge their duties with plenty of efficiency. trying from social perspective it offers you likelihood to grasp additional students Associate in Nursingd move with them throughout your ride. it's an android-based application. It asks for the stripped-down personal information. Since we've got deep coupled the application You need to choose the timeslot to travel, from and to places and range of person travelling.

2. PROBLEM STATEMENT: -

The manual u-drive system provides services solely throughout workplace hour. So, customers have restricted time to form any transactions or reservation of the cars. The existence of the web car rental systems today has overcome the limitation of the business operation hour. Manual automobile hiring system is tedious, a consumer should be gift physically or a minimum of decision the assistance table of a corporation so as to book a car for rental. Records are entered into books by suggests that of paper and pen therefore data storage is manually done. Manipulations of information together with calculations are done manually and typically accuracy is comprised. Deletion and update of information is somehow troublesome and if possible, it ends up in untidiness.

3. JUSTIFICATION: -

The proposed system can reduce travel expenses to the company's car rental center. Customers can install the application on their mobile phones and create an account with a company that provides car rental services. Therefore, when creating an account, you only need to enter the details once. After creating an account, you can comfortably book a car using your phone, cancel the transaction, confirm the transaction and receive an invoice. They have a central database where they can receive car rental applications and can book cars upon customer request. The system automatically generates a report on the number of cars available for lease in a given period, reports how much funds have been raised in a given period, and reports the total cost of the company during that period. The system can provide reports to analyze how much each customer contributes to the company's annual revenue and predict how many customers will join the company each year. System users must provide authentication details. Access to various menu items is restricted, especially for employees. Therefore, each employee can only access permitted content, and each employee is responsible for the transactions they conduct.

4. RELATED WORK: -

D. Kesrarat, S. Songcharoenkit, P. Nanthapornpisut has developed good Matching for rent-a-car in2017. the aim of writing is to develop applications that permit users to decide on the vehicle consistent with their desires and to process the rental of vehicles each motorbike and cars. the event methodology used is that the water method that consists of communication, planning, modelling, construction, deployment. The results are evaluated with eight golden rules of interface style and also the results of the form show that the appliance may be utilized by users and suppliers to create the method of rental and renting a vehicle. it absolutely was concluded that this application may be used well and might perform the method of rental and renting vehicles for cars and motorbikes.

Jia-Ning Luo, Ming-Hour rule, Ming-Chien Yang has developed anonymous you-drive protocol supported NFC technology in 2013. Our main contributions include: (1) Anonymity. Users offer their personal info to a trusty third party (TTP) only. The car rent suppliers will not get users' real identity. (2) Unlink ability. you-drive corporations are unable to determine any link between users' rental records and users' identity just by analyzing the rental history. (3) Trace ability. If there are client disputes or accidents, the rental company can request that TTP reveal users' identity. (4) Flexibility. Users are liberal to select their most well-liked vehicle. A client must register his identity with a TTP via his NFC phone. He ought to request a short lived anonymous license from TTP and sends it to the rental company. If the license is valid, the corporate problems a price tag for a particular vehicle to the user over the air. The vehicle authenticates the ticket through the user' NFC phone.

5. Functional Requirements: -

Requirement analysis could be a package engineering technique that's composed of the assorted tasks that confirm the wants or conditions that are to be met for a brand new or altered product, taking into thought the attainable conflicting requirements of the various users. useful requirements are those requirements that are accustomed illustrate the inner operating nature of the system, the outline of the system, and rationalization of every subsystem. It consists of what task the system ought to perform, the processes involved, that knowledge should the system holds and also the interfaces with the user. The functional requirements known are:

