MINI PROJECT REPORT

ON

KARNATAKA TOURISM

Submitted in partial fulfillment for the VI Semester, BE, Information Science & Engineering

Prescribed By:

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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2021-2022

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

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CERTIFICATE

Certified that the Mini Project entitled **KARNATAKA TOURISM** carried out by **RAKSHAK G D**, **1GA19IS044 and STHUTI J, 1GA19IS053** bonafide student of VI Semester, in partial fulfillment for the award of **Bachelor of Engineering** in **Information Science & Engineering,** of the Visvesvaraya Technological University, Belgaum, during the year **2021-2022**. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report. This seminar report has been approved as it satisfies the academic requirements for Mini Project (18CSMP68) prescribed for the said degree.

Signature of the Guide	Signature of the guide	Signature of the HOD
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Name of Examiners	Signature of Examiners
1._____	_____
2. _____	_____

DECLARATION

We the undersigned students of 6th semester, Department of Information Science and Engineering, Global academy of Technology, declare that the mini project entitled "**Karnataka Tourism"**, is a bonafide work of us and our project is neither a copy nor by any means a modification of any other engineering project.

We also declare that this mini project was not entitled for submission to any other university in the past and shall remain the only submission made and will not be submitted by us to any other university in the future.

Name	USN	Signature
Rakshak G D	**1GA19IS044**	**……**
Sthuti J	**1GA19IS053**	**……**

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible, whose constant guidance and encouragement crowned our effort with success.

We are grateful to our institution, **Global Academy of Technology**, with its ideals and inspirations for having provided us with the facilities, which has made this project a success.

We earnestly thank **Dr. Rana Pratap Reddy, Principal, Global Academy of Technology** for facilitating academic excellence in the college and providing us with the congenial environment to work in, that helped us in completing this project.

We wish to extend our profound thanks to **Dr. Kiran Y C, Prof. and Head, Department of Information Science & Engineering, GAT,** for giving us the consent to carry out this project.

We would like to express our sincere thanks to our guide **Prof. Dheeraj D, Assistant Professor, Department of Information Science & Engineering, GAT,** for her able guidance and valuable advice at every stage, which helped us in the successful completion of the project.

We would like to thank all the teaching and non-teaching staff for their valuable advice and support.

We would like to express our sincere thanks to our parents and friends for their support.

Sthuti J

Rakshak G D

ABSTRACT

Our generation relies mostly on phones to get through the day and its use have increased significantly in the past decade. All these devices use applications that are created for them. These applications can provide many different services including, social media, music streaming, video streaming, ride sharing, online shopping, and video games. Some of these apps need to be constantly connected to the internet to function properly, while others can work offline.

This system is a Karnataka Tourism Android Application built to understand RecyclerViewAdapter with CardView Layout. This provides the users with easy to understand and easy to get information about Karnataka tourist place and this application can be accessed by the user at anyplace and anytime. This Android application aspires to run efficiently.

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CHAPTER 1

INTRODUCTION

The advancement in technology has made our lives easy like never. Everything that we require is available at our fingertips. With a few taps on our smartphones, we can complete tasks in minimal time. From entertainment to learning and from fitness to tourist, there are various applications for everything that we need.

Mobile application development is the set of processes and procedures involved in writing software for small, wireless computing devices, such as smartphones and other hand-held devices. A mobile operating system is an operating system that helps to run other application software on mobile devices. It is the same kind of software as the famous computer operating systems like Linux and Windows, but now they are light and simple to some extent.

A mobile app or most known simply as an app refers to an application software that is created to be run on a mobile device such as, smartphone or tablets. Depending on the app it might need to be connected to the internet to work properly or it might be fully functional offline. The programming language that is used to develop a mobile differs based on the operating system that the app is going to work on. For example, apps running on an android phone are mostly written in Java, while apps running on iOS phones are written in Objective C or Swift.

Environment change is important for physical and mental well-being. It is more than just a primary factor for survival for some, for others, it is a major factor which can change a grumpy mood into frivolous one. After a long day of work, or a hectic schedule people want to plan to visit places and relax. To find a proper source of for planning a trip is difficult. With just a click of a button, you can get access to multiple places within a second. Each place provides you with all the information, from the place view to each step required to spend some good time. These applications are generally used by people who want to try to make some memories, or by people who live all by themselves.

