Cab Booking System

Project report submitted in partial fulfillment of the requirement for the degree of

BACHELOR OF TECHNOLOGY

IN

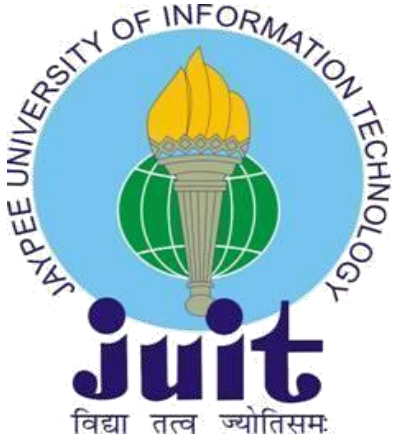
COMPUTER SCIENCE ENGINEERING

By

Kanav Walia 121294

UNDER THE GUIDANCE OF

Ms. Ramanpreet Kaur



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
JUNE 2016

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SUPERVISOR'S CERTIFICATE

This is to certify that the work reported in the B-Tech. project entitled **"Cab Booking System"**, submitted by **Kanav Walia** at **Jaypee University of Information Technology, Waknaghat**, **India,** is a bonafide record of their original work carried out under my supervision. This work has not been submitted elsewhere for any other degree or diploma.

Ms. Ramanpreet Kaur

Computer Science Engineering
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Date:

DECLARATION

I hereby declare that the work presented in this report entitled **" Cab Boking System"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology**,** Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried under the supervision of **Ms. Ramanpreet Kaur.**The matter embodied in the report has not been submitted for the award of any other degree or diploma.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Kanav Walia

Department of Computer Science Engineering

Dated:

ACKNOWLEDGEMENT

I would like to express our deepest appreciation to all those who provided us the possibility to complete this report. A special gratitude to our final year project mentor,

Ms Ramanpreet Kaur whose contribution in stimulating suggestions and encouragement, helped us to coordinate and complete our project especially in writing this report.

Furthermore, I would also like to acknowledge with much appreciation, the crucial role of the staff of JUIT, who gave the permission to use all the resources and other necessary materials to complete the project, 'CAB BOOKING SYSTEM'.

I shall also thank deep heartedly to the Course Coordinator of BTECH-CSE Mr. Yashwant Singh, who have invested his full effort in guiding the team in achieving the goal of concluding the project with a satisfactory note.

Date: **Name of the student:**

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Abstract

When it comes to cab rental services, Taxi Service is the most trusted and reliable name in the travel business. The most advanced travel agents offering cab rental and car hire in India, making full use of information technology to improve the level of our efficiency. However, this is only one aspect of services. And this project continually strives to offer the best of services - both in terms of man and machine, to our clients Moreover, this project has a fleet of cars ranging from luxury to budget cabs. While, it offers online cab hire service for corporate houses. And this project claims to offer the best of rates, which are tailor-made depending upon the facilities, availed and offer both intercity and intra-city cab facilities. All cabs have proper permits and documentation so that the clients couldn't be hassled for the lack 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 categories of cars from luxury to budget.

Further, this project's utmost priority is quality. To achieve this, vehicles are well maintained and tested for delivering optimum and uninterrupted performance. Team of professionals in the travel business enables this system to design trips that suits to all budgets and preferences of the travelers. In addition, workforce including drivers and administrative staff are well trained to discharge their duties with a lot of efficiency.

CHAPTER-1
INTRODUCTION

1.1. Introduction

Online Cab Booking System specializing in Hiring cabs to customers. It is an online system through which customers can view available cabs; register the cabs, view profile and book cabs.Cab booking service is a major transport service provided by the various transport operators in a particular city. Mostly peoples use cab service for their daily transportations need. The company must be a registered and fulfils all the requirements and security standards set by the transport department.

Online Cab Booking System is a web based platform that allows your customers to book their taxi's and executive taxis all online from the comfort of their own home or office. The platform should offer an administration interface where the taxi company can manage the content, and access all bookings and customer information. More and more Taxi companies are looking for integrated taxi booking systems as it makes life much easier for (1) The traveler - this is highly important and in today's internet age people should be able to book taxis online without having to pick up the phone and (2) the taxi company as all their bookings are now managed via an automated system which means they have an electronic record of future and historic bookings

A Cab Booking/Hiring is a system that can be used temporarily for a period of time with a fee. Hiring a car assists people to get around even when they do not have access to their own personal vehicle or don't own a vehicle at all. The individual who want to hire/rent a car must first contact the cab hiring company for the desire vehicle. This can be done online. At this point, this person has to supply some information such as: dates of rental, and type of car. After these details are worked out, the individual renting the car must present a valid Identification Card. Most companies throughout the industry make a profit based of the type of cars. The hiring cabs are categorized into economy, compact, compact

premium; premium and luxury & customers are free to choose any car of their choice based on their purse and availability of such car at the time of reservation.

Chandigarh Cab Service is the first site in India, which provides reliable online (web based) cab booking facility to the people in various cities of India., free of cost. Trinity Cab Service acts like a bridge between the cab operators & the customers/ users/ people who book a cab. This is the online cab booking service provided to customers. This bridges together the registration travel agencies/ cab operator/ cab owners & the customers.

www.chandigarhcabservice.com provides this service i.e. we provide free registration for the cab owners & free service to travels/ customers/ users who go for booking a cab or taxi. Here the traveler can book a cab/ taxi/ car by viewing all the cab details and pricing details available, according to selected city and area. It is the reliable service provided to both customers and travel agencies. This provides service with well-conditioned new vehicles, with experience drivers for a happy journey of the customers. This project intends to introduce more user friendly in the various activities such as record updating, maintenance, and searching. This service is provided by the young entrepreneur who is living in the Chandigarh. He is feeling something is missing in city to overcome people day to day problems. The following Online Cab Booking having the following services: -

1**. Enhance Business Processes:** To be able to use internet technology to project the rental company to the global world instead of limiting their services to their local domain alone, thus increase their Return on Investment (ROI).

2.Traveler's registration: A registration portal to hold traveler's details, monitor their transaction and used same to offer better and improve services to them.

3.Group bookings: Allows the customer to book space for a group in the case of weeding or corporate parties or meetings.

4.Eco-friendly: The monitoring of the vehicle activity and the overall business becomes easy and includes the least of paper work.

5. Availability: The software acts as an office that is open 24/7.

6.Efficient: It increases the efficiency of the management at offering quality services to the customers.

7.User friendly: It provides custom features development and support with the software's.

8.Security: The subsystem should provide a high level of security and integrity of the data held by the system, only authorized personnel of the company can gain access to the company's secured page on the system; and only users with valid password and username can login to view user's page.

Following are the Processes-

1. Cab Search-

Users can search cab for a particular location here. Users required to enter source, Destination, & place where he wants to go.

2. Login Search-

In the customers has to give out the login details i.e. user's id and password and then only he can be logged on. The user id and password given by the customers are checked from the data stored in the database.

3. Registration Process-

User must be registered before booking a cab. Proper validations will be provided to keep only authenticated users i.e. those users who will provide correct information. All the data supply by the user will be stored in database and it will be used for further validations and authenticated. During registration, users have to give login and password of their choice. Login names and password will be stored in the databases so that the users can directly login without registration again and again.

A **taxicab**, also **taxi** or **cab**, is a type of vehicle for hire with a driver, used by a single passenger or small group of passengers often for a non-shared ride. A taxicab conveys passengers between locations of their choice. In modes of public transport, the pick-up and drop-off locations are determined by the service provider, not by the passenger, although demand and share taxis provide a hybrid bus/taxi mode.

We used SWIFT 2.0 language for developing our project. Swift is a powerful and intuitive programming language for iOS, OS X, tvOS, and watchOS. Writing Swift code is interactive and fun, the syntax is concise yet expressive, and apps run lightning-fast. Swift has been refined from the ground up. It generates faster code across the board, both for release and debug builds. The Swift compiler is also faster, even while adding new Fix-it suggestions such as where you can use let instead of var. Comments can include Markdown syntax to add rich text and embedded images that display in Xcode's Quick Help. A new assistant shows Swift API in a "header-like" view. And new syntax features combined with improvements to the Cocoa frameworks and Objective-C will make your code more expressive, and even safer.

1.2 Problem Statement

The old manual system was suffering from a series of drawbacks. Since whole of the system was to be maintained with hands the process of keeping, maintaining and retrieving the information was very tedious and lengthy. The records were never used to be in a systematic order. there used to be lots of difficulties in associating any particular transaction with a particular context. If any information was to be found it was required to go through the different registers, documents there would never exist anything like report generation. There would always be unnecessary consumption of time while entering records and retrieving records. One more problem was that it was very difficult to find errors while entering the records. Once the records were entered it was very difficult to update these records.

1.3 Objectives

- To keep the information of Customer.
- To keep the information of number of bookings in current month.
- To keep the detail of taxis route.
- To keep the information of cancellation and modification of booking in current month.
- To maintain the record of every employee of every route.

A computer based management system is designed to handle the entire primary Information required to manage the whole data. Separate database is maintained to handle all the details required for the correct statement calculation and generations. This project intends to introduce more user friendly in the various activities such as record updating, maintenance, and searching. The objective and scope of my project Online Cab Hiring System is to record the details various activities of user. It will simplify the task and reduce the paper work. To produce a web-based system that allow customer to register and reserve cab online During implementation every user will be given appropriate training to suit their specific needs. Specific support will also be provided at key points within the academic calendar. Training will be provided on a timely basis, and you will be trained as the new is Cab Hiring System rolled out to your area of responsibility.

To produce a web-based system that allow customer to register and reserve cab online and for the company to effectively manage their Cab hiring business. To ease customer's task whenever they need to rent a cab or hire a cab.

1.4 Introduction to tools :

1.4.1 Introduction of Swift:

Swift is a new programming language for iOS, OS X, watchOS, and tvOS apps that builds on the best of C and Objective-C, without the constraints of C compatibility. Swift adopts safe programming patterns and adds modern features to make programming easier, more

flexible, and more fun. Swift's clean slate, backed by the mature and much-loved Cocoa and Cocoa Touch frameworks, is an opportunity to reimagine how software development works.

Swift has been years in the making. Apple laid the foundation for Swift by advancing our existing compiler, debugger, and framework infrastructure. We simplified memory management with Automatic Reference Counting (ARC). Our framework stack, built on the solid base of Foundation and Cocoa, has been modernized and standardized throughout. Objective-C itself has evolved to support blocks, collection literals, and modules, enabling framework adoption of modern language technologies without disruption. Thanks to this groundwork, we can now introduce a new language for the future of Apple software development.

Swift is a fantastic way to write iOS, OS X, watchOS, and tvOS apps, and will continue to evolve with new features and capabilities. Our goals for Swift are ambitious. We can't wait to see what you create with it

1.4.2 Introduction of IOS

iOS is a mobile operating system developed and distributed by Apple Inc. It was originally released in 2007 for the iPhone, iPod Touch, and Apple TV. iOS is derived from OS X, with which it shares the Darwin foundation. iOS is Apple's mobile version of the OS X operating system used in Apple computers.

Advantages of Swift:

- Swift has a lot of cool things, such as safe memory management, strong typing, generics and
- Swift is cleaner and more readable than Objective-C. There are modules that eliminate class prefixes. It also has half as many files in a project, and understandable closure syntax.

- Swift allows to create flexible and lightweight classes which contain exactly what you want (no root class), i.e. if you want to print description, just implement the protocol printableand if you want to compare - implement *Comparable*.
- Swift isn't that fast, but isn't slower than Objective-C either.
- Optional and optional bindings
- Switch statement

1.5 Time Line OF Project:

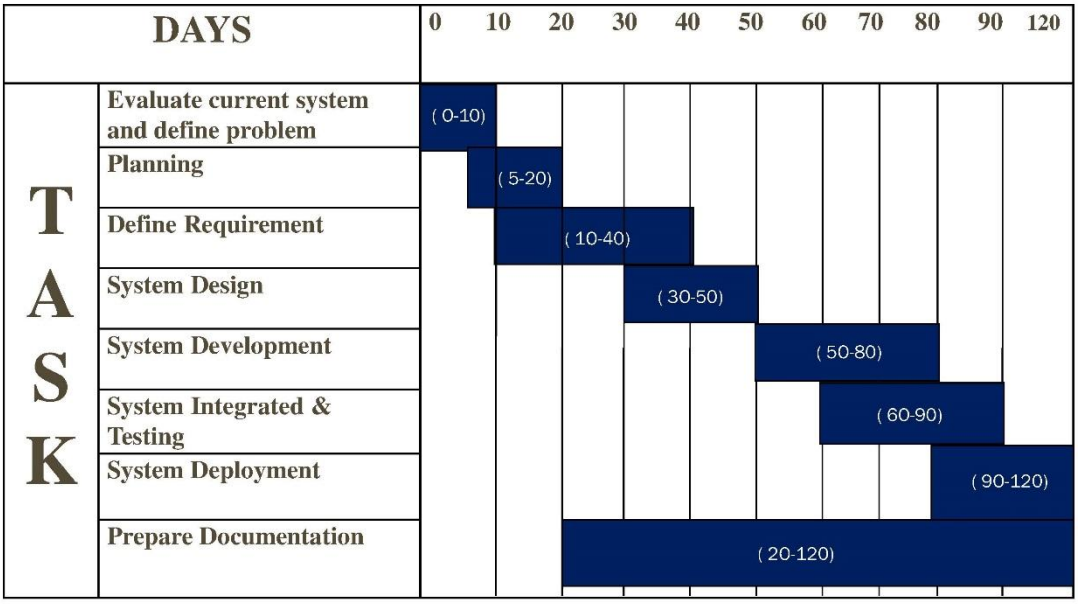


Figure 1.1

CHAPTER 2
LITERATURE SURVEY

2.1 INTRODUCTION

Actual cities are oversaturated, on one hand most of the population is concentrated in large cities (in 2030 more than 80% (UNFPA 2007) of the population will live in urban areas), on the other hand mobility needs of the modern population are growing continuously. While urban demand for trips is growing constantly, supply (capacity of city streets) is limited, and must be optimized, not increased (most of the times not possible inside the city). Well-planned, efficiently operated, and cost-effective transportation system management (TSM) strategies can improve mobility of existing systems for transportation users, especially in urban environments, where a good optimization of the infrastructure is needed (considering the high cost of building new facilities and the continuously increasing demand resulting from economical and population growth). Last years tendencies are shifting person trips from private vehicles to public vehicles, increasing the Public Transport share importantly. The most used Public Transports are the "Mass Transports" such as metro, tram or bus. This kind of transport usually has a centralized management which uses ITS technologies developed in the last decade for an optimal operation of the service.