- Customer's registration: the appliance ought to permit new users to register on-line and generate membership card.
- on-line reservation of cars: Customers should be able to use the application to form booking and online reservation.
- Automatic update to info once reservation is created or new client registered: Whenever there's new reservation or new registration, the system should be in a position update the database with none extra efforts from the admin.
- Feedbacks to customers: It should give means that for patrons to go away feedback.
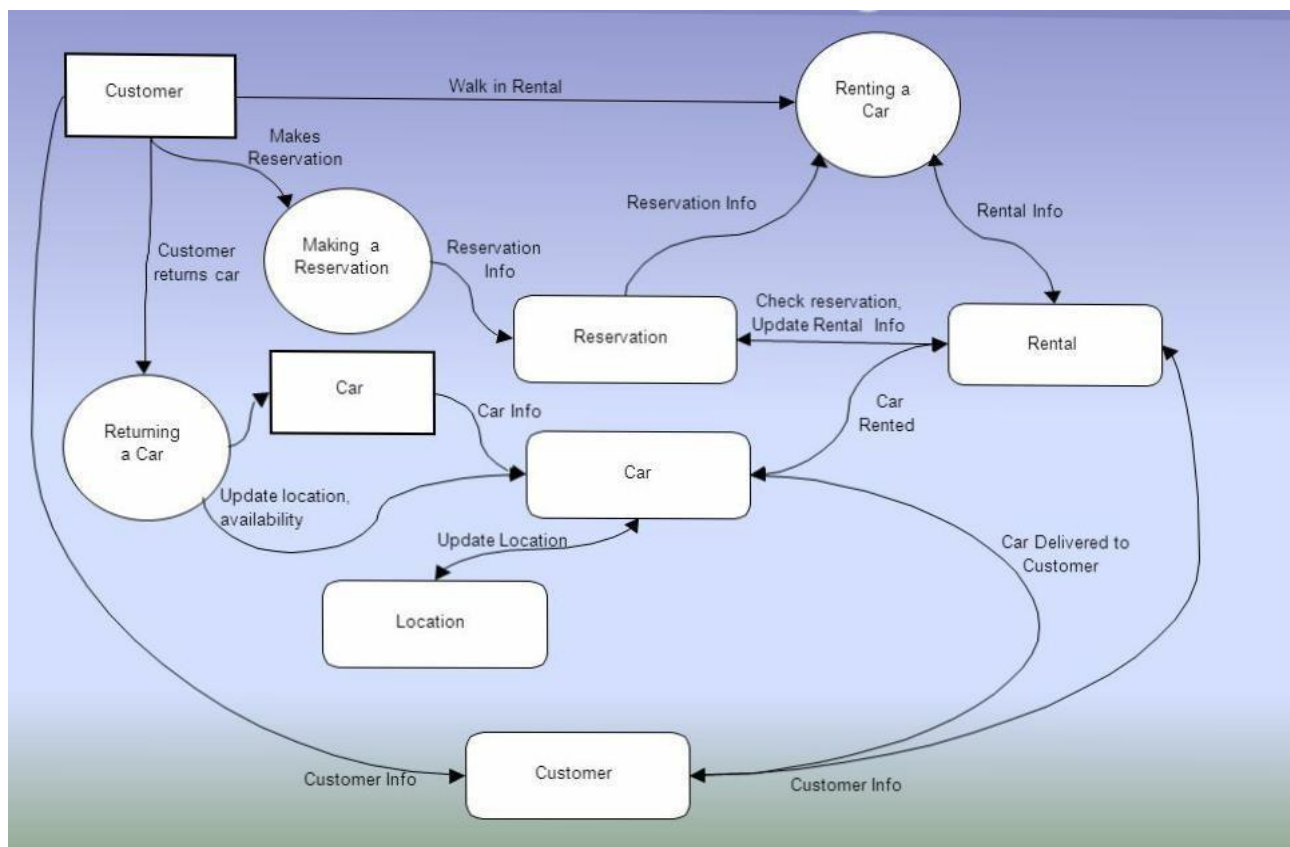
6. Non-Functional Requirements: -

- Security: The system should provide a high level of security and integrity of the information control by the system, solely licensed personnel of the corporate will gain access to the company's secured page on the system; and only users with valid watchword and username can login to look at user's page.
- Performance and Response time: the applying should have high performance rate once capital punishment user's input and will be able to provide feedback or response among a brief time span sometimes fifty seconds for highly sophisticated task And