This application is a simple user interface that allows the user to view different places in Karnataka based on different districts. This was built to understand RecyclerViewAdapter with CardView Layout.

CHAPTER 2

PROBLEM STATEMENT

Today "Tourism" concept has become very popular in the world. Regardless of age factor everyone, includes children to old age people loves exploring new places. Drawn to the idea of travelling We all have those times when we don't know what we could explore in Karnataka including the information about nature. Even if we do, we may not know about a new places that are near by. And to explore the beauty of the place.

Surely there are many good travel guide app which provide thousands of place, but a good application lacks a small feature that prevents it from making it a great application. There are few apps which give details about famous places but this app provides information about our native place.

Here, we have tried to include few places such as Madikeri, Hassan, Udupi and Chikmagaluru and these can be a guidance for the people who loves solo travelling too.

2.1 OBJECTIVE

Our aim is to help travellers to explore many good places with regards to their choice.

Some of the features include,

- Offline availability of place information.
- Attached Picture for each information.
- List of districts and place.
- Accurate information regarding the place and their culture.

CHAPTER 3

SOFTWARE REQUIREMENT AND ANALYSIS

The software requirement specification is produced at the culmination of the analysis task. The functions and performance allocated to software as part of the engineering system is refined by establishing a complete information description, a detailed functional and behavioural description, an indication of performance requirements and design constraints, appropriate validation criteria, and the other data pertinent to requirements.

Every project has its own specification with respect to the requirements and configurations. This maybe in the form of hardware and software requirements or functional and non-functional requirements.

3.1 HARDWARE REQUIREMENTS

WINDOWS

- 64-bit Microsoft® Windows® 8/10.
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD CPU with support for a Windows Hypervisor.
- 8 GB RAM or more.
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator).
- 1280 x 800 minimum screen resolution.

MAC

- MacOS® 10.14 (Mojave) or higher.
- ARM-based chips, or 2nd generation Intel Core or newer with support for Hypervisor Framework.
- 8 GB RAM or more.
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator).
- 1280 x 800 minimum screen resolution.

LINUX

- Any 64-bit Linux distribution that supports Gnome, KDE, or Unity DE; GNU C Library (glibc) 2.31 or later.
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD processor with support for AMD Virtualization (AMD-V) and SSSE3
- 8 GB RAM or more.
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution. **Mobile**

Requirements to Run Application

- Android OS 4.0 or above.
- 512MB RAM.
- Screen Size 3.5 inch or above.

The Android Emulator has additional requirements beyond the basic system requirements for Android Studio, which are described below:

- SDK Tools 26.1.1 or higher.
- 64-bit processor.
- Windows: CPU with UG (unrestricted guest) support.
- Intel Hardware Accelerated Execution Manager (HAXM) 6.2.1 or later (HAXM 7.2.0 or later recommended).

3.2 SOFTWARE REQUIREMNTS

1. Android Studio.
2. Android SDK.
3. Java Development Kit (JDK).

CHAPTER 4

DESIGN

Android RecyclerView and Android CardView got introduced in Android Lollipop with Material Design. For those who're not aware of Material Design, it's a comprehensive guide of UI Widgets introduced since Android 5.0, and it improves the visual appeal of the apps.

4.1 RECYCLERVIEW

Android RecyclerView is a more advanced, powerful, and flexible version of the ListView. Android RecyclerView is like ListView except that it forces us to use RecyclerView. ViewHolder class to hold the elements which is not a compulsion in ListView.

As the name suggests, Android RecyclerView is used to reuse cells when scrolling up and down by recycling the items in the list. Another improvement in RecyclerView is that it allows us to set the Layout Managers dynamically at runtime, unlike the ListView which was only available in a Vertical scrolling List. RecyclerView allows us to set the following types of Layouts at runtime.

- **LinearLayoutManager**: it supports both vertical and horizontal lists.
- **StaggeredLayoutManager**: it supports staggered lists.
- **GridLayoutManager**: it supports displaying grids as seen in GalleryView earlier.