Unfortunately, inflexibility, long total travel time and insufficient service coverage of Mass Transport systems cause a lower usage of them in most metropolitan areas. Oppositely, the taxi-cab sector is a more convenient mode due to its speediness, door-to-door attribute, privacy, comfort, long-time operation and lack of parking fees. The great Josep Maria Salanova et al. / Procedia Social and Behavioral Sciences 20 (2011) 150–161 151 inconvenience is the lack of central management; each taxi is operated by an independent driver, taking his own decisions continuously, with a weak intent of control by the policy issues of each city such as license control or distributing the working days of the taxi vehicles (normally the control is imposed on vehicles, not on drivers, generating double shift and increasing the use of taxis). An important percentage of the cars (e. g. 60% in Hong Kong (Yang et al. 2000)) in the daily flow are taxis, most of them empty

taxies. This situation is creating two problems, an internal problem to the taxi drivers (higher empty kilometers means lower benefits) and an external problem to the citizens (congestion and pollution). The first problem is being aggravated with the actual economic crisis, which is breaking the market equilibrium: demand is decreasing due to the lower incomes of the population and offer is increasing due to the increasing number of taxi drivers (not taxi licenses). Market equilibrium cannot be achieved in this concrete market because of the regulations (price is not established freely), and cannot go to the next equilibrium point due to the price policies imposed in each city. This is a vicious cycle, where empty hours are increasing, and taxi drivers need to work more time in order to have the same income, which means lower income per hour (Daniel (2006)). In this situation, taxi drivers prefer to stop at taxi stands and wait for a client, without expending fuel in empty trips and consequently saturating the taxi stands. If taxi stops network is not well designed, this situation will create a decrease in the Level of Service of the passengers, decreasing the demand and congesting the streets near the taxi stops.

The taxi sector has been traditionally a regulated market in terms of fares and entry control. The objective of this regulation is to correct the defects of the taxi sector, such as externalities (congestion and contamination), low level of service offered and anticompetitive behavior of the market. A fundamental distinction in types of taxi regulations is between quantity regulation, quality regulation and market conduct regulation. Quality regulation embraces the standard of vehicles, driver and operator; this type of regulation is more a safety regulation than a competitiveness one. Market conduct regulation includes rules regarding pick up of passengers, or affiliation to a radio network.Quantity regulations include price regulation and entry restriction. From now and on, the term regulation will refer to quantity regulation. Restrictions on entry to the taxi market have been applied by many cities around the world, but actually many cities are deregulating their markets. The most common justifications used for controlling the entrance to the taxi market are the protection of the taxi drivers incomes and the externalities (pollution and congestion) caused by the circulating taxis, but when decisions are taken without a good justification or implementation plan, entry restrictions and fare regulations are distorting economically the taxi sector, leading to important welfare losses. As a result of entry control, the price of the licenses in markets where taxi licenses are

tradeable are higher (Paris 125.000 €, Sydney 300.000 $, Melbourne 500.000$, New York 600.000$ [OECD 2007]), and they are rising up constantly due to the exploitation of their owners. Reforms have often been opposed to reduce the incomes of drivers, which are normally low, and restrictive conditions have been applied in this direction, but there is no evidence that taxi incomes are higher in markets with regulated entry conditions. Oppositely, license owners is the group who is being beneficiated by these measures, and not the drivers (Melbourne, as commented above has taxi licenses valuated in 500.000$, but driver incomes are estimated at 8 – 14$ per hour [OECD 2007]).

Deregulation has most of the times positive impacts, resulting in lower waiting times, increased consumer satisfaction and price falling (OECD 2007). Market liberalization is an interesting challenge for many cities, but in cities where strong supply restrictions have been applied, there will be a strong opposition to reform proposals from the license-owners. Arguments support that license-owners must be compensated in that case: one approach (first used in Ireland) is to give the additional licenses to each license-owner, ensuring that the new monopoly will remain in their hands; alternatively the new license can be given to taxi drivers without taxi license (OECD 2007). In Melbourne, a 12 year program is adding to the stock of licenses a number of licenses equal to the yearly demand growth. Other concepts are important in relation to deregulation, most of the times quantity deregulation means quality regulation, ensuring safety and minimum service standards.

The paper is structured as follows: the second chapter presents the taxi market, describing the operational modes.The third chapter resumes the different models presented in the literature, from the aggregated models until the equilibrium models. The next chapter highlights the most important ideas and results from the literature review, analyzing the operational modes, the market equilibrium and the regulation of the taxicab markets. The fifth chapter presents an overview of the taxi markets in different cities around the world, resuming the deregulation consequences observed in the deregulated markets. Finally, the last chapter contains the conclusions obtained from the literature and state of the practice review and proposes the development of a new model for the study of the taxicab market.

2.2 TAXI MARKET

2. The taxi market

Taxis are private vehicles used for public transport services providing door to door personal transport. Taxi services can be divided into three broad categories: rank market, hail market and prebooked market. Rank places are designated places where taxi can wait for passengers and vice versa. Taxis and customers are forming queues regulated by a FIFO system. Disadvantages are that due to the FIFO policy established price has no effects on customer choice, and that customers must walk until the nearest taxi stop. In the hail market clients hail a cruising taxi on the street. There is uncertainty about the waiting time and the quality/fare of the service customers will find. Advantage here is that customer mustn't walk until the taxi stop.

In this case a monopolistic market is possible. In the pre-booked market consumers telephone a dispatching center asking for an immediate taxi service or for a later taxi service. Only in this kind of market consumers can choose between different service providers or companies. At the same time, companies can fidelize clients with a good door to door service. The market here isa competitive market where larger companies can offer smaller waiting times.

3.

2.3 Taxi Model Review

From the early 70's many studies have been published in relation to the taxi sector. While first studies (1970-1990) were related to the profitability of the sector and the necessity for regulation using aggregated models, later studies (1990-2010) implemented more realistic models in the taxi sector: from the most simple model of Wong developed in 1997 for a little taxi fleet until the most sophisticated model of Wong (2009) being able to simulate congestion, elasticity of demand, different user classes, external congestion and non linear costs, taking into account different market configurations. Douglas (1972) developed the first taxi model in an aggregated way, using economic relationships from other sectors (goods and services). Many authors (de Vany (1975), Beesley (1973), Beesley and Glaster (1983) and Schroeter (1983)) used the model proposed by Douglas for developing their models and tested them in the different market configurations. Manski and Wright (1976), Arnott (1996) and Cairns and Liston-Heyes (1996) developed structural models,

obtaining more realistic results. Yang and Wong (1997-2010c) developed accurate models, taking into account the spatial distribution of demand and supply in the city using traffic assignment models. Last models proposed by Wong et al. (2005) and Yang et al. (2010b) assume a bidirectional function taking account the willingness to pay of customers, making it much more realistic. New technologies applied to the taxi market such as GPS, GIS and GPRS were also simulated in the different models, proving their benefits and justifying their use. Many of the models developed have been tested in different cities around the world using data from different sources. Beesley (1973) and Beesley and Gaister (1983) studied the data obtained from questionnaires in different cities in the UK, especially from London. Schroeter (1983) is the first to use data from taximeters in his model, using the data from a taxi company in Minneapolis (EEUU). Schaller (2007) uses interviews and questionnaires from taxi agents and customers in different cities of the EEUU.

CHAPTER 3
SYSTEM DEVELOPMENT

3.1 MODULE DESIGN

Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to produce a model or representation of an entity that will later be built. Beginning, once system requirement has been specified and analyzed, system design is the first of the three technical activities -design, code and test that is required to build and verify software.

The importance can be stated with a single word "Quality". Design is the place where quality is fostered in software development. Design provides us with representations of software that can assess for quality. Design is the only way that we can accurately translate a customer's view into a finished software product or system. Software design serves as a foundation for all the software engineering steps that follow. Without a strong design we risk building an unstable system – one that will be difficult to test, one whose quality cannot be assessed until the last stage.

During design, progressive refinement of data structure, program structure, and procedural details are developed reviewed and documented. System design can be viewed from either technical or project management perspective. From the technical point of view, design is comprised of four activities – architectural design, data structure design, interface design and procedural design.

3.2DATA FLOW DIAGRAMS

A data flow diagram is graphical tool used to describe and analyze movement of data through a system. These are the central tool and the basis from which the other components are developed. The transformation of data from input to output, through processed, may be described logically and independently of physical components associated with the system. These are known as the logical data flow diagrams. The physical data flow diagrams show the actual implements and movement of data between

people, departments and workstations. A full description of a system actually consists of a set of data flow diagrams. Using two familiar notations Yourdon, Gane and Sarson notation develops the data flow diagrams. Each component in a DFD is labeled with a descriptive name. Process is further identified with a number that will be used for identification purpose. The development of DFD'S is done in several levels. Each process in lower level diagrams can be broken down into a more detailed DFD in the next level. The lop-level diagram is often called context diagram. It consists a single process bit, which plays vital role in studying the current system. The process in the context level diagram is exploded into other process at the first level DFD.

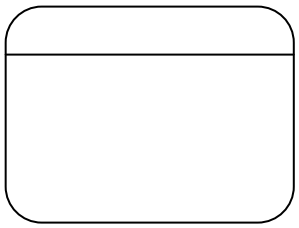
The idea behind the explosion of a process into more process is that understanding at one level of detail is exploded into greater detail at the next level. This is done until further explosion is necessary and an adequate amount of detail is described for analyst to understand the process. Larry Constantine first developed the DFD as a way of expressing system requirements in a graphical from, this lead to the modular design.

A DFD is also known as a "bubble Chart" has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design. So it is the starting point of the design to the lowest level of detail. A DFD consists of a series of bubbles joined by data flows in the system.

3.2.1 Dfd symbols

In the DFD, there are four symbols

1. A square defines a source(originator) or destination of system data
2. An arrow identifies data flow. It is the pipeline through which the information flows
3. A circle or a bubble represents a process that transforms incoming data flow into outgoing data flows.
4. An open rectangle is a data store, data at rest or a temporary repository of data



Process that transforms data flow.

Source or Destination of data

Data flow

Data Store

Figure 3.1

3.2.2 Constructing a dfd

Several rules of thumb are used in drawing DFD'S:

1. Process should be named and numbered for an easy reference. Each name should be representative of the process.
2. The direction of flow is from top to bottom and from left to right. Data traditionally flow from source to the destination although they may flow back to the source. One way to indicate this is to draw long flow line back to a source. An alternative way is to repeat the source symbol as a destination. Since it is used more than once in the DFD it is marked with a short diagonal.
3. When a process is exploded into lower level details, they are numbered.
4. The names of data stores and destinations are written in capital letters. Process and dataflow names have the first letter of each work capitalized

A DFD typically shows the minimum contents of data store. Each data store should contain all the data elements that flow in and out.

3.2.3 Salient features of dfd's :

1. The DFD shows flow of data, not of control loops and decision are controlled considerations do not appear on a DFD.
2. The DFD does not indicate the time factor involved in any process whether the dataflow take place daily, weekly, monthly or yearly.
3. The sequence of events is not brought out on the DFD.

3.2.4 Types of dfd's :

1. Current Physical

   In Current Physical DFD process label include the name of people or their positions or the names of computer systems that might provide some of the overall system-processing label includes an identification of the technology used to process the data. Similarly, data flows and data stores are often labels with the names of the actual physical media on which data are stored such as file folders, computer files, business forms or computer tapes
2. Current Logical

   The physical aspects at the system are removed as much as possible so that the current system is reduced to its essence to the data and the processors that transform them regardless of actual physical form.
3. New Logical

   This is exactly like a current logical model if the user were completely happy with the user were completely happy with the functionality of the current system but had problems with how it was implemented typically through the new logical model will differ from current logical model while having additional functions, absolute function removal and inefficient flows recognized.

4. New Physical

The new physical represents only the physical implementation of the new system.

