KNOWLEDGE & TECHNOLOGY

Bangladesh Army University of Engineering & Technology

Department of Computer Science and Engineering

A project on

Ticut (Online Bus Booking System)

Submitted by

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Department of Computer Science and Engineering

CERTIFICATE

This is to certify that the project entitled Ticut (Online Bus Booking System) by "Md. Rohit Hasan", ID No.: 18204003, "MD. Touhid Iqbal Sagar", ID No.: 18204023, "Mst. Rukhtaj Ara Choitee", ID No.: 18204031, "Sumya Khatun", ID No.: 18204049 "Nosin Atia", ID No.: 18204063, has been accepted as satisfactory in partial fulfilment of the requirement for the degree of Bachelor of Science in Computer Science and Engineering on October, 2022.

Signature of Supervisor	Signature of Supervisor
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BAUET	BAUET

Bangladesh Army University of Engineering & Technology

Department of Computer Science and Engineering

DECLARATION

I thereby declare that our project entitled "Ticut (Online Bus Booking System)" is the result of our work. We also ensure that it does not previously submitted or published elsewhere for the award of any degree or diploma.

The work has been accepted for the degree of Bachelor of Science in Computer Science and Engineering at Bangladesh Army University of Engineering & Technology (BAUET).

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ABSTRACT

‘Ticut’ is an inter-university/school/collage’s bus ticket booking system. There are many bus tickets booking system in our country. But most of them are inter-city bus ticket booking system. Through these systems, we can book a bus ticket to go one place to another within a country.

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Chapter 1

INTRODUCTION

1.1 Introduction

Android App is a software designed to run on an Android device or emulator. The term also refers to an APK file which stands for Android package. This file is a Zip archive containing app code, resources, and meta information.

Android apps can be written in Kotlin, Java, and C++ and are run inside Virtual Machine. The official development environment is Android Studio. [1]

Although an Android app can be made available by developers through their websites, most Android apps are uploaded and published on the Android Market, an online store dedicated to these applications. The Android Market features both free and priced apps.

Android apps are written in the Java programming language and use Java core libraries. They are first compiled to Dalvik executables to run on the Dalvik virtual machine, which is a virtual machine specially designed for mobile devices.

Developers may download the Android software development kit (SDK) from the Android website. The SDK includes tools, sample code and relevant documents for creating Android apps.

Novice developers who simply want to play around with Android programming can make use of the App Inventor. Using this online application, a user can construct an Android app as if putting together pieces of a puzzle. [2]

1.2 Background:

The first step is obviously the most basic one. If you are reading this article, you might already have a basic idea in mind. But is that enough? Your idea about the android application needs to be highly specific. It should aim to solve a specific problem or perform a specific set of functions. Using python programming language, we are going to build a project for property detecting colors from an input image.

Our goal is to have something which is going to be a user-friendly project that will help user to detect colors. He doesn't have to check the color chart manually.

There are some existing systems such as Bdtickets, Bd.top10quest, Sohoz. These systems are based on intercity bus services but there is no app for university/school/college students. 'Ticut' will help university/school/collage's students to buy tickets online which makes us different from others.

1.3 Objectives

The project “Ticut” is aimed to maintain the online bus ticket booking of schools, colleges or universities. It is designed to achieve the following objectives:

1.3.1 Specific objective:

- ✓ Free from hassles and hassles of manual ticket cutting system.
- ✓ Time savings.
- ✓ Eliminating corruption in manual ticket cutting system.
- ✓ Making easy way of online ticket cutting system for schools, colleges or university’s student.
- ✓ Making a secure system.
- ✓ Being update or aware of the direction of the route.
- ✓ Creating an easy way to pay ticket prices.
- ✓ To know in advance if there is a ticket available or not and take action accordingly.
- ✓ There will be a different apk file so that schools, colleges or universities can maintain this system or admin can maintain it safely.

1.3.2 Overall Objective:

- ✓ To computerize all details of bus ticket cutting system like observing route, ticket availability, ticket booking, payment, dating digital copy of ticket.
- ✓ The inventory should be updated automatically whenever a transection is made.
- ✓ The information about the route will be kept up to date and their record should be kept in the system (Admin panel) for historical purpose.
- ✓ To provide top management a single point of control.

1.4 Advantages & Disadvantages:

1.4.1 Advantages:

a. Time saving.
b. User friendly.
c. Convenience.
d. Dynamic.
e. Easy payment method.
f. Accuracy.

1.4.2 Disadvantages:

a. Android phone required.
b. E-wallet system.

1.5 Conclusion:

“Ticut” the online bus booking system improves the quality control on the manual bus ticket boking system of the buses of the schools, colleges or universities. Improved ticket cutting system. It also improves the management visibility of ticket counter. All the information about user, ticket details, route details, seat details are recorded.

Chapter 2

PLANNING

2.1 Introduction

A Software Project is the complete methodology of programming advancement from requirement gathering to testing and support, completed by the execution procedures, in a specified period to achieve intended software product. [12]

Project planning is a discipline addressing how to complete a project in a certain timeframe, usually with defined stages and designated resources. One view of project planning divides the activity into these steps: setting measurable objectives. identifying deliverables. [13]

The first step is obviously the most basic one. If you are reading this article, you might already have a basic idea in mind. But is that enough? Your idea about the android application needs to be highly specific. It should aim to solve a specific problem or perform a specific set of functions. We are going to build a project for Online Bus Booking System

Our goal is to have something which is going to be a user-friendly project that will help user to book bus ticket online. He doesn't have to porches it by going there physically.

2.2 Existing system:

There are some existing systems such as Bdtickets, Bd.top10quest, Sohoz. These systems are based on intercity bus services but there is no app for university/school/college students. 'Ticut' will help university/school/collage's students to buy tickets online which makes us different from others.