Android RecyclerView Classes

- The **RecyclerView.ItemAnimator** class provides better support to animating the views unlike the ListViews.
- The **RecyclerView.ItemDecorator** class provides better support when it comes to adding borders and dividers thereby giving huge control to us.

Hence a RecyclerView is more customizable when compared to ListView and gives greater control to the users. The RecyclerView is available in the support library.

4.2 CARDVIEW

Android CardView UI component shows information inside cards. This component is generally used to show contact information. This component is available in another support library, so we must add its dependency too. The main usage of CardView is that it helps to give a rich feel and look to the UI design. This widget can be easily seen in many different Android Apps. CardView can be used for creating items in listview or inside Recycler View. The best part about CardView is that it extends Framelayout, and it can be displayed on all platforms of Android.

Android CardView widget allows us to control the background colour, shadow, corner radius, elevation etc. For using the custom attributes in XML, we need to add the following namespace declaration to the parent layout.

The important attributes used above are:

- **card_view:cardCornerRadius** : Used to set the corner radius in our layouts.
- **card_view:cardBackgroundColor** : Used to set the background color of the view.

CHAPTER 5

DETAILED DESCRIPTION

5.1 ANDROID STUDIO

Android Studio is an integrated development environment (IDE) for Google Android Operating System. It is built based on JetBrains' IntelliJ IDEA Community Edition, and it specifically designed for creating applications on Android devices. Some of the key features of Android Studio are as follows:

1. **Instant Run** – a feature that pushes code and resource changes to the running app. It allows changes to be made to the app without the need to restart the app, or rebuilding the APK, so that the effects can be seen instantly.

2. **An Emulator** – a virtual android device that can simulate variety of hardware features such as GPS location, network latency, motion sensors, and multi-touch input that can be used to run and install the app. It can then be used for testing purposes.

3. **Testing Tools and Frameworks** – extensive testing tools such as, JUnit 4 and functional UI test frameworks are included with Android Studio. Espresso Test Recorder can generate UI test code by recording the developer's interactions with the app on a device or emulator. The tests can be run on a device, an emulator, in Firebase Test Lab, or on a continuous integration environment.

5.2 JAVA PROGRAMMING LANGUAGE

Java is an object-oriented programming language created by James Gosling, Mike Sheridan, and Patrick Naughton in 1991. It is designed to be simple enough that many programmers can achieve fluency in the language. The Java programming language is related to C and C++ but is organized rather differently, with several aspects of C and C++ omitted and a few ideas from other languages included. It is intended to be a production language, not a research language. Java is a very flexible programming language which is used to create many different types of applications for many different operating systems. This is possible because Java can be run on any operating system if the Java Runtime Environment is available. The application created for Android devices must be coded using Java programming language. This allows these apps to work on variety of different devices, no matter the company that has manufactured the device.

The Java Development Kit (JDK) is a software development environment used for developing Java applications and applets. It includes the Java Runtime Environment (JRE), an interpreter/loader (Java), a compiler (javac), an archiver (jar), a documentation generator (Javadoc) and other tools needed in Java development. **JSON** (JavaScript Object Notation) is a programming language. It is minimal, textual, and a subset of JavaScript. It is an alternative to XML.

Note: JDK is only used by Java Developers.

5.3 XML

XML or Extensible Markup Language is a text language that can be used to describe the behaviour of programming languages that process them. XML was developed XML working group in 1996. According to World Wide Web Consortium there are ten design goals for XML. These design goals are:

1. XML shall be straightforwardly usable over the Internet.
2. XML shall support a wide variety of applications.
3. XML shall be compatible with SGML.
4. It shall be easy to write programs which process XML documents.
5. The number of optional features in XML is to be kept to the absolute minimum, ideally zero.
6. XML documents should be human-legible and reasonably clear.
7. The XML design should be prepared quickly.
8. The design of XML shall be formal and concise.
9. XML documents shall be easy to create.
10. Terseness in XML markup is of minimal importance.

XML is used when transferring data from the database to the client, and in designing the visual aspect of Android applications. When data is sent from the database, it is sent using XML. This allows the data to be processed by any programming language the same way, since the data is always sent using XML. As mentioned, XML is also used to design the user interface of Android applications. This means that all the visual aspects such as, the layout of the page, the position of all button and text fields, as well

as the colour of anything on the page is specified using XML. Since XML is human-legible, it makes the process of designing a page in the app relatively easy and intuitive.