3.3 Diagrams

Level 1 Admin:

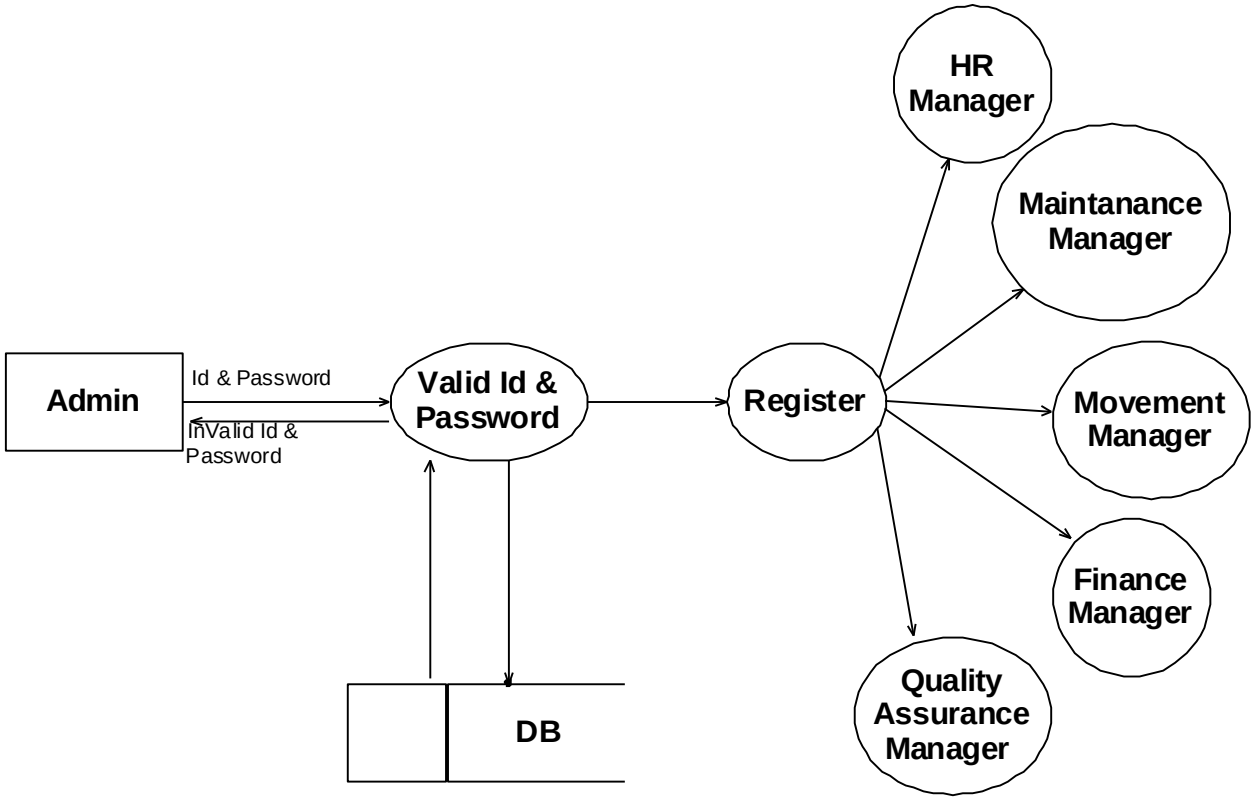


Figure 3.2

3.3.1 Use Case:

Admin :

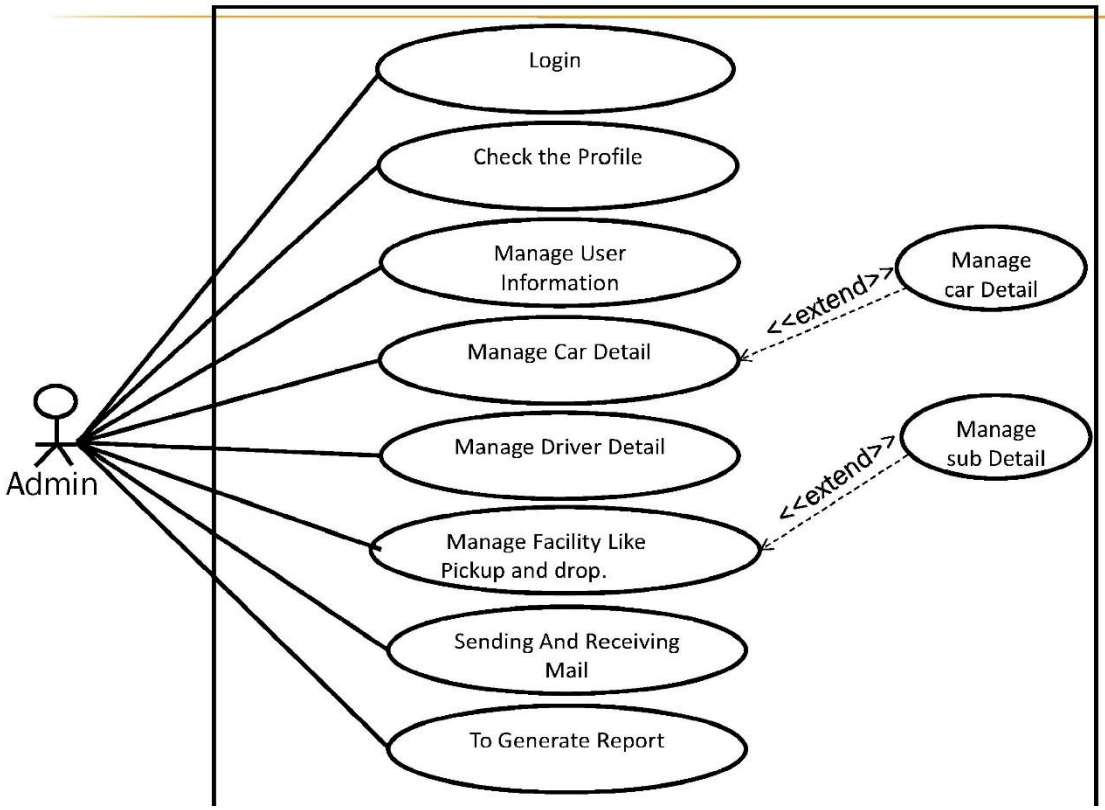


Figure 3.3

User :