2.3 Conclusion:

Planning helps for the organizational health and quality of the organization. According to (Hall, 2013) strategic planning helps to identify the suitable instruments that allow making a long-term plan which can be used to have stable organizational growth.

Planning software is a tool that helps organizations identify and define short- and long-term goals and priorities. It helps users choose different paths to reach their desired goals and measure their progress. It also helps us to gather and track information all in one place, from the formulation to the execution stage.

Overall, the software provides users the ability to create a detailed and transparent action plan for an organization's growth and helps users make more informed decisions.

Chapter 3

ANALYSIS

3.1 Introduction

It's a process of collecting and interpreting, identifying the problems of manual ticket cutting system into its components.

System analysis is conducted for the purpose of studying a system or its parts in order to identify its objectives. It is a problem-solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose.

Analysis specifies what the system should do.

3.2 Description of the system

Administration module: -

Input: – Providing manual apk file.

Process Definition: –

i. Login to the system.
ii. Creating new trip.
iii. Updating trip details.
iv. Updating routes.
v. Updating ticket price.
vi. Current seat status.
vii. Having user details.

Output: – If apk file runs well, the administrator will access and correct the system.

User module:

Input: –

Registration:

i. User name.
ii. Department ID.
iii. Phone number.
iv. User e-mail.
v. Password.

Login:

i. User e-mail.
ii. Password

Process Definition: –

i. My trip details
ii. Ticket details
    a. Bus name.
    b. Destination.
    c. Seat number.
    d. Total ticket price.
    e. Departure time.
    f. Booking date.
    g. Conformation status.

Output: – Information about online bus ticket of schools, colleges or universities and conformation of the ticket.

3.3 Conclusion

System analysis is important because it provides an avenue for solutions in the system through the various task doing the analysis. Through these various tasks, the overall quality of a system can be easily modified or improve and occurrences of errors can ultimately be reduced.

System analysis uncovers what software does and how it should behave. This is important information when maintaining software to make corrections or add functionality. Software evolution includes modifications to software but should not compromise its functionality.

In systems engineering and software engineering, requirements analysis focuses on the tasks that determine the needs or conditions to meet the new or altered product or project, taking account of the possibly conflicting requirements of the various stakeholders, analyzing, documenting, validating and managing software

Chapter 4

DESIGN

4.1 Introduction

Project design is an early phase of the project life cycle where ideas, processes, resources and deliverables are planned out. A project design comes before a project plan as it's a broad overview whereas a project plan includes more information. A project design is a method of organizing ideas, materials and processes in order to achieve a specific goal.

4.2 Software Development Model

Our proposed model is incremental model to create a python project. The development process based on the Incremental model is split into several iterations ("Lego-style" modular software design is required!).

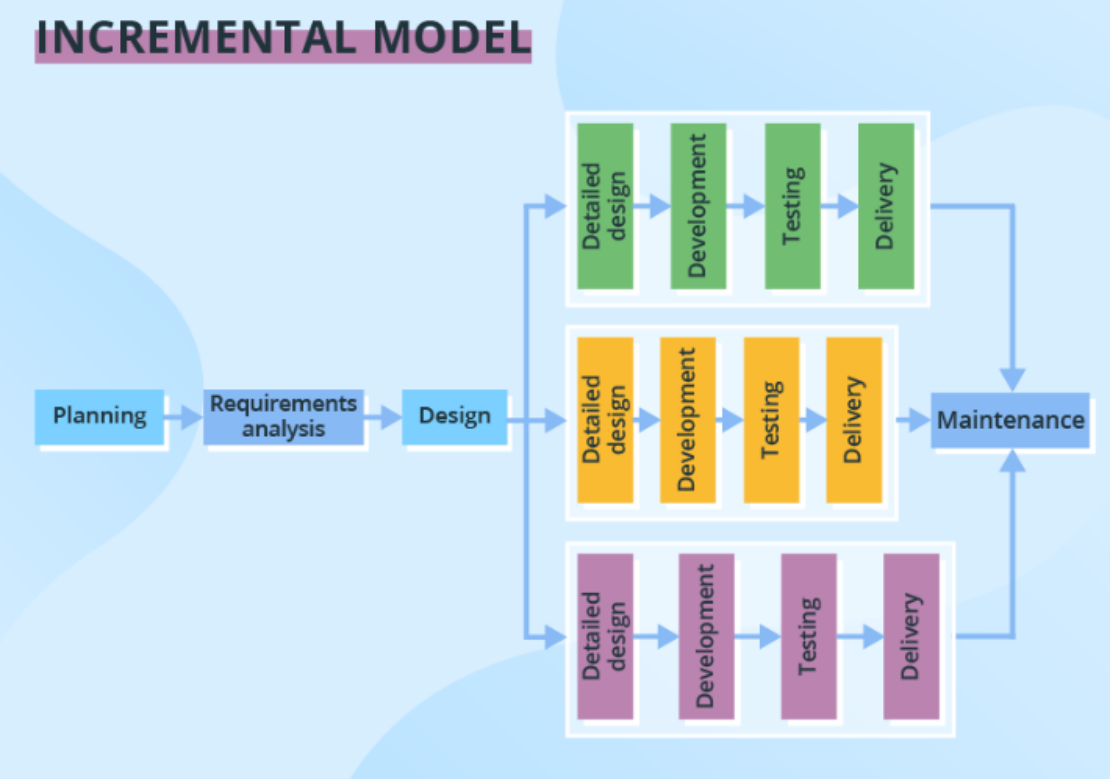

Figure 4.2.1: Incremental Model

New software modules are added in each iteration with no or little change in earlier added modules. The development process can go either sequentially or in parallel. Parallel development adds to the speed of delivery, while many repeated cycles of sequential development can make the project long and costly. [3]