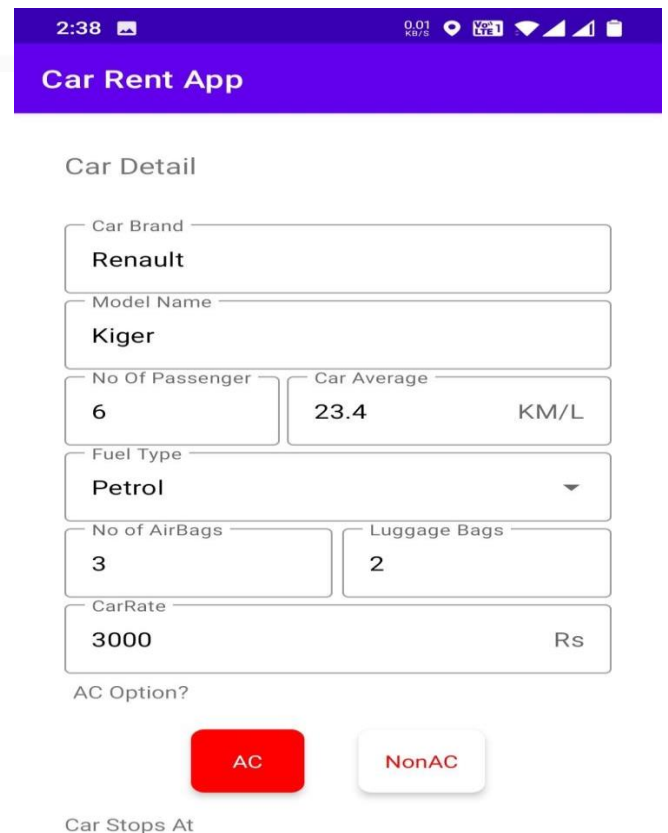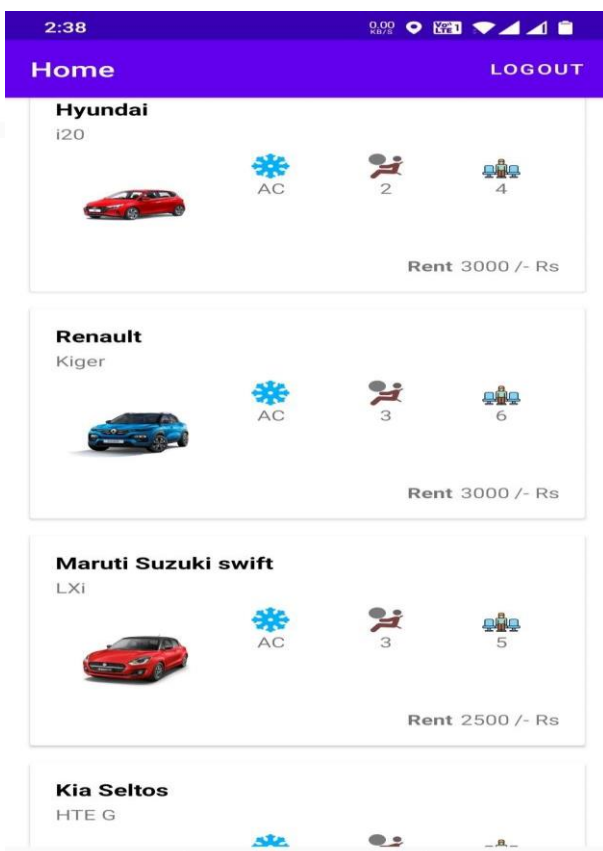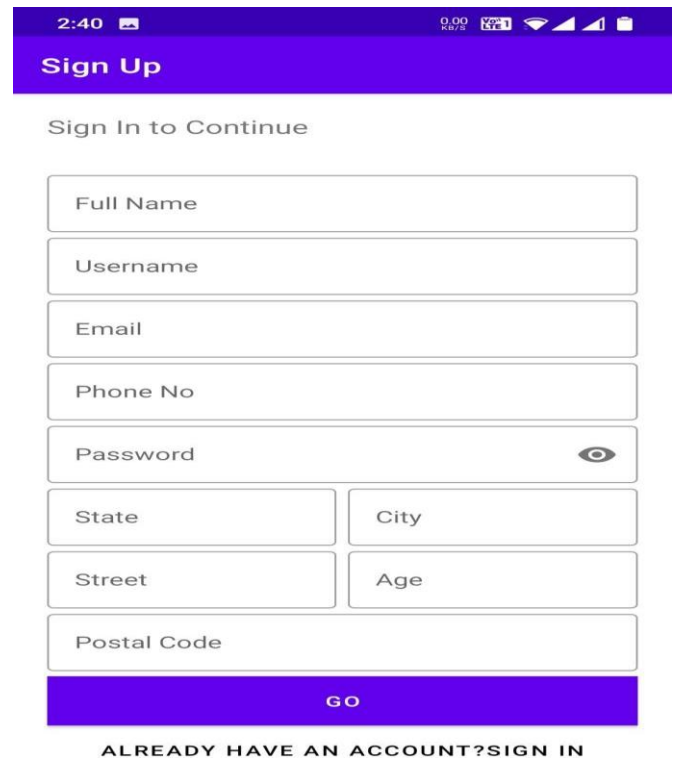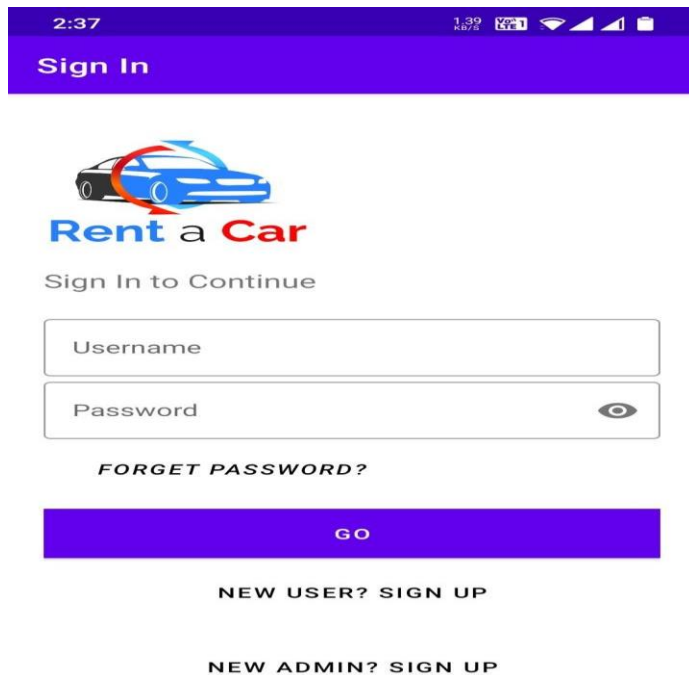20 to twenty five seconds for fewer complicated task.