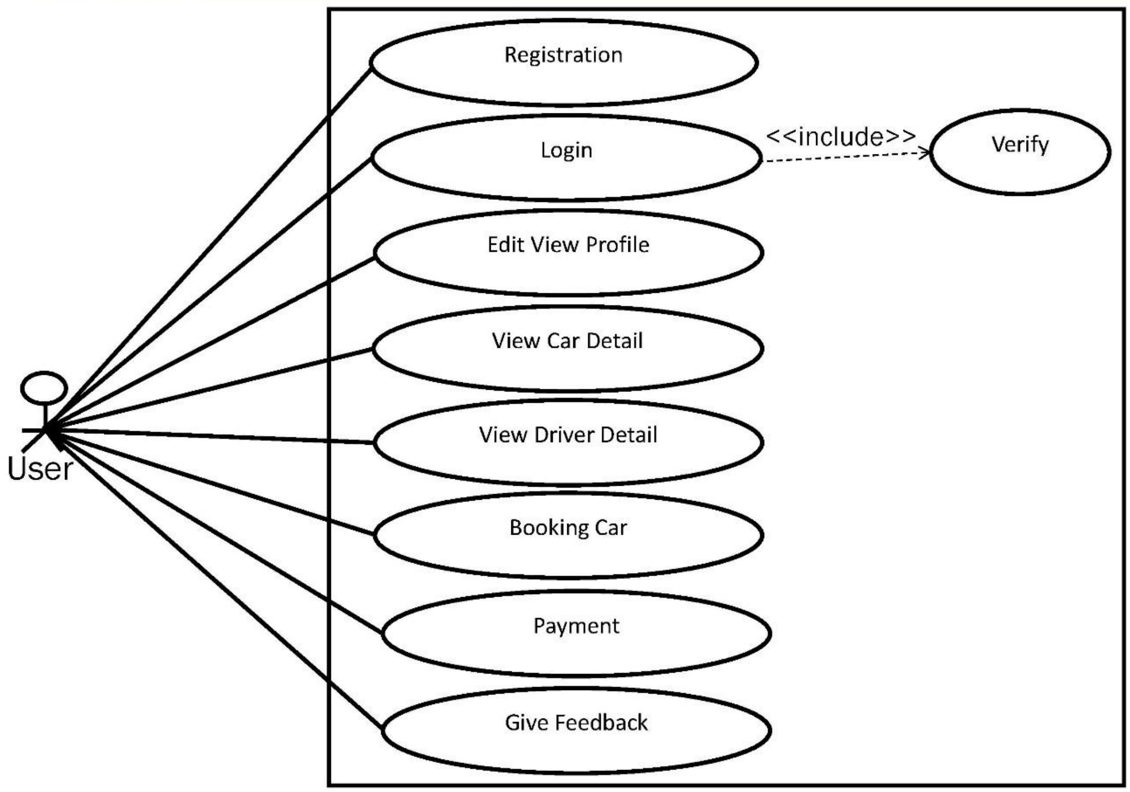


Figure 3.4

3.3.2 Class Diagram

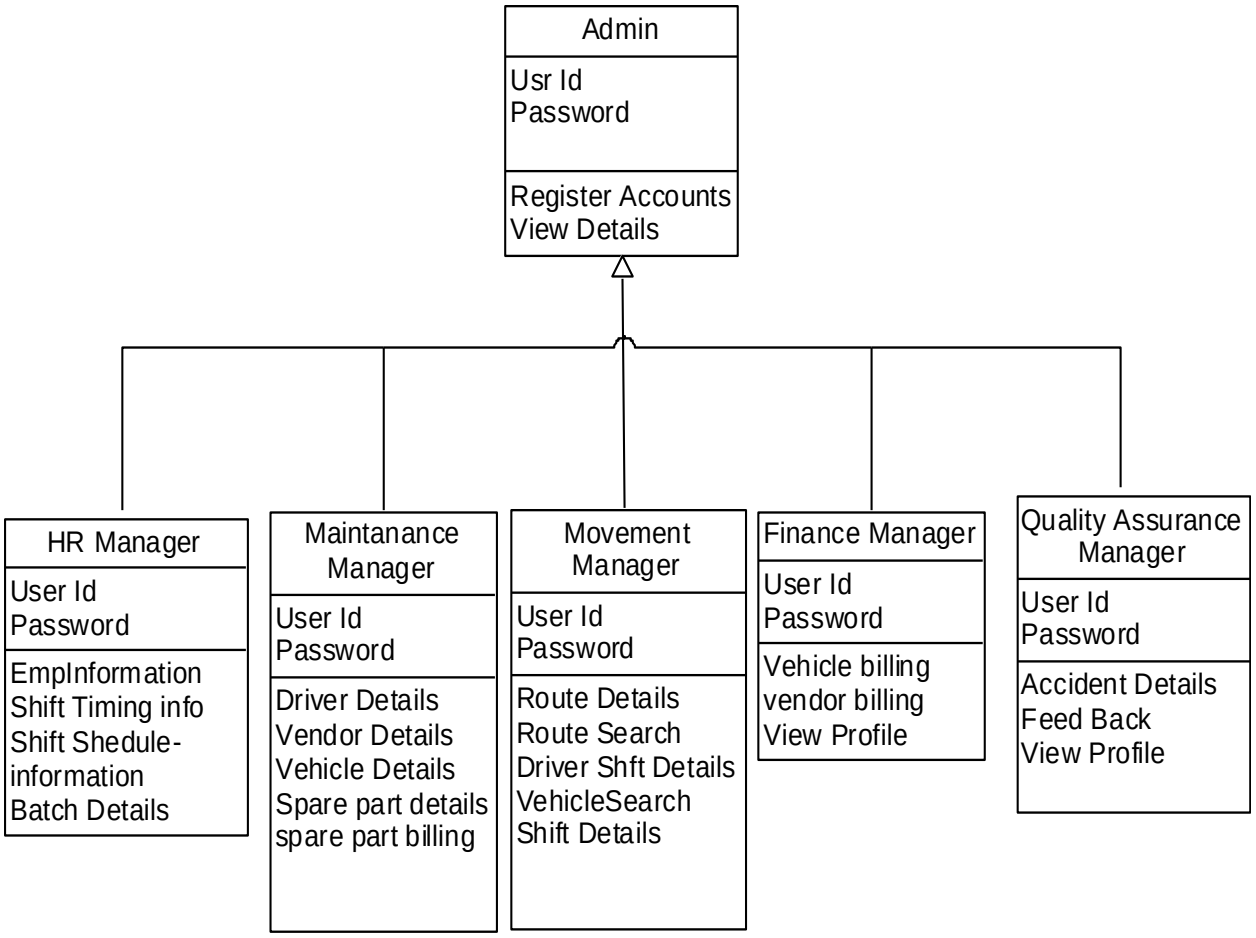


Figure 3.5

3.3.3 State Chart Diagram:

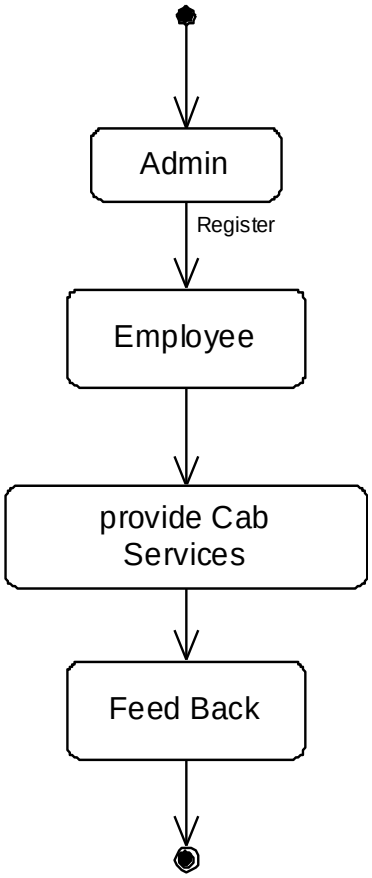


Figure 3.6

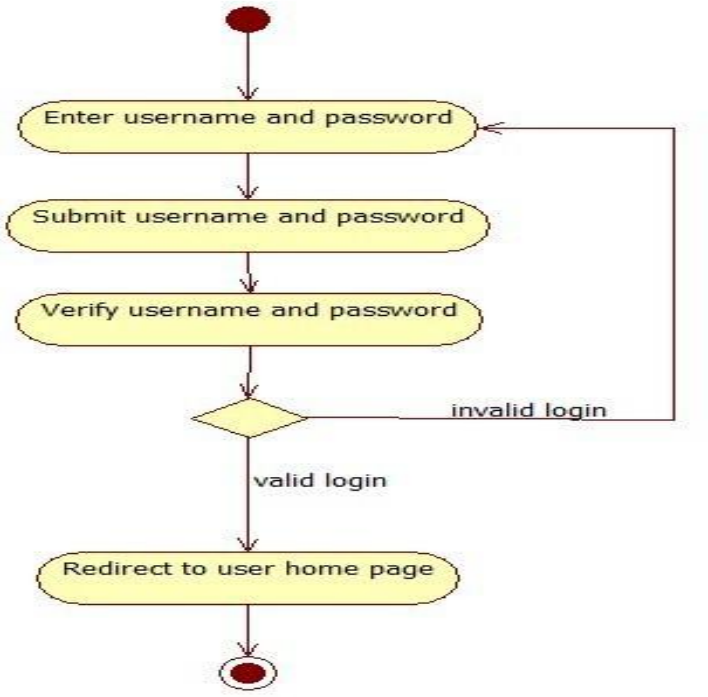


Figure 3.7

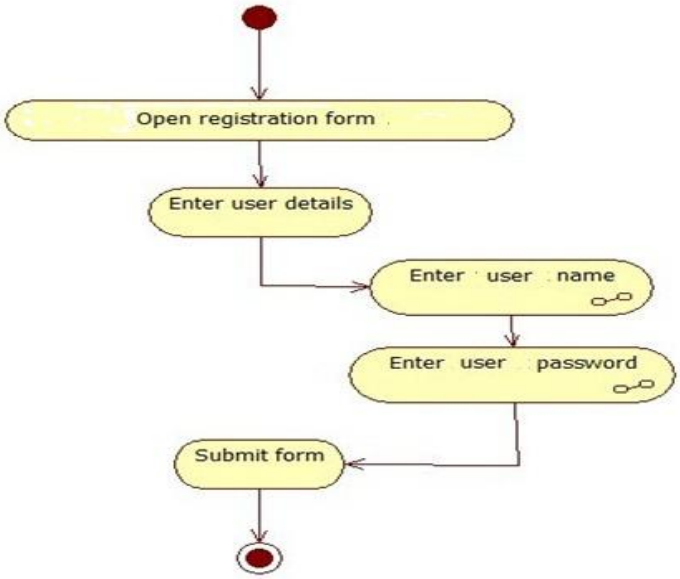


Figure 3.8

3.3.4 Activity diagram

Admin

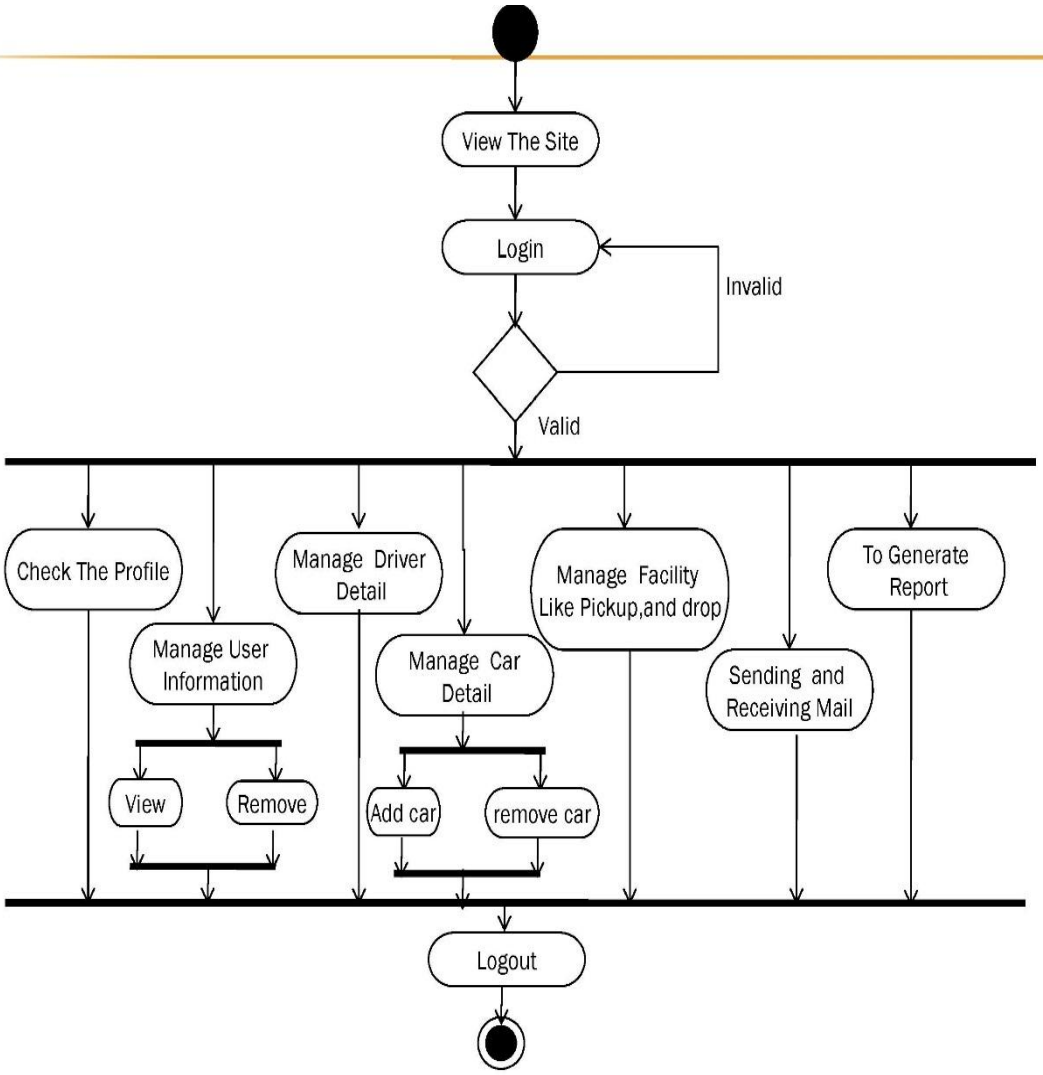


Figure 3.9

User :

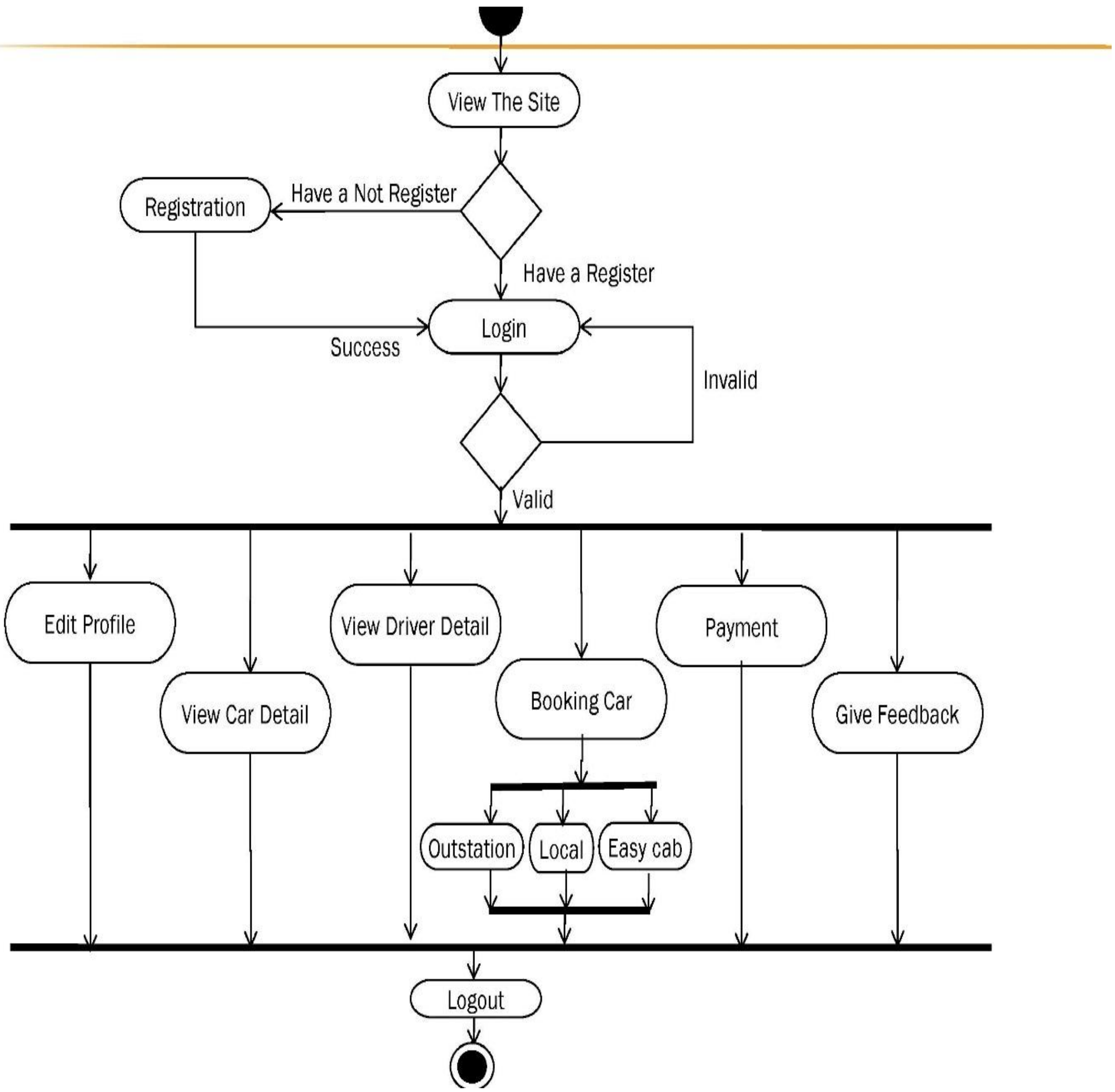


Figure 3.10

3.3.5 Sequence Diagram :

Admin :

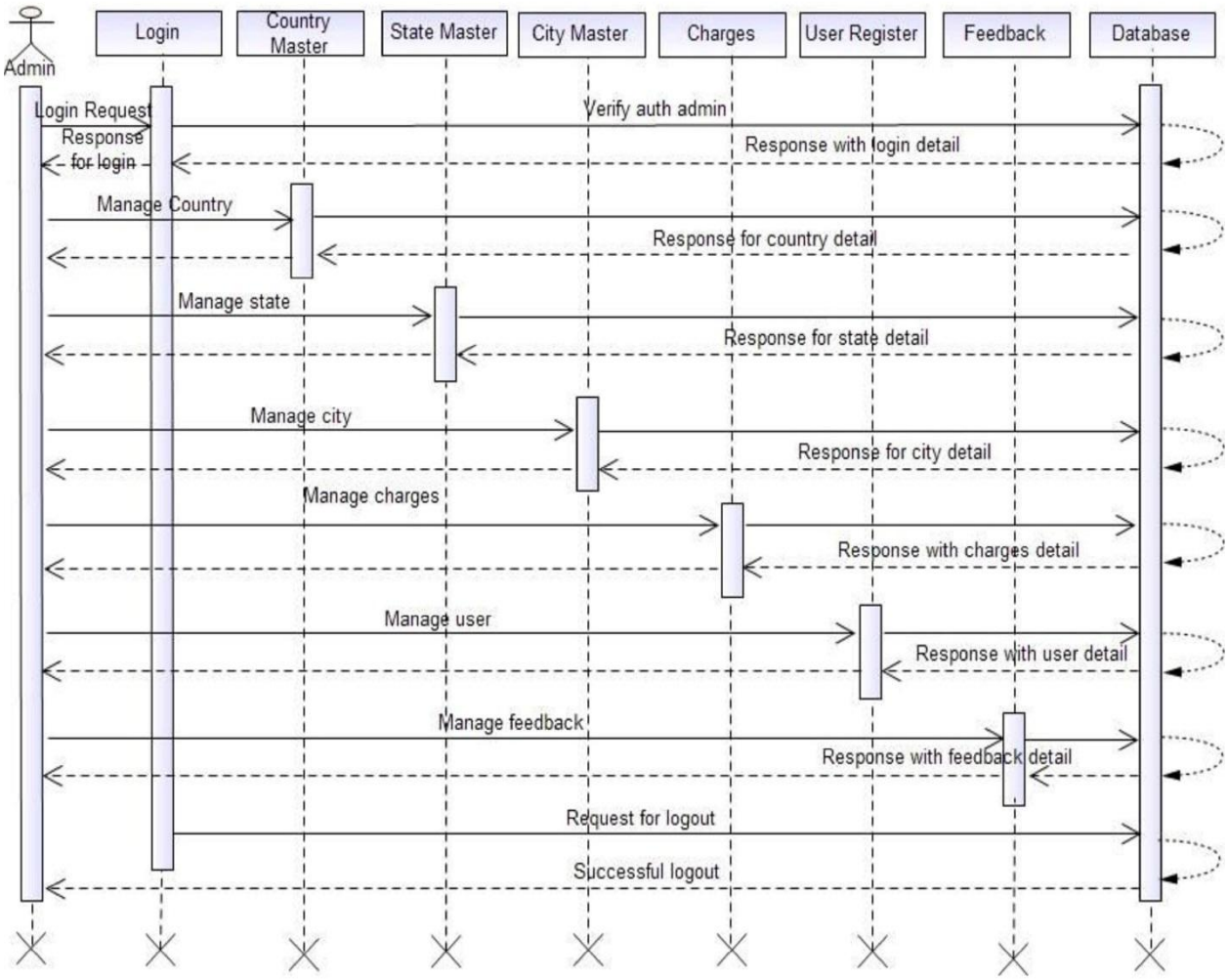


Figure 3.11

User :