4.3 Flow-chart

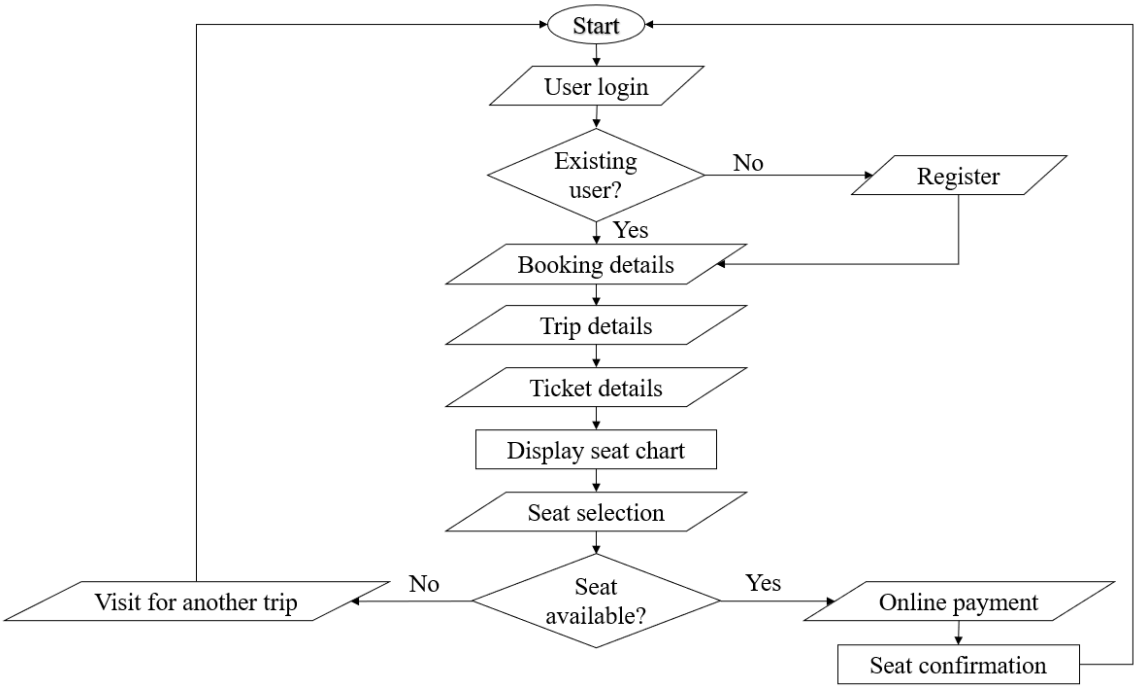

Figure 4.3.1: Flowchart of Ticut

This is the flowchart of our android project. At first, User have to log in to the application. If he is an existing user the he can simply log in. Otherwise, he has to register here with his email address. After that user can see the booking details, trip details ticket details, seat chart pages of our application. If the seat is available, he can select a seat as he wants and can pay online. After payment the seat confirmation will be received by the user. If seat is not available then user have to visit another trip in the same procedure.

4.4 Class Diagram:

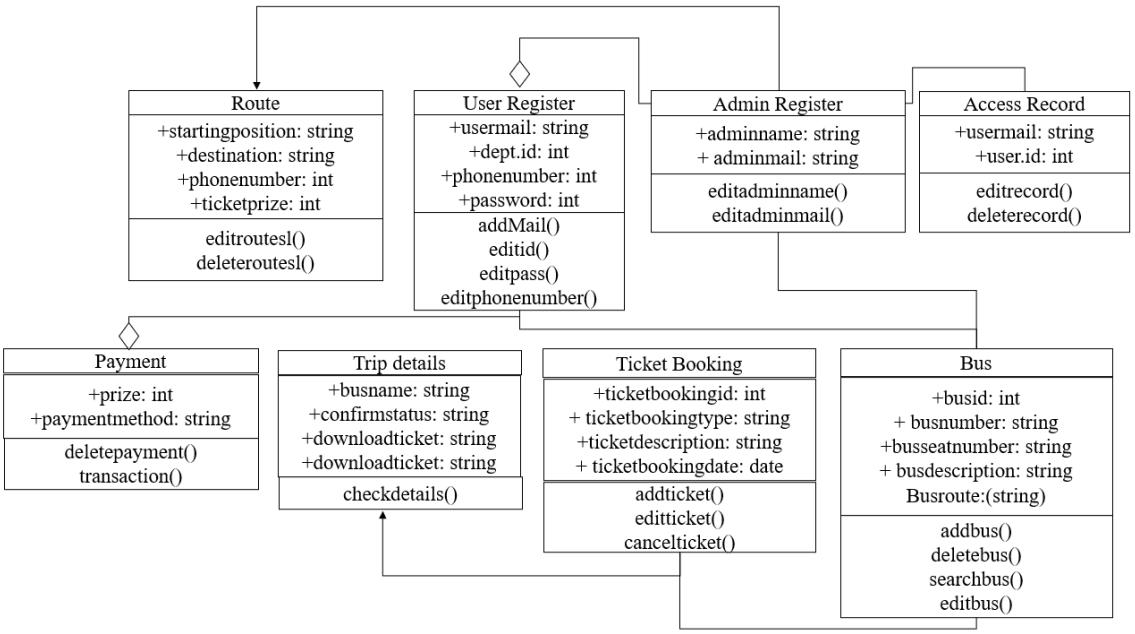

Figure 4.4.1: Class Diagram of Ticut

This is the class diagram of our android project. Here we can see classes like:

Routes: Has some attributes like startingposition, destination, phonenumber, ticketprize and some operations like editroutesl, deleteroutesl.,

User register: Has some attributes like usermail, dept.id, phonenumber, password and some operations like addMail, edited, editpass, editphonenumber.

Admin register: Has some attributes like adminname, adminmail and some operations like editadminname, editadminmail.

Access record: Has some attributes like usermail, user.id and some operations like editrecord, deleterecord.