• Error handling: Error should be significantly reduced and an applicable error message that guides the user to pass though miscalculation should be provided. Validation of user's input is very essential. conjointly the quality time taken to recover from an error should be fifteen to twenty seconds.

• Availability: This application must always be obtainable for access at twenty four hours, seven days a week. conjointly within the incidence of any major system malfunctioning, the system should be available in 1 to a pair of operating days, in order that the business method isn't severely affected.

• easy use: thought-about the extent of information possessed by the users of this system, a straightforward however quality computer program ought to be developed to form it easy to know and needed less training.
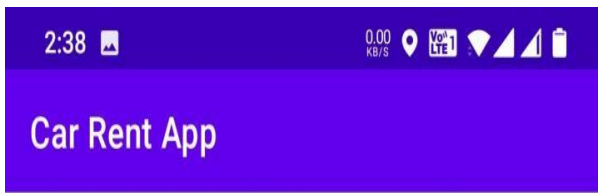
7. SYSTEM DESIGN: -

Software design constitutes the technical basis of the software development process, and software design can be applied regardless of the development paradigm and application field. Design is the first step in the development phase of designing a product or system. The designer's goal is to create a model or representation of the object that will be created later. Starting from the definition and analysis of system requirements, system design is the first of three technical activities: design, code, and testing, which are necessary to create and verify software. Use one word for "quality". In terms of design, the quality of software development has been improved. Design gives us an in-depth understanding of software that can measure quality. Design is the only way to accurately transform the customer's vision into the final product or software system. Software design is the basis for all subsequent software development stages. Without a reliable design, we risk building an unstable system that is difficult to test and can only assess its quality in the final stage. In the design stage, the data structure, program structure and process details will be gradually improved, verified and recorded. The system design can be viewed from a technical perspective or from a project management perspective. From a technical point of view, design includes four activities: design, data structure design, interface design and process development.
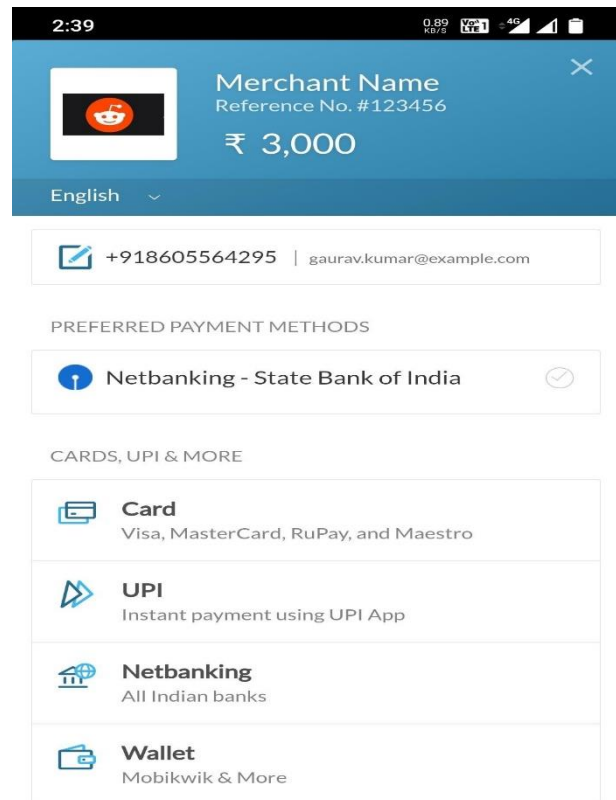
8. RESULT: -