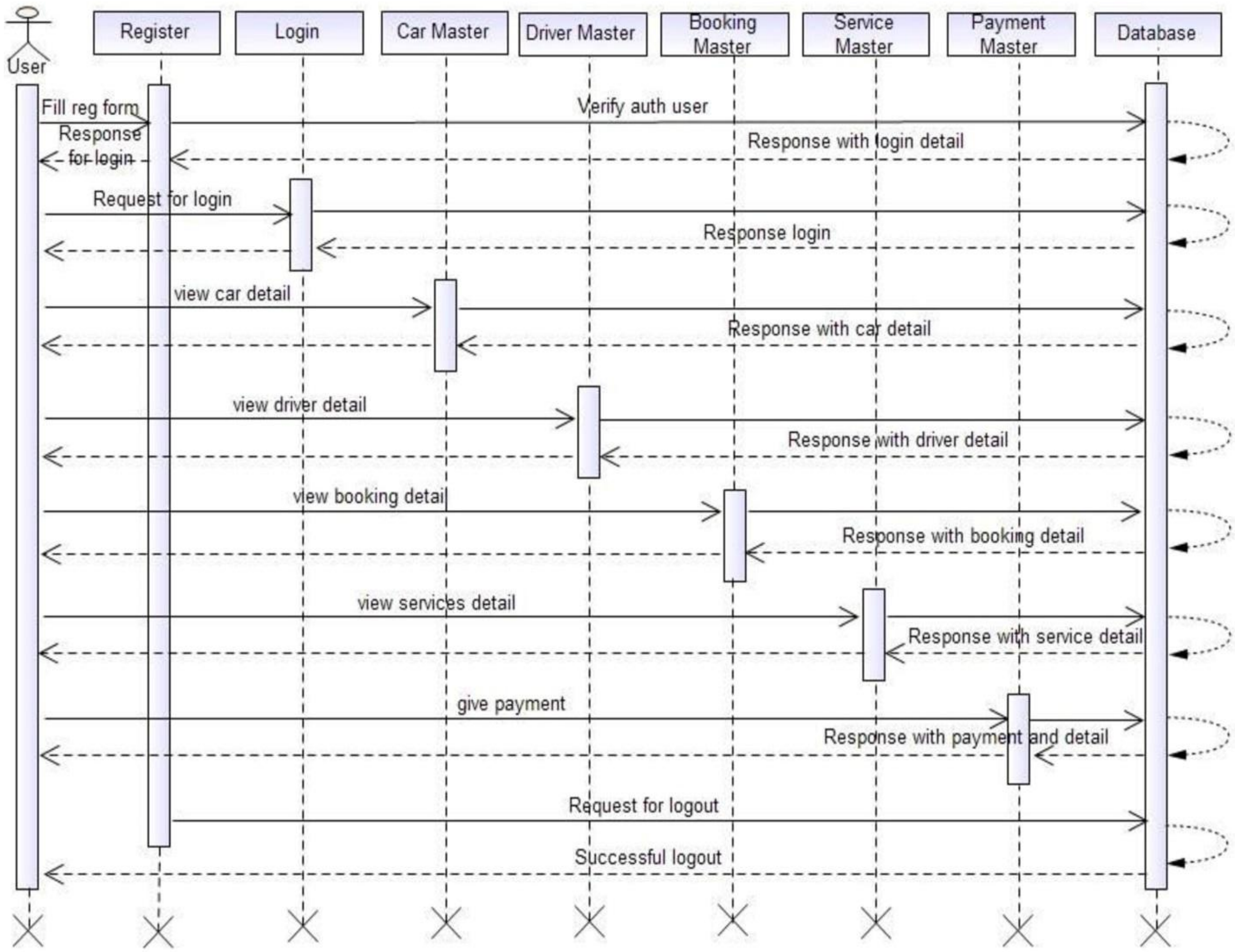


Figure 3.12

3.3.6 Collaboration Diagram :

Admin

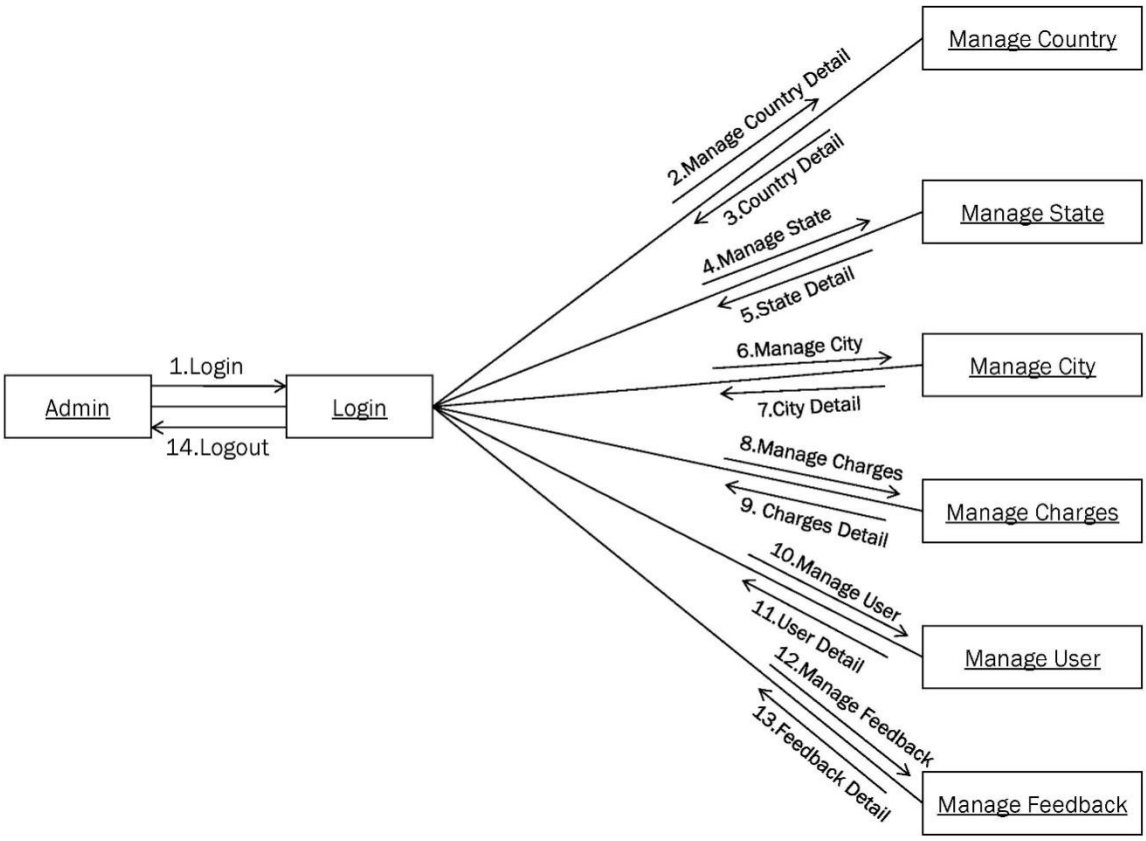


Figure 3.13

User

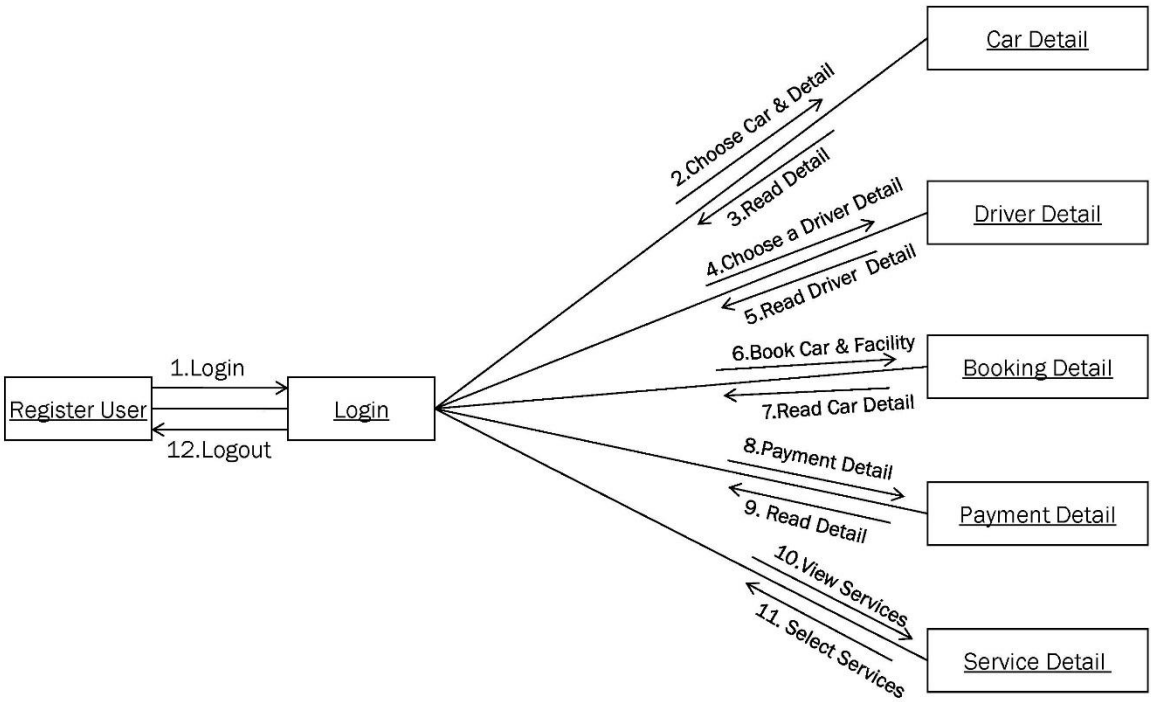


Figure 3.14

3.4 NS Core Data

3.4.1 Entities

User Details

Atribute name	Type
Full name	String
Username	String
Email	String
Location	String
Password	String
Phone Number	Integer
Date Of Birth	String
Order History	Dictionary

3.5 Process Algorith

Admin

Step1: Open The Website/View the Website.
Step2: Login in the Website as administrator
Step3: Check For the Valid Login.
if not valid then go to step2
else go to step4.
Step4: Manage Country.
Step5: Manage State.
Step6: Manage City.
Step7: Manage Feedback.
Step8: Manage User.
Step9: Manage Report.
Step10: Exit.

User

Step1: Open The Website/View the Website.
Step2: Login in the Website as user
Step3: Check For the Valid Login.
if not valid then go to step2
else go to step4.
Step4: Manage Booking
Step5: Manage Car.
Step6: Manage Driver.
Step7: Manage Payment.
Step8: Manage Service.
Step8: Exit.

CHAPTER 4
ANALYSIS OF THE PROJECT

4.1 Project Overview:

We aim to become a pioneer in the vehicle rental industry by completely focusing on customers, our employees, growth, innovation and efficiency. All of these elements will drive us towards success and show us as one company that can perform and give value for money.

4.2 Product Description

When it comes to cab rental services, Cool Service is the most trusted and reliable name in the travel business. The most advanced travel agents offering cab rental and car hire in India, making full use of information technology to improve the level of our efficiency. However, this is only one aspect of services. And this project continually strives to offer the best of services - both in terms of man and machine, to our clients Moreover, this project has a fleet of cars ranging from luxury to budget cabs. While, it offers online cab hire service for corporate houses. And this project claims to offer the best of rates, which are tailor-made depending upon the facilities, availed and offer both intercity and intra-city cab facilities. All cabs have proper permits and documentation so that the clients couldn't be hassled for the lack 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 categories of cars from luxury to budget.

Further, this project's utmost priority is quality. To achieve this, vehicles are well maintained and tested for delivering optimum and uninterrupted performance. Team of professionals in the travel business enables this system to design trips that suits to all budgets and preferences of the travelers. In addition, workforce including drivers and administrative

4.3 Project Plan

It was decided to use good Software engineering principals in the development of the system since the server in the network always is running state for the user requests.

1. The Analysts will interact with the current manual system users to get the Requirements. As a part of this the Requirements Specification Document will be created.

2. The requirements Specifications document will contain the Analysis & Design of the system.

3. The Analysis, Design, Implementation & testing of the System will be followed to produce an incremental cycle, which will deliver milestones like the Requirements Specification Document etc., at the end of each of the iterations, Phases or cycles.

4. The Architecture & Technologies will be decided as a part of the Analysis of the requirements.

5. Once the Design is ready the Implementation & Testing strategy of the system will commence. Each will be independent of the other. The implementation of the system itself will be broken down into sub-systems following the Software Engineering principles for the development of robust software.

6. Once the implementation is ready, the System testing will take place. If the system is judged to be stable, then Acceptance testing by the Users will take place & once the Users are satisfied the System will be rolled out to the Users & they will be trained on how to use it for an initial period.

The following chapters contain an account of how the Technology & architecture for the system were chosen.

4.3.1 Existing System:

Cool cab Service is an innovative thought to simplify the Transportation problems of Employees of an organization. In the present System, Organization do maintain a person for the allocating and proper functioning of transportation. The Person appointed needs to look after the assigning and movement of cabs.Authorized person maintains the

transportation details in papers, which is a tedious task if any updations or changes need to be done.

- Details are stored in Papers.
- Maintenance is a huge problem.
- Updation, changes in details is a tedious task.
- Performance is not achieved up to the requirements.

4.3.2 Proposed System

In the Previous System, Details are Stored Manually in papers, to share the details between employees was a Financial drawback. Updations in the details is a tedious task.But a new system was proposed to overcome the above drawbacks.

Functionalities and advantages of proposed system are:

- Data is Centralized which has overcome the Sharing problem in previous system.
- As data is Maintained electronically, it's easy for a person to update the details, which has overcome the tedious updation in previous system.
- Maintenance is easy and performance is good.
- Mainly the system has automated the Transportation Process.

4.4 Use Case Template

Source / Destination: - Use case specification

Brief Description: - The main use of this use caseis to provide the details about source and the destination of the user of the cab.

Flow of Events: -

Basic Flow: -

1. User books a cab by providing the details of source and destination.
2. Booking clerk check the database.

3.On successful traveler makes the booking of the cab.

Pre conditions:

The traveler should have a cab for a destination place.

Post conditions:

The database must be modified after the booking transaction takes place.

2. Date / Time:

Use case specification

Brief Description:

The main purpose of this use case is to know details about the number of cabs available at that particular date.

4.5 MODULE

This project contains 2 main modules

- Customer Module
- Driver Module

I am working on Customer Module right now.

The project consists of four main views:

- **Log in:** A Login screen with user and password text fields. There's a "Sign Up" button to go to the Sign Up view to create a new user.
- **Sign Up:** In this view, the user introduces the username and password to create a new account with the backend service.
- **Wall:** This is the main screen of the app. Here the user can see all of the other users uploaded images, the creation date and the comment associated with them.
- **Map:** In this view user can see the nearest cab and its location and timing and also their movement and rout.

Each view has its own **UI ViewController** in the storyboard.