Payment: Has some attributes like prize, paymentmethod and some operations like deletepayment, transaction.

Trip details: Has some attributes like busname, confirmstatus, downloadticket and operation is checkdetails.

Ticket booking: Has some attributes like ticketbookingid, ticketbookingtype, ticketdescription, ticketbookingdate and some operations like addticket, editticket, cancelticket.

Bus: Has some attributes like busid, busnumber, busseatnumber, busdescription, Busroute and some operations like addbus, deletebus, searchbus, editbus.

Here, All the classes are connected. “Admin register”, “Ticket booking” classes are inheriting the “Route” and “Trip details” classes respectively. “Admin register” and “User register”, “User register” and “payment” classes are connected by aggregation sign. “Access record” and “Admin register”, “Admin register” and “Bus”, “User register” and “Bus”, “Ticket booking” and “Bus” classes are connected with association sign.

4.5 Use-Case Diagram:

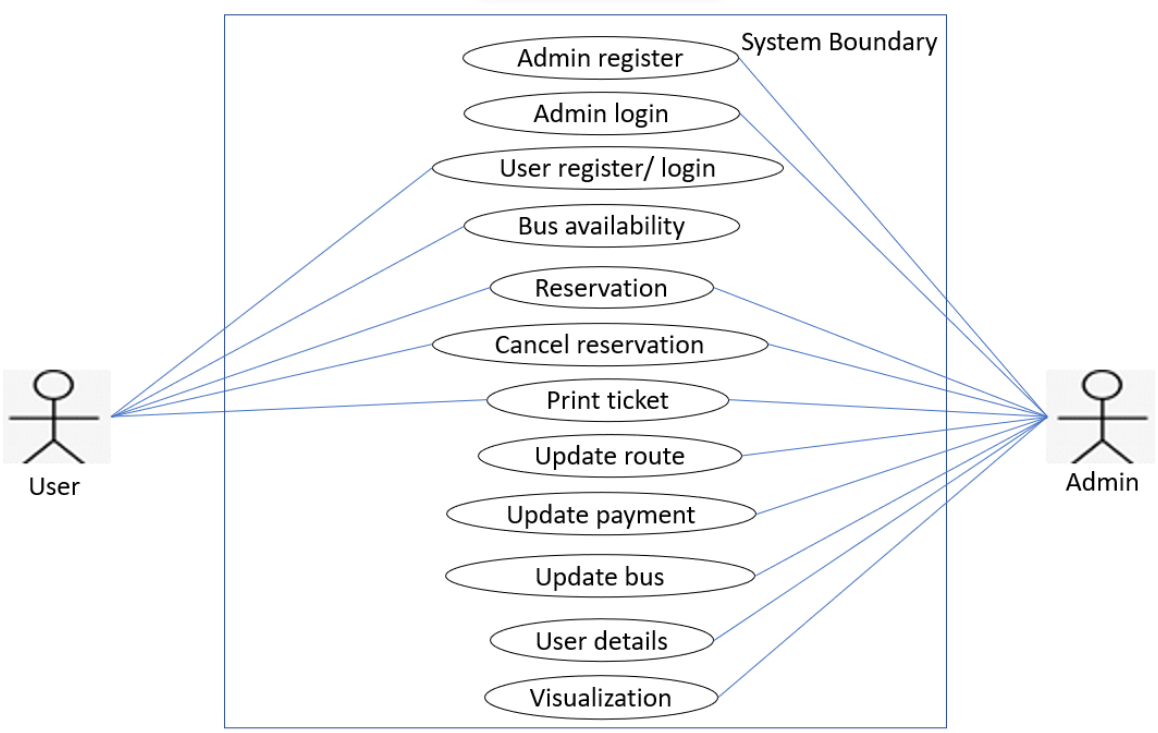

Fig 4.5.1: Use-case diagram of Ticut

This is the use-case diagram of our android project. Here, two actors are available. User and Admin. In the system boundary There are some use cases like admin register, admin login, user register/ login bus availability, reservation, cancel reservation, print ticket, update route, update payment, update bus, user details and visualization. User has access in user register/ login bus availability, reservation, cancel reservation, print ticket and admin has access to admin register, admin login, reservation, cancel reservation, print ticket, update route, update payment, update bus, user details and visualization.

4.6 Conclusion

Project design is an important piece of an executing a successful project. From gathering the necessary information and resources to coordinating with team members your job is to bring the details to life. The purpose of the System Design process is to provide sufficient detailed data and information about the system and its system elements to enable the implementation consistent with architectural entities as defined in models and views of the system architecture.

With the right project design, we can tackle anything that comes our way.

Chapter 5

IMPLEMENTATION

5.1 Introduction

Project implementation (or project execution) is the phase where visions and plans become reality. This is the logical conclusion, after evaluating, deciding, visioning, planning, applying for funds and finding the financial resources of a project. The implementation phase involves putting the project plan into action. It's here that the project manager will coordinate and direct project resources to meet the objectives of the project plan.

The implementation phase involves putting the project plan into action. It’s here that the project manager will coordinate and direct project resources to meet the objectives of the project plan. As the project unfolds, it’s the project manager’s job to direct and manage each activity, every step of the way. Our project is implemented as the requirements. All the options proposed in the design is implemented here. [4]

5.2 Frame work

We used React native frame work for our android project. React Native is an open-source UI software framework created by Meta Platforms, Inc. It is used to develop applications for Android, Android TV, iOS, macOS, tvOS, Web, Windows and UWP by enabling developers to use the React framework along with native platform capabilities. [5]

One of the main reasons of using react native it also speeds up the development process by allowing you to use a single code base to build fully functional apps for both the iOS and Android platforms. React Native is a popular choice among entrepreneurs today since it enables them to develop their apps first and deliver them across both platforms. [6]

React Native is easy to install, but unlike Flutter, it creates packages. Some developers find it annoying, but for many, this plays any importance. React Native provides only UI rendering and device access APIs. It means that the framework relies on third-party libraries. [7]

5.3 Front end

5.3.1 Native based

Native Base is a mobile-first, accessible component library for building a consistent design system across android, iOS & web.