9. CONCLUSION: -

Thus we've got developed Associate in Nursing automaton app for letting system .Using this app user has the freedom of booking any car of his choice as per the occasion .Also we have provided a payment entrance victimization that user will build payment either by using debit or mastercard .Also user has the selection for choosing a driver .The user can either choose a driver or not opt for a driver .Our system is largely fabricated from 3 apps .One is given to the user, one to the Admin and different to the motive force .The user app permits user to decide on from the range of cars, choose the pick-up purpose and also the destination .Also it contains the payment choices .The admin app is alone controlled by the administrator .He/She is accountable for adding deleting cars, settle foring/rejecting booking so on .The driver app is controlled by the drivers .They will accept or reject the request created by the admin to the driver. Our application is restricted solely to the users within the automaton eco system. within the future perhaps the applying will be developed for iOS. conjointly Machine learning can be used. Machine learning algorithms can analyse the user's behaviour patterns and looking requests to create recommendations for him. you'll conjointly optimize searching method by applying machine learning to your automaton app. Add a voice search, writing system corrections, suggestions and also the searching process for your users can become additional intuitive and fewer troublesome.

10. CONCLUSION: -

[1] www.tripadvisor.com

[2] www.expedia.com

[3] www.kayak.com/Rental_Car

[4] www.hotwire.com/Travel-Car-Rentals

[5] www.priceline.com

[6]] Ambite, J. & Noblock, K. Planning through rewriting: effective creation of high-quality plans. In the Proceedings of the 14th National Conference on Artificial Intelligence, Providence, Rhode Island, 1997.

[7] Decker K.Sicara K. and Williamson M. are the average agents of the Internet. In the Proceedings of the 15th IJCAI Conference, pages 578-583, Nagoya, Japan, 1997.

[8] Funkhauser, P. And Neuhold, E., 1992. Knowledge-driven heterogeneous database integration.In the IFIP Conference DS-5 Interoperable Database System Semantics Conference Proceedings, Lorne, Victoria, Australia, 1992.

[9] Finin, T., Fritzson, R., McKay, D. and McEntire, R. 1994. Language intermediaries. As part of the 3rd International Conference on Information and Knowledge Management CIKM-94, ACM Press.

[10] Goguen, D., Nguyen, D., Meseger, J., Luke, Zhang, D. And Berzins, V.1996. Locate the software component. System Integration Journal, 6: 93-134.

[11 Jacobs, North.And Shi, R. 1996. "The Role of Java in InfoSleuth: The Use of Information Resources Based on Heterogeneous Agents." As part of the Intranet-96 Java Developers Conference.

[12] Jha, S., Chalasani, P., Shehori, O. & K. Sikara, 1998. "Formal Interpretation of Distributed Mapping."Proceedings of the 2nd International Conference of Self-Employed People (Agent No. 98) held in Minneapolis, Minnesota.

[13] Jeng, JJ Y Cheng, B.C. the year 1995. "Comparison of Software Reuse Specifications: Based on ACM SIGSOFT Symposium on Software Reuse", ACM Software Engineering Description.

[14] Kracker, M., 1992. Fuzzy concept network. Published by IEEE Computer Society Press at the IEEE International Fuzzy System Conference.

[15] Kuokka, D. and Harrada, L., 1995. About using KQML for matching. In the minutes of the third meeting. Confon Information and Knowledge Management Cih'M 95, 239-45, AAAI/MIT Press.