4.5 Minimum system requirements for TAXI Management:

Processor:

ARM Processor, 1Gz or better

RAM:

2GB

HDD:

160 GB, 7200k spin

Operating system:

Mac MINI, IOS system

Minimum system requirements for CMS Mobile:

- Operating system, I Phone 4
- Touchscreen
- GPS Module
- GPRS Data Plan

4.6 SCREENS

4.6.1 Launch Screen

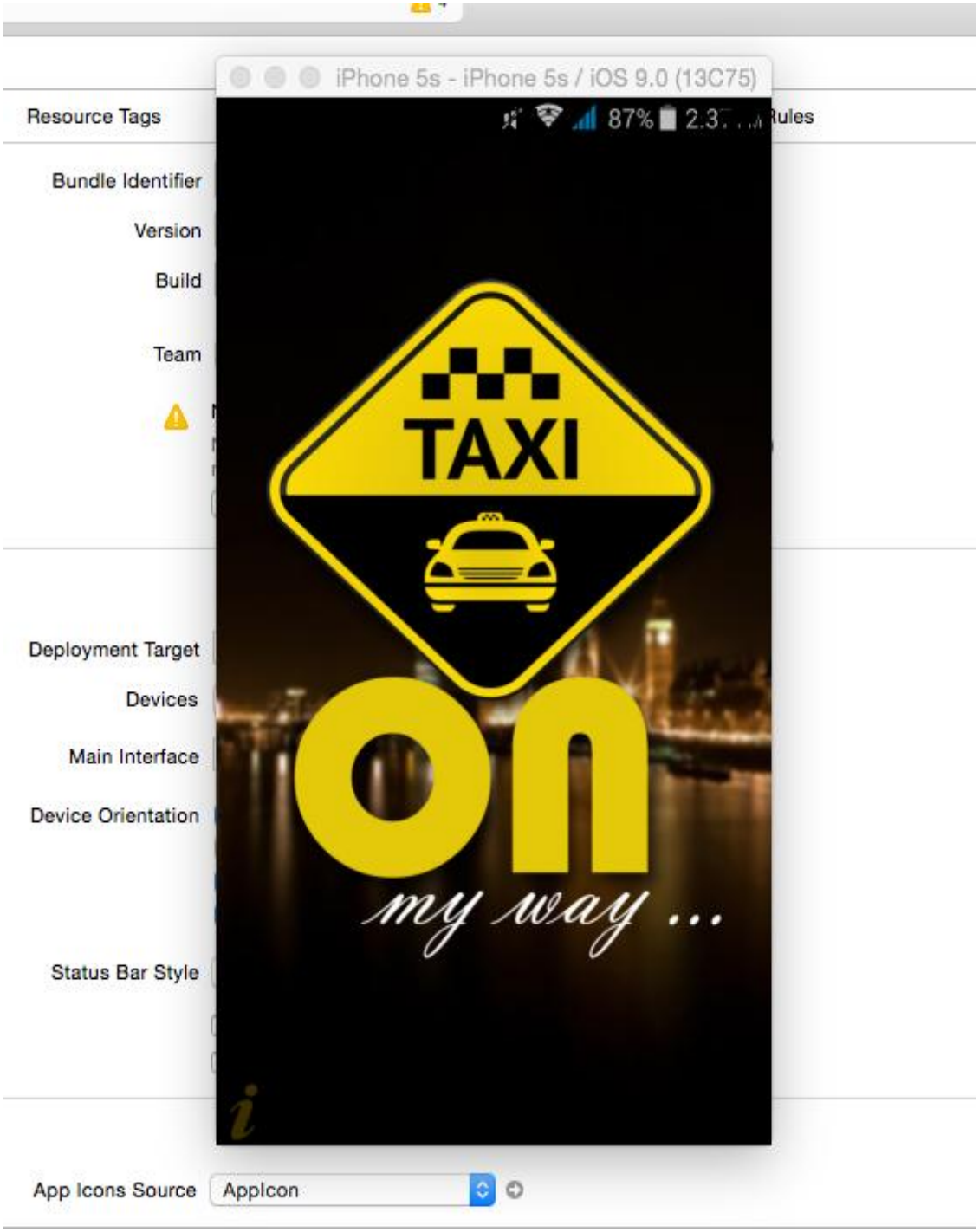


Figure 4.1

4.6.2 Login Screen :

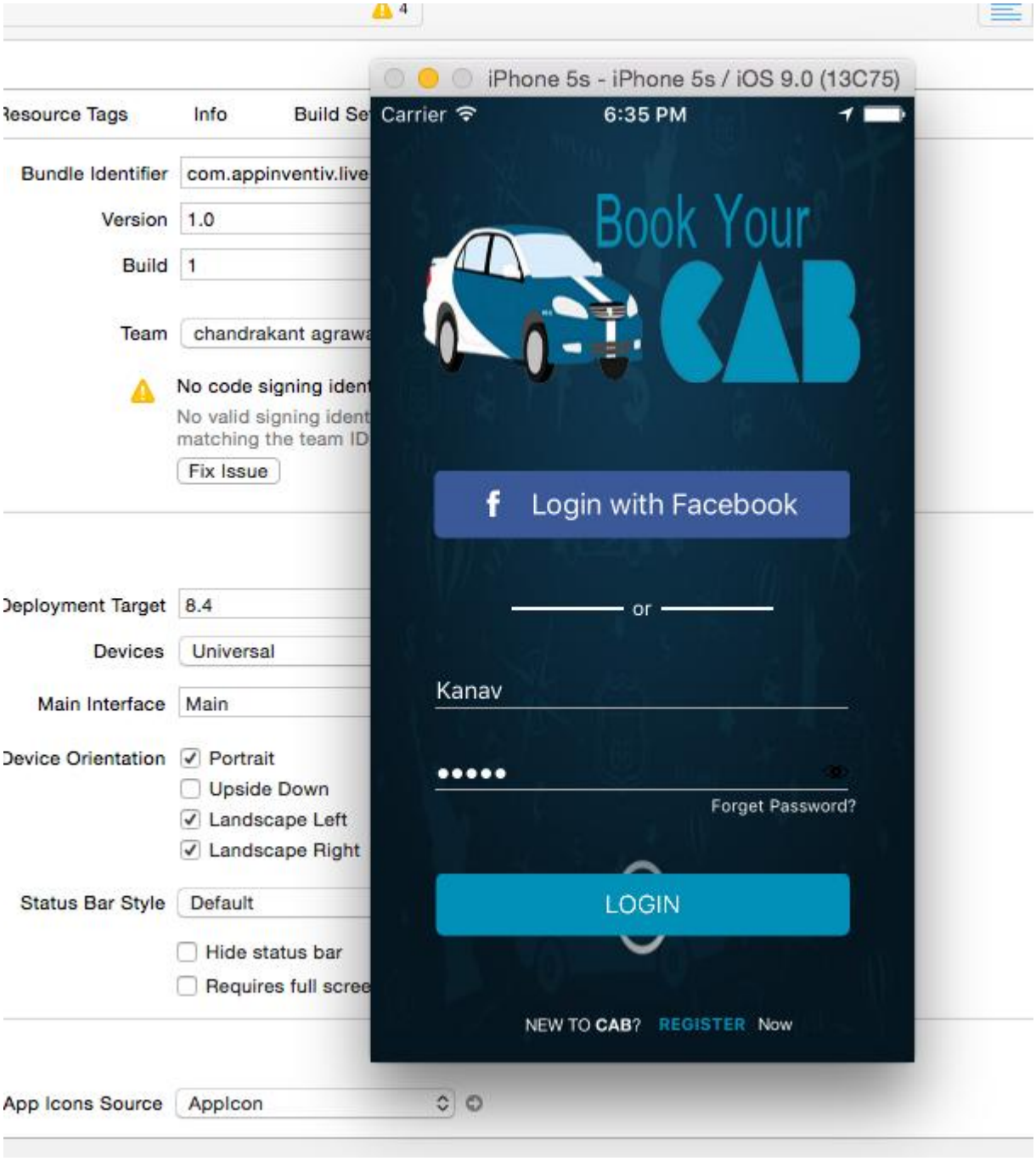


Figure 4.2

4.6.3 Registration screen with alert for incomplete input

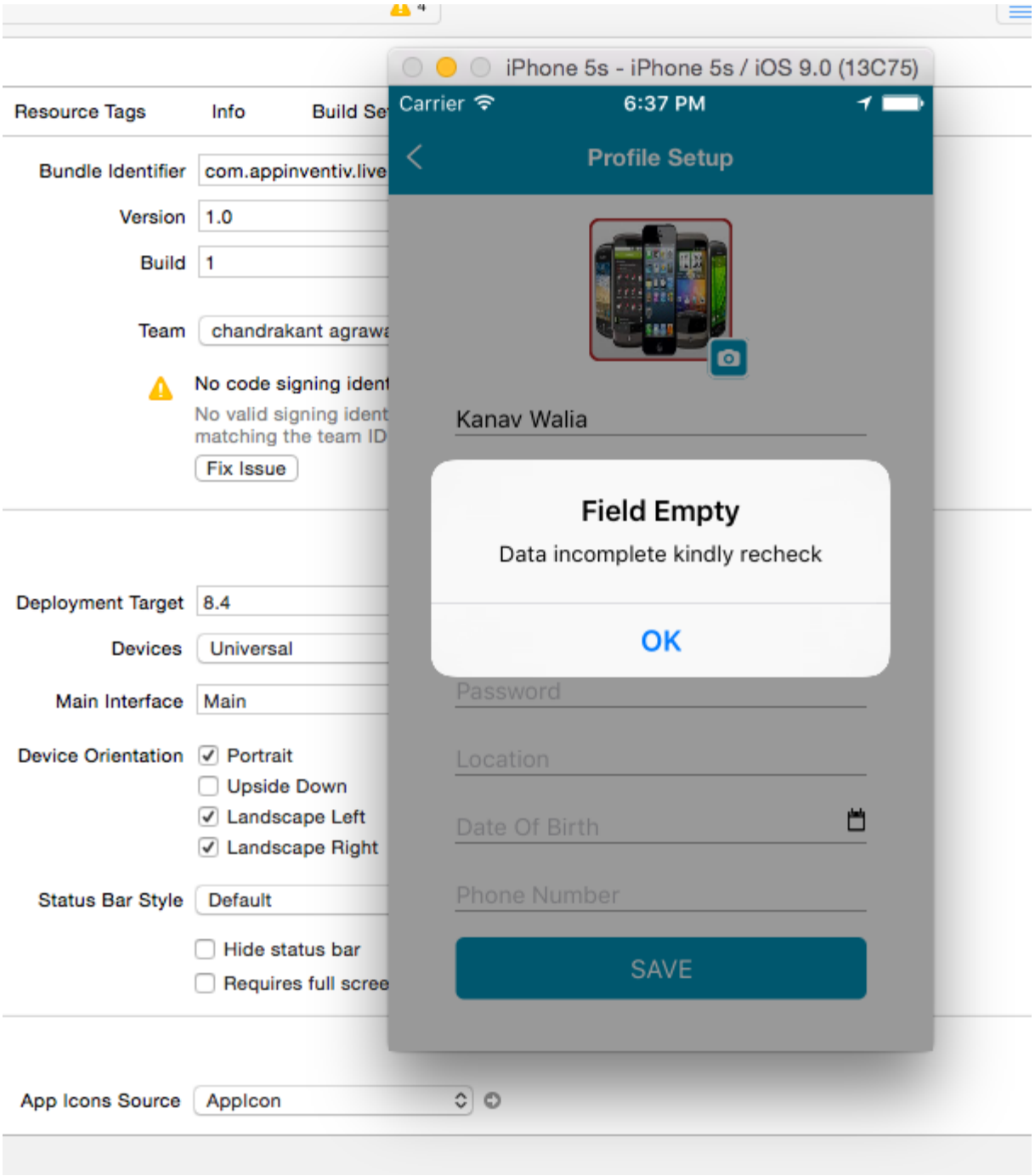


Figure 4.3

4.6.4 Registration Screen with date picker

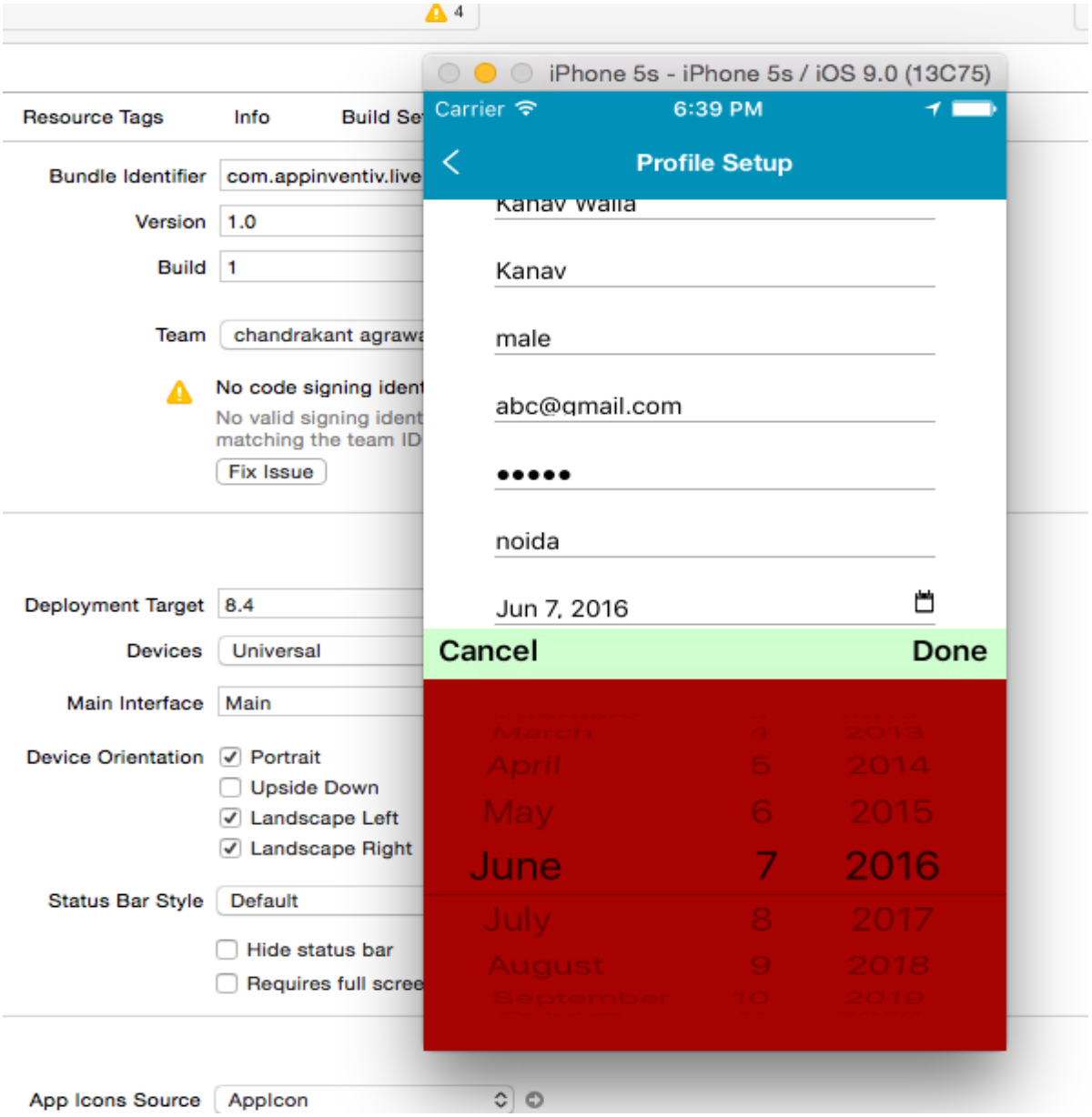


Figure 4.4

4.6.5 Map Screen

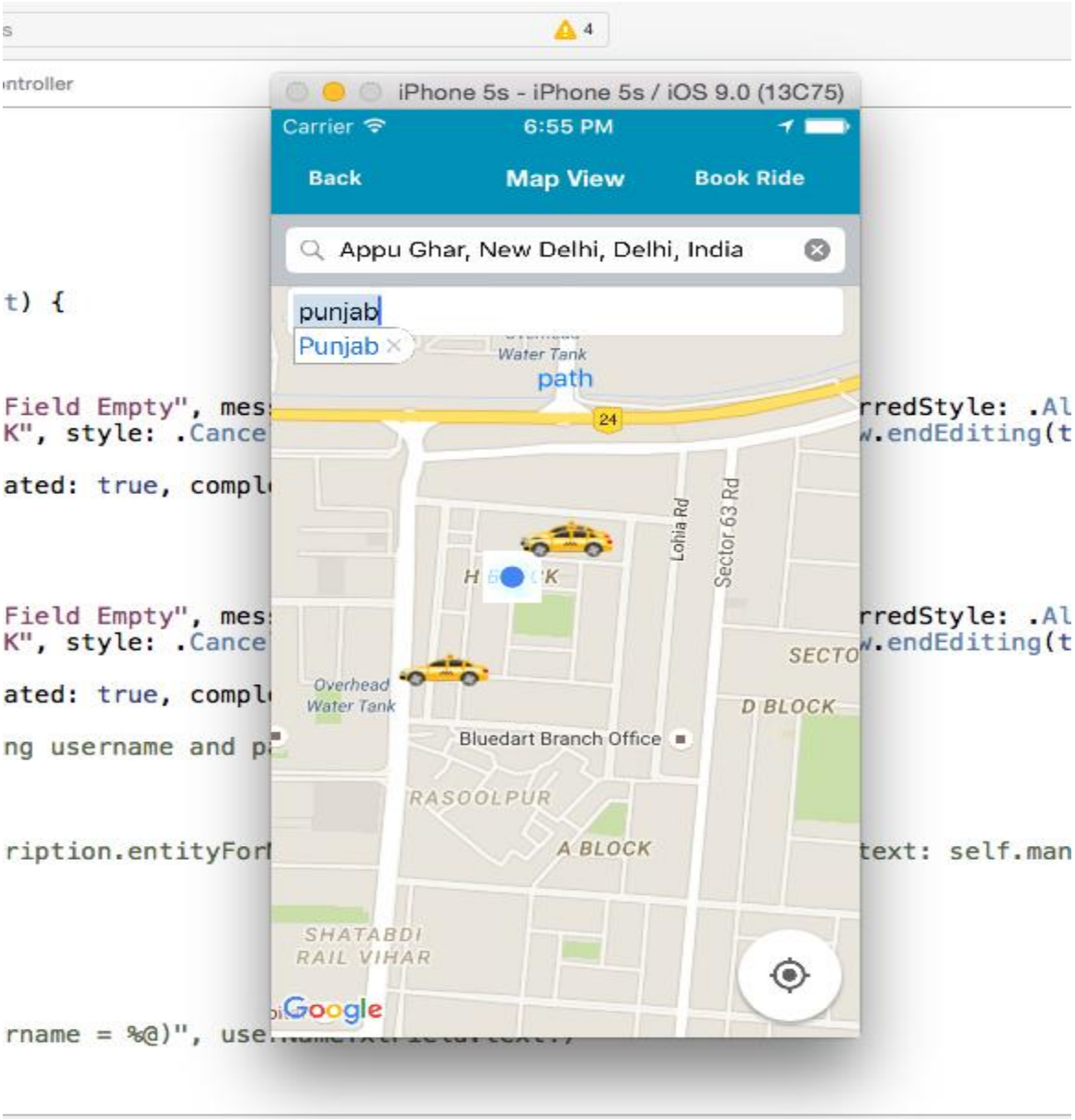


Figure 4.5

4.6.6 Map screen with no path selected

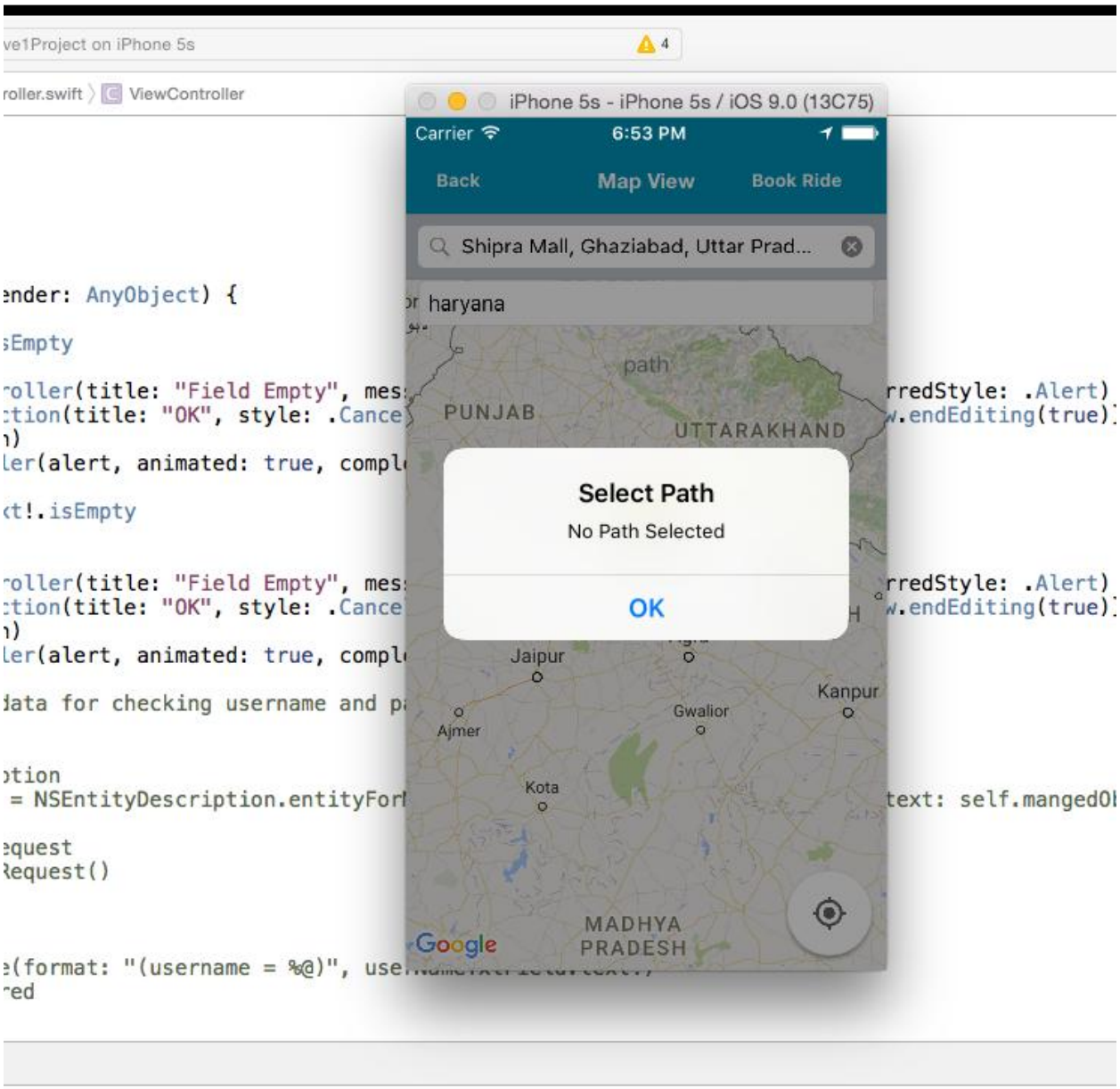


Figure 4.6

4.6.7 Map with path shown

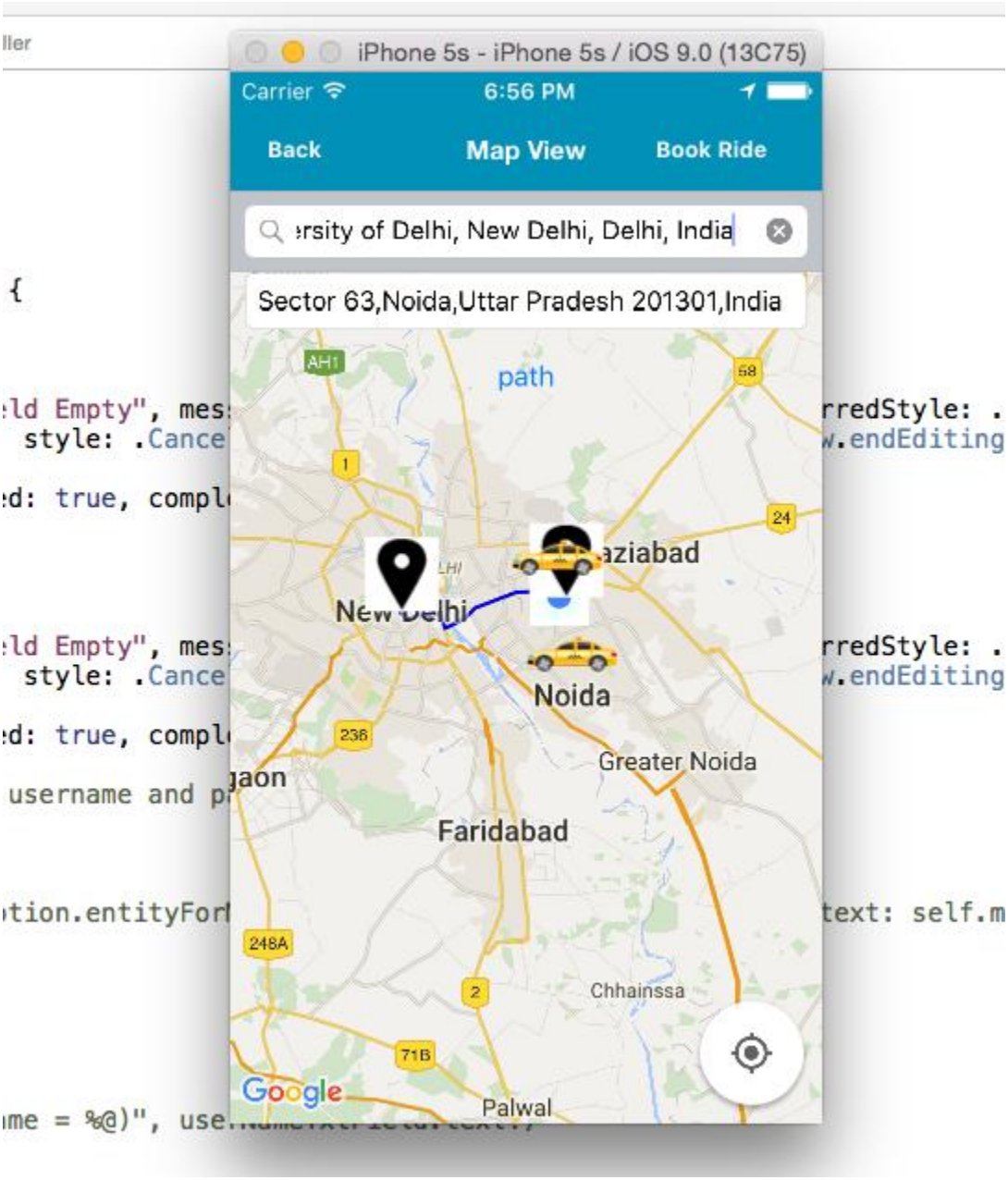


Figure 4.7

4.6.8 Final Screen with journey details being shown

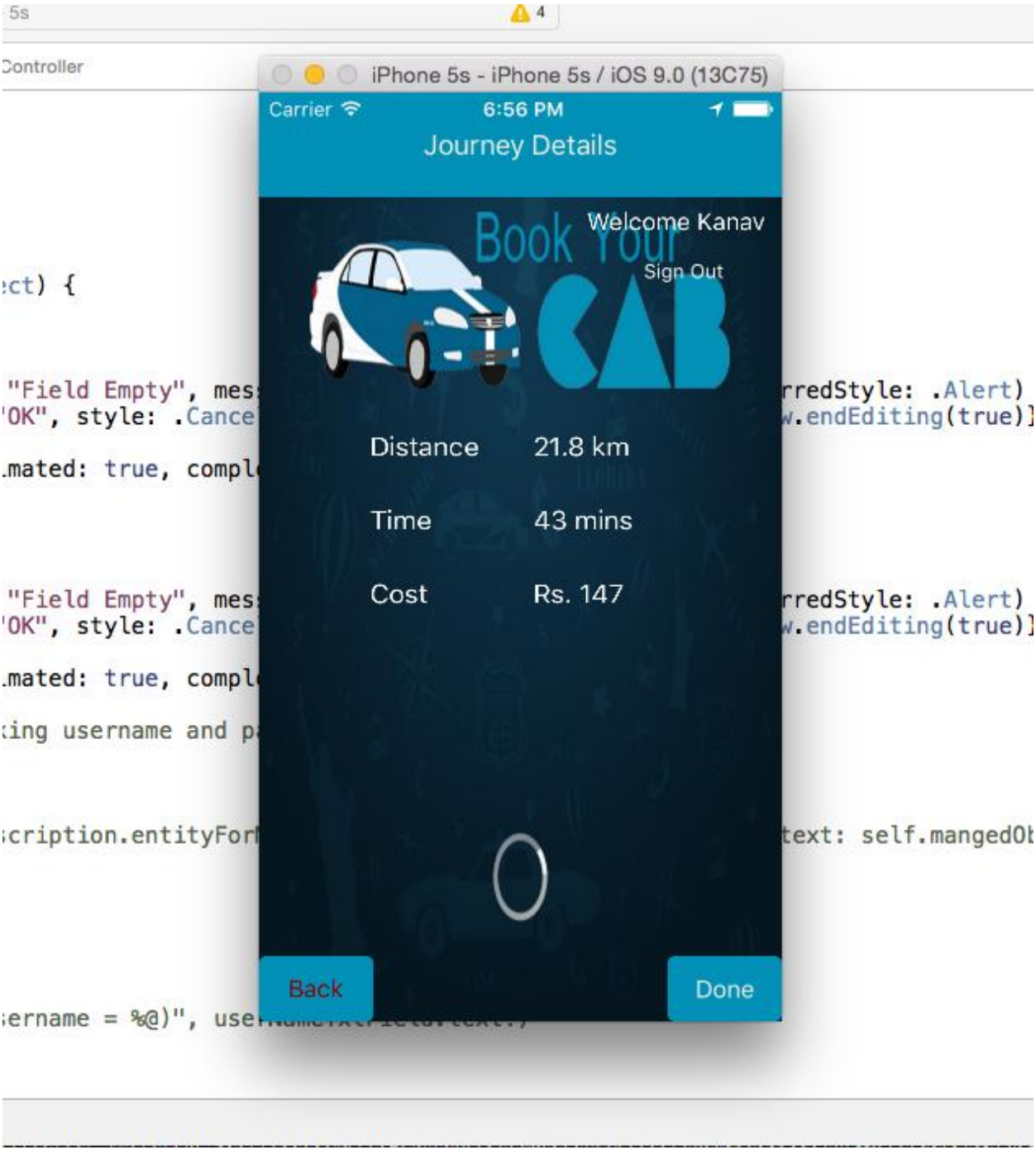


Figure 4.8

4.6.9 Journey details showing successful booking

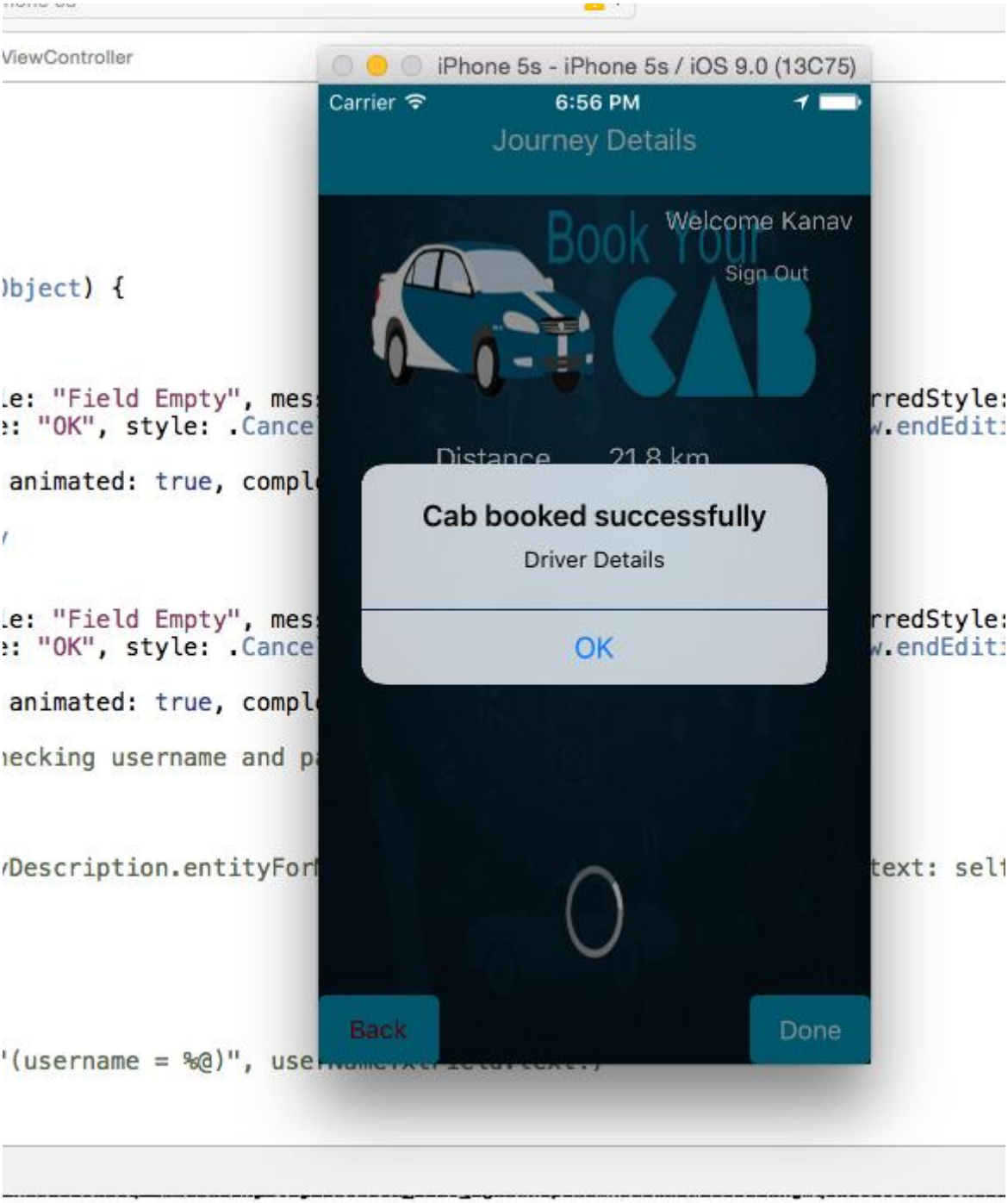


Figure 4.9

4.7 Interpretation

The first step that users will encounter in your app is to register as a user.Open the file RegisterViewController.swift; right now the view doesn't do anything apart from being opened and closed. Mission is to implement the functionality for user registration when the user taps the "Sign Up" button.

Locate the action method **signUpPressed(_:):** and replace it with the following code:

Registration Code :

```
IBActionfuncsignUpPressed(sender: AnyObject) {
let user = PFUser()
user.username = userTextField.text
user.password = passwordTextField.text
user.signUpInBackgroundWithBlock {
succeeded, error in    if (succeeded) {
            //The registration was successful, go to the wall
    self.performSegueWithIdentifier(self.scrollViewWallSegue, sender: nil)
 } else if let error = error {
  //Something bad has occurred
self.showErrorView(error)
}
}}
```

In the code above, the steps followed for creating a user are:

Create a new **PFUser** object named **user**. You will use this object for both the login and register processes. It stores your authenticated user, so you can access the data for this user any time you want.