It is an open-source UI library that makes it easy to build universal design systems. NativeBase was built for react native and is supported in Expo, Web, and React Native CLI initiated apps. NativeBase has UI components like Button, Image, Alert, Progress, Spinner, Card, and more built into it.

Using Native has lots of benefits. NativeBase builds a layer on top of React Native that provides you with basic set of components for mobile application development. This helps us to build world-class application experiences on native platforms. NativeBase is a tool in the Cross-Platform Mobile Development category of a tech stack.

At runtime, React Native creates the corresponding Android and iOS views for those components. Because React Native components are backed by the same views as Android and iOS, React Native apps look, feel, and perform like any other apps. We call these platform-backed components Native Components.

A native user interface is where the app or website was built specifically for a specific platform or device. The user interface is designed specifically to look and feel great on those devices. It's often faster and more intuitive than using an app or website designed for different devices or platforms.

5.4 Backend

5.4.1 Java script

JavaScript is a scripting language that enables you to create dynamically updating content, control multimedia, animate images, and pretty much everything else.

Javascript is used by programmers across the world to create dynamic and interactive web content like applications and browsers. JavaScript is so popular that it's the most used programming language in the world, used as a client-side programming language by 97.0% of all websites.

Javascript works on android by default, but if you have turned it off then you can follow these instructions to enable javascript on android phones. This also applies to javascript enabled browsers on javascript-enabled devices in general.

We can enable JS in android by-

Apps icon. (Google) Chrome. If unavailable, swipe up from the centre of the display then tap. Chrome.

i. Tap the. Menu icon. (Upper-right).
ii. Tap. Settings.
iii. From the Advanced section, tap. Site settings.
iv. Tap. JavaScript.
v. Tap the. JavaScript switch. to turn on or off

So, JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions.

5.4.2 Firebase:

I use firebase as a database in our project.

Firebase is a real time data base which allows to store tree of lists of objects. It allows to synchronize data between different devices. It is a NoSQL JSON database.

The Firebase Realtime Database is a cloud-hosted NoSQL database that lets we store and sync data between our users in real time.

The Firebase SDK supports programming in C++, Java, JavaScript, JavaScript/Node. js, Objective-C, and Swift. We use JS as a programming language in our project.

Firebase is better than MySQL because Data Handling: Firebase handles large data sets effectively; MySQL is a good choice for complex data.

5.5 Working flow

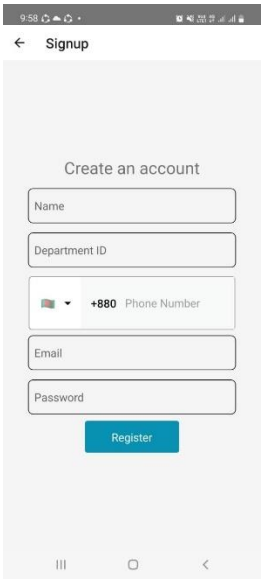

Fig 5.5.1: User Registration

This is the user “Registration page”. From this page new users can register.

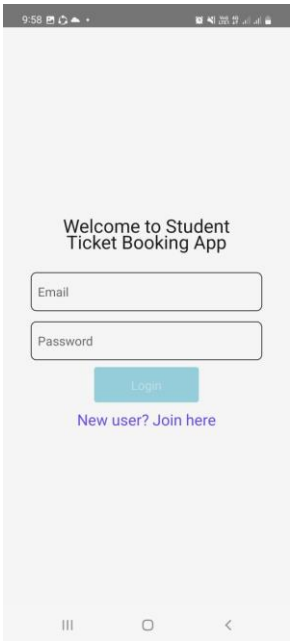

Fig 5.5.2: Admin Login

This is the “Admin log” in page. Admins have to log in to Ticut from this page.

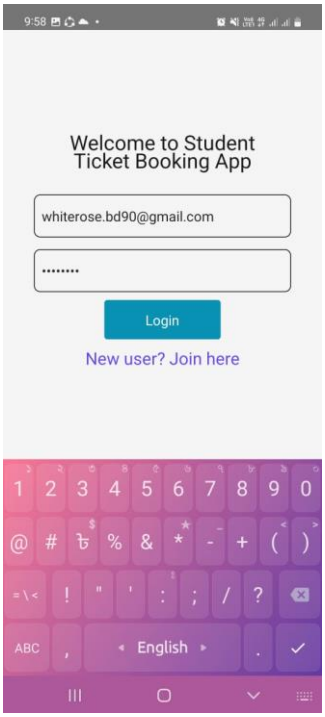

Fig 5.5.3: Login Confirmation

This is the “Login confirmation” page. By giving e-mail address and password admin can log in to our application.

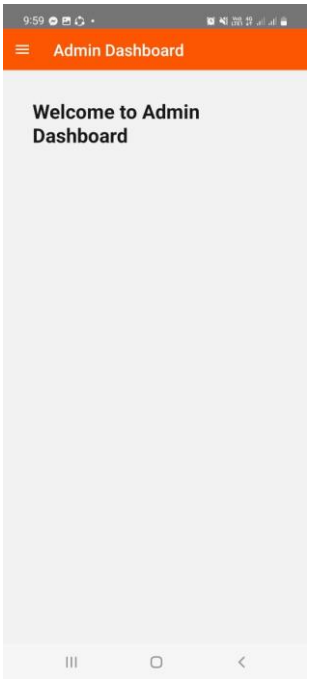

Fig 5.5.4: Admin Panel

This is the “Admin panel”. After log in as admin this page will flash to the screen.