You can find the PFUser class documentation.Assign the username and password to user from the text fields in the view.Call the method that registers the user in the background, and checks the response in a closure. There are two possible responses here: either the response is okay and you logged in your newly created user, or there was an error. In the first case, move on to the wall view, and otherwise show the user a description of the error. Build and run the app to check for errors. To check the user registration process, run the app, and at the Log In screen, press the Sign Up button.

4.8 SYSTEM DEVELOPMENT LIFE CYCLE

The systems development life cycle is a project management technique that divides complex projects into smaller, more easily managed segments or phases. Segmenting projects allows managers to verify the successful completion of project phases before allocating resources to subsequent phases. Software development projects typically include initiation, planning, design, development, testing, implementation, and maintenance phases. However, the phases may be divided differently depending on the organization involved.

PICTORIAL REPRESENTATION OF SDLC

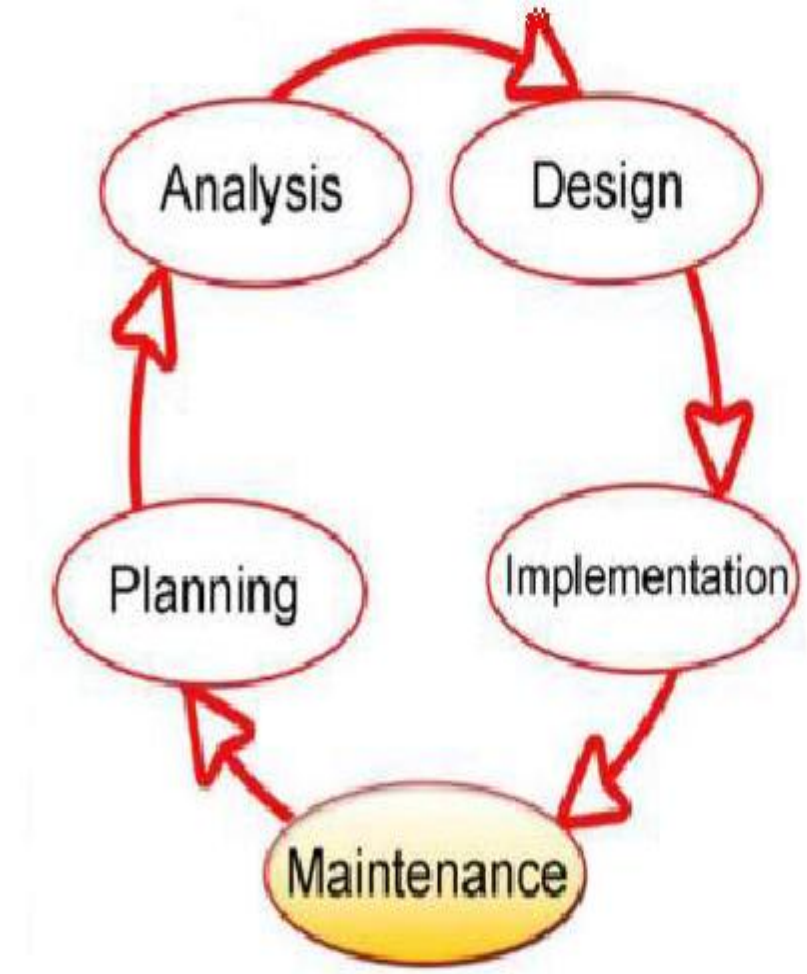


Figure 4.10

4.8 ADVANTAGES OF CAB BOOKING SYSTEM

Now one can easily plan the journey comfortably as the process is efficient and fast with being easy to access. Bookings can be made through the cab booking site or by the phone call. This being a big step in terms of improvement in the cab system it is widely accepted across the country.A route-based booking system that facilitates the issue of journey-cum-booking cab, which can be issued from any station to any station.

Passenger journey to multiple laps of booking can be handled from a single terminal window.The booking facility is offered round-the-clock (24 hours uninterrupted).Changes in cab profiles (cab addition, replacement, de-allocation), route structures, etc., can be made effective immediately with the appropriate contingency handling

Dynamic definition of the advance booking period is possible. This feature facilitates defining different advance booking periods for different cabs.Any cab running schedule can be accommodated.Provides on-line aggregation of EIS figures such as revenue, cabutilization, etc., and presentation of the summarized data in the form of visual analytics from the operational system's information store. The data aggregation is done incrementally, to inflict minimal impact.Provides automatic database recovery against all kinds of hardware and software failures.

4.9 SECURITY MECHANISMS

Some of the factors that are identified to protect the software from accidental or malicious access, use, modification, destruction, or disclosure are described below. Specific requirements in this area could include the need to:

- Utilize certain cryptographic techniques
- Keep specific log or history data sets
- Assign certain functions to different modules
- Restrict communications between some areas of the program
- Check data integrity for critical variables

- Later version of the software will incorporate encryption techniques in the user/license authentication process.
- The software will include an error tracking log that will help the user understand what error occurred when the application crashed along with suggestions on how to prevent the error from occurring again.
- Communication needs to be restricted when the application is validating the user or license. (i.e., using https).

4.10 Future scope of the project

Every Edition of a book comes with new topics and modifications if any errors are present. In the similar way, in near future, our application will overcome the flaws if occurred, and attains new features offered to employees for the Flexible and easy Transportation.
Following are the Enhancements to the application.

- Providing Good User Interface.

- Providing access permissions to the employees

- Try to Implement the GPS system in the Cabs.

CONCLUSIONS

Information Technology plays a vital role not only in a particular field, it provides various kinds of solutions and services to the various problems prevailing in many fields. Cabs exploits information technology at the maximum extent. It uses the information technology in an efficient way for providing better passenger services. The online booking system helps to solve the everyday problems of the world biggest Indian

Limitations:

Cool Cab Services is a Web application and it is restricted to only limited type of users. In this application, Different types of managers have been given access rights and they are restricted up to their functionalities, so that the data is maintained securely and redundant data is prevented. As the Data is stored electronically, it is necessary to have a Computer and Network connection to access the Application. Here The Details of Employees and Drivers, cabs are maintained but accounts to these people are not created. using this application manger do assign or update the batch, shift of cabs to drivers and employees. But employees are unable to view their details.

Guidelines and References

1. www.google.com
2. http://www.javaworld.com/javaworld/jw-12-1996/jw-12-sockets.html
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6. *http://www.appcoda.com/*
7. *https://www.lynda.com/*
8. *https://developers.google.com/maps/documentation/ios-sdk/start#step_2_get_cocoapods*