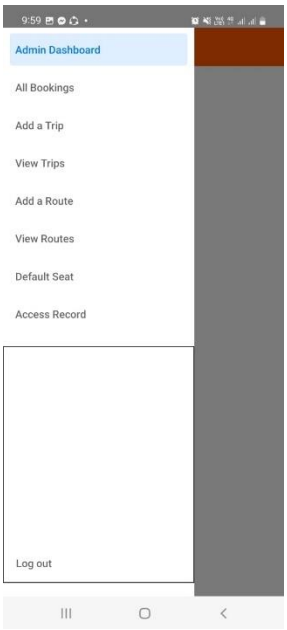

Fig 5.5.5: Admin Dashboard

This is the “Admin Dashboard” page. All the operations done by admin can be act from this page.

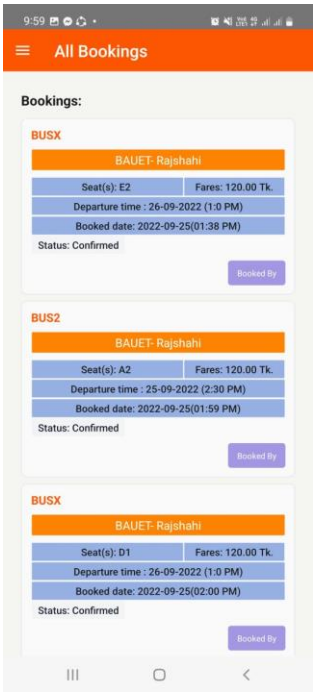

Fig 5.5.6: All Bookings

This is the “All Bookings” page of our android app. Seat Booking details is available in this page.

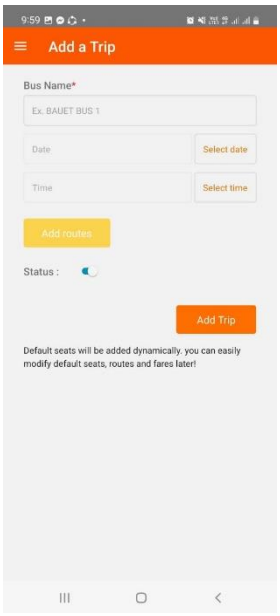

Fig 5.5.7: Add a trip

This is the “Add a trip” screen. If there is a new trip, admin can update that in the application from here.

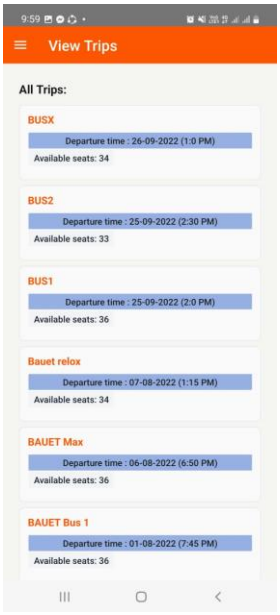

Fig 5.5.8: View Trips

This is the “View Trips” page. Here all the trips are visible.

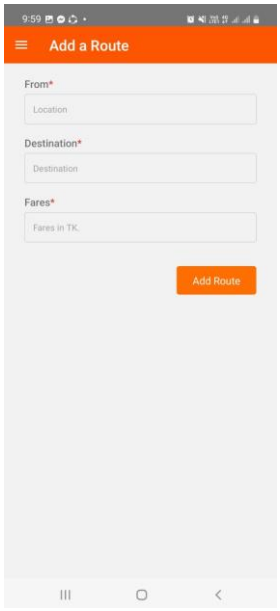

Fig 5.5.9: Add a Route

This is the “Add Route” page. Admin can add route with fare in this page.

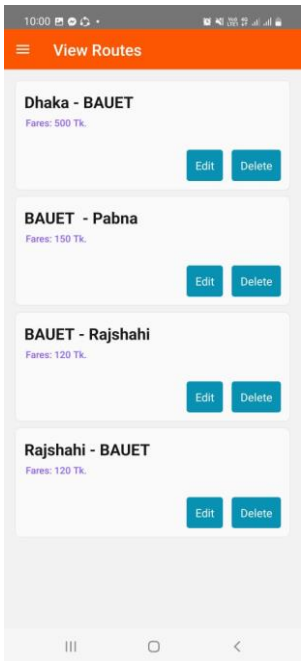

Fig 5.5.10: View Routes

This is the “View Routes” page. All the routes are available here. If admin needs to edit or delete any route, he can perform that action also from this page.

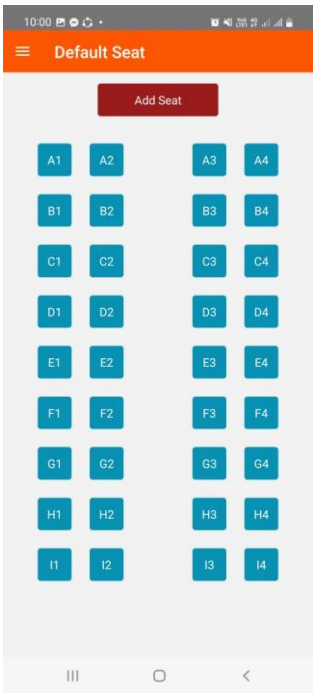

Fig 5.5.11: Default Seat

This is the seat chart of our app. All the seats of a bus are shown here.

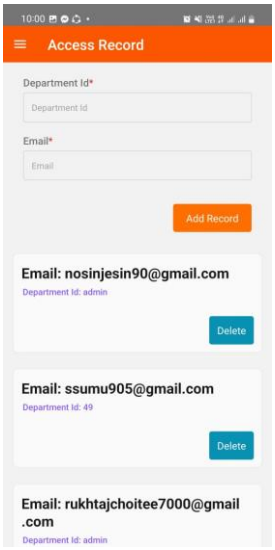

Fig 5.5.12: Access Record

This is the “Access record” page. Here all the record of registered user are available.

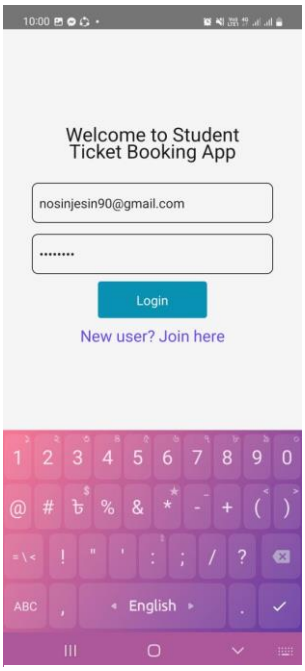

Fig 5.5.13: User login

This is the “User login” page. User can log in from this page by using his e-mail id and password.

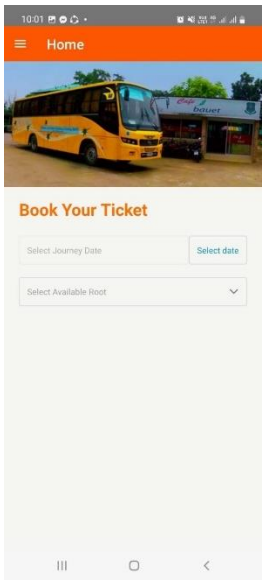

Fig 5.5.14: Frontend of User

This is the “Frontend of user”. After log in user can see this page.

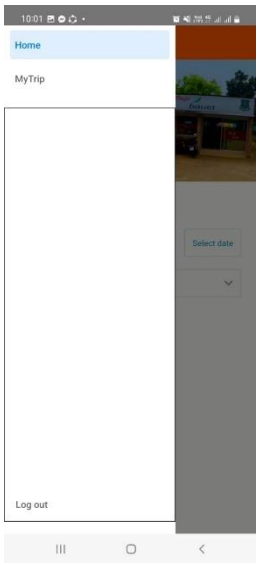

Fig 5.5.15: Home

This is user “Home” page. User can see his trip from here.

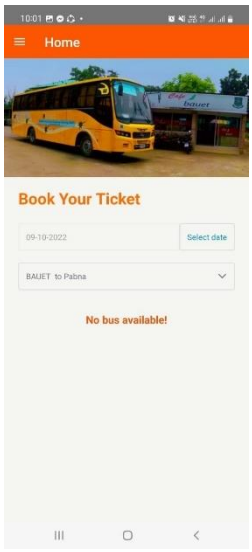

Fig 5.5.16: Booking a ticket

This page is to book ticket of users. He can select his route, date of journey and request for ticket.

5.6 Conclusion

Implementing projects is important for project managers and the strategic planning process because it can reveal new issues and challenges that planners may not have anticipated, ultimately resulting in more refined strategies, products, and process.

Software implementation is important because it allows a company to access the latest technology. By replacing old applications with new software, employees can increase their productivity and produce higher quality work. New applications may also increase customer satisfaction by providing clients with a more user-friendly experience. A company can increase the chance of yielding these benefits by using an effective process for software implementation. For instance, it might choose an application within its budget and compatible with its existing systems. It's also important to select an application that the organization can install as efficiently as possible to minimize downtime.

Chapter 6

TESTING AND INTEGRATION

6.1 Introduction

Software Testing is a method to check whether the actual software product matches expected requirements and to ensure that software product is Defect free. It involves execution of software/system components using manual or automated tools to evaluate one or more properties of interest. The purpose of software testing is to identify errors, gaps or missing requirements in contrast to actual requirements.

Some prefer saying Software testing definition as a White Box and Black Box Testing. In simple terms, Software Testing means the Verification of Application Under Test (AUT). This Software Testing course introduces testing software to the audience and justifies the importance of software testing. [8]

Integration testing is the second level of the software testing process comes after unit testing. In this testing, units or individual components of the software are tested in a group. The focus of the integration testing level is to expose defects at the time of interaction between integrated components or units. [9]

6.2 Testing

We have tested our application by using unit testing method. Unit testing uses modules for testing purpose, and these modules are combined and tested in integration testing. The Software is developed with a number of software modules that are coded by different coders or programmers. The goal of integration testing is to check the correctness of communication among all the modules.

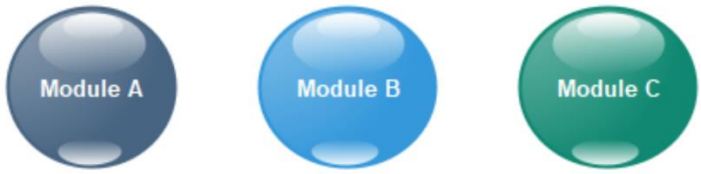

Fig 6.2.1: Unit testing of Ticut

6.3 Integration

- ✓ We go for the integration testing only after the functional testing is completed on each module of the application.
- ✓ We always do integration testing by picking module by module so that a proper sequence is followed, and also, we don't miss out on any integration scenarios.
- ✓ First, determine the test case strategy through which executable test cases can be prepared according to test data.
- ✓ Examine the structure and architecture of the application and identify the crucial modules to test them first and also identify all possible scenarios.
- ✓ Design test cases to verify each interface in detail.
- ✓ Choose input data for test case execution. Input data plays a significant role in testing.
- ✓ If we find any bugs then communicate the bug reports to developers and fix defects and retest.
- ✓ Perform positive and negative integration testing.

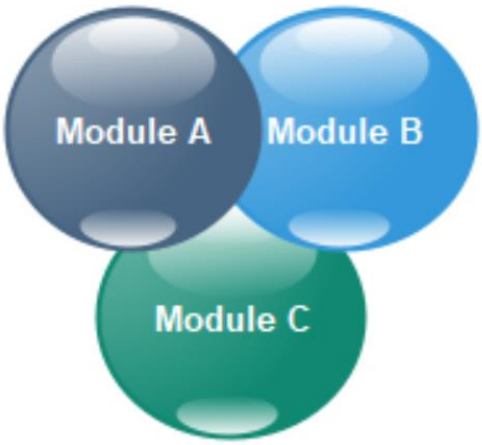

Fig 6.3.1: Integration of Ticut

6.4 Conclusion

- ✓ There are some features, we might be performing only the functional testing, and there are some features where we are performing both functional and integration testing based on the feature's requirements.
- ✓ Prioritizing is essential, and we should perform it at all the phases, which means we will open the application and select which feature needs to be tested first. Then go to that feature and choose which component must be tested first. Go to those components and determine what values to be entered first.
- ✓ And don't apply the same rule everywhere because testing logic varies from feature to feature.
- ✓ While performing testing, we should test one feature entirely and then only proceed to another function.
- ✓ Among the two features, we must be performing only positive integrating testing or both positive and negative integration testing, and this also depends on the features need.

Chapter 7

MAINTANANCE

7.1 Introduction

Software Maintenance is the process of modifying a software product after it has been delivered to the customer. The main purpose of software maintenance is to modify and update software applications after delivery to correct faults and to improve performance. [10]

Software maintenance is the process of changing, modifying, and updating software to keep up with customer needs. Software maintenance is done after the product has launched for several reasons including improving the software overall, correcting issues or bugs, to boost performance, and more. [11]

7.2 Maintenance

We are performing these steps for maintenance of Ticut:

- ✓ Correct faults.
- ✓ Improve the design.
- ✓ Implement enhancements.
- ✓ Interface with other systems.
- ✓ Accommodate programs so that different hardware, software, system features, and telecommunications facilities can be used.
- ✓ Migrate legacy software.
- ✓ Retire software.

7.3 Conclusion

Software maintenance is part of the software development life cycle. The purpose of the service is to modify and continuously update software applications to eliminate all possible errors, malfunctions, to improve work efficiency and better system performance.

The life of your software does not begin when coding starts and ends with the launch. Instead, it has an ongoing lifecycle that stops and starts whenever necessary. Software is always changing and as long as it is being used. And you can monitor and maintain it properly. This is partly to adjust for the changes within an organization but is even more important because technology keeps changing. So, having software maintenance methods is a must.

Chapter 8

CONCLUSION

8.1 Introduction

A conclusion is the last element of a research paper, essay, or article that summarizes all of the work. The concluding paragraph should rephrase our project, summarize the main supporting ideas we have discussed throughout the work. It should offer our final impression of the central idea. This final summons should also include the morality of our story or the revelation of a deeper reality. A good conclusion will summarize our final thoughts and main points, combining all the relevant information with an emotional appeal for a final statement that resonates with our readers.

This chapter describes the future scope and extensions for the project. There is still a huge scope of implementing something new and more to the project which can make it to the level of a commercial product. This section also concludes stating the advantages and applications of this android project.

8.2 Conclusion

We've learned through our research that Android is a much more diverse operating system than iOS and Windows Phone Mobile. Android has grown rapidly over the past 4 years becoming the most used smartphone operating system in the world. It's because Android doesn't release 1 phone from 1 company with 1 new OS every year, but countless phones from numerous companies, adding their own twist, throughout the year, developing gradually day-by-day. Android's ability to customize is unparalleled compared to Apple's and Microsoft's software allowing the user to change and customize nearly every aspect of Android which most iPhone and Windows 7 users wouldn't dream possible. I am not one to say that Android is better or worse than one OS, but is unique and incomparable to other mobile operating systems.

Online bus ticket booking system is an application where the customer can book a ticket online and 24*7 hours a day from anyplace in the world. Customers can also interact with the ticket booking website to know any other details they want. Online ticket booking system has been developed successfully. System performance is also found to be satisfactory. This is a user-friendly application. Through this application, the cost can be

reduced and efficiency is increased. There are several procedures that can be selected by customers. With the help of this application customers can book tickets, can know the status of a bus, a Source station and destination can be chosen according to their choice, can select seats, can choose the and pay through the portal after reaching the station or airport. Thus, online ticket booking system target internal and external audiences. Online ticket booking system is very big to maintain but it always provides excellent facilities to accomplish the goal and help to reduce a complex paperwork process through a mobile application. This can be a benefit using online ticket booking system application rather searching on several websites. With the help of online ticket booking system records are maintained and the database is updated with time to time. Through Online ticket booking system, technologies and features have been introduced.

REFERENCES

[1] https://www.educative.io/answers/what-is-an-android-app
[2] https://www.techopedia.com/definition/25099/android-app
[3] https://www.javatpoint.com/software-engineering-incremental-model
[4] https://opentextbc.ca/projectmanagement/chapter/chapter-17-project-implementation-overview-project-management/#:~:text=The%20implementation%20phase%20involves%20putting,every%20step%20of%20the%20way.
[5] https://en.wikipedia.org/wiki/React_Native
[6] https://www.bacancytechnology.com/blog/why-use-react-native#:~:text=Besides%2C%20it%20also%20speeds%20up,deliver%20them%20across%20both%20platforms.
[7] https://fireart.studio/blog/flutter-vs-react-native-what-app-developers-should-know-about-cross-platform-mobile-development/#:~:text=React%20Native%20is%20easy%20to,relies%20on%20third%2Dparty%20libraries.
[8] https://www.guru99.com/software-testing-introduction-importance.html
[9] https://www.javatpoint.com/integration-testing#:~:text=Integration%20testing%20is%20the%20second,between%20integrated%20components%20or%20units.
[10] https://www.geeksforgeeks.org/software-engineering-software-maintenance/
[11] https://cpl.thalesgroup.com/software-monetization/four-types-of-software-maintenance
[12] https://www.javatpoint.com/software-project-planning
[13] https://www.techtarget.com/searchcio/definition/project-planning
[14]