5.4 OUR APPLICATION DESIGN

The app houses a few places integrated within the app itself, which the user can access anytime. The place details are available completely offline and for free. When the app is opened/launched, the landing page would be the list districts. It will be in a CardView layout where the picture of the place along with its name will be visible. The list of places is in the order of districts mainly such as Madikeri, Hassan Chikmagaluru and finally Udupi When you click on a particular recipe, the next/landing page would contain the details of the places for which it that district is famous for.

5.4.1 RECYCLERVIEW

```
public class home extends AppCompatActivity {

   Button button, button2, button3, button4;

   @Override

   protected void onCreate(Bundle savedInstanceState) {

      super.onCreate(savedInstanceState);

      setContentView(R.layout.activity_home);

      button=(Button)findViewById(R.id.button);

      button.setOnClickListener(new View.OnClickListener() {

         @Override

         public void onClick(View view) {

            func1();

         }
```

```
    });
    button2=(Button)findViewById(R.id.button2);
    button2.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            func2();
        }
    });
    button3=(Button)findViewById(R.id.button3);
    button3.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            func3();
        }
    });
    button4=(Button)findViewById(R.id.button4);
    button4.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {func4() }
    }); }
  public void func1() {
```

```
        Intent intent = new Intent(this, Madikeri.class);
        startActivity(intent);
    }
    public void func2() {
        Intent intent1 = new Intent(this, Hassan.class);
        startActivity(intent1);
    }
    public void func3() {
        Intent intent3 = new Intent(this, chikmagaluru.class);
        startActivity(intent3);
        }
        public void func4() {
            Intent intent4 = new Intent(this, udupi.class);
            startActivity(intent4);
           }
 }
```

5.4.2 CARDVIEW

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Madikeri">
```

```
<ImageView
   android:id="@+id/imageView2"
   android:layout_width="414dp"
   android:layout_height="224dp"
   android:layout_marginTop="20dp"
   app:layout_constraintEnd_toEndOf="parent"
   app:layout_constraintHorizontal_bias="0.666"
   app:layout_constraintStart_toStartOf="parent"
   app:layout_constraintTop_toBottomOf="@+id/textView4"
   app:srcCompat="@drawable/madikeri_cover" />

<TextView
   android:id="@+id/textView4"
   android:layout_width="369dp"
   android:layout_height="78dp"
   android:layout_marginTop="48dp"
   android:fontFamily="cursive"
   android:includeFontPadding="true"
   android:text="Welcome To Kashmir Of Karnataka"
   android:textSize="34sp"
   app:layout_constraintEnd_toEndOf="parent"
   app:layout_constraintHorizontal_bias="0.38"
   app:layout_constraintStart_toStartOf="parent"
   app:layout_constraintTop_toTopOf="parent" />

<Button
   android:id="@+id/button6"
   android:layout_width="176dp"
   android:layout_height="54dp"
   android:layout_marginStart="16dp"
   android:layout_marginTop="64dp"
   android:text="mandallpatti"
   app:layout_constraintStart_toStartOf="parent"
   app:layout_constraintTop_toBottomOf="@+id/imageView2" />

<Button
   android:id="@+id/button7"
   android:layout_width="149dp"
   android:layout_height="51dp"
   android:layout_marginStart="16dp"
   android:layout_marginTop="36dp"
   android:text="abbey falls"
   app:layout_constraintStart_toStartOf="parent"
   app:layout_constraintTop_toBottomOf="@+id/button6" />

<Button
   android:id="@+id/button9"
   android:layout_width="165dp"
   android:layout_height="56dp"
```

```
    android:layout_marginStart="245dp"
    android:layout_marginTop="64dp"
    android:layout_marginEnd="36dp"
    android:text="golden temple"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.607"
    app:layout_constraintStart_toStartOf="@+id/button6"
    app:layout_constraintTop_toBottomOf="@+id/imageView2" />

  <Button
    android:id="@+id/button10"
    android:layout_width="155dp"
    android:layout_height="54dp"
    android:layout_marginTop="36dp"
    android:layout_marginEnd="16dp"
    android:text="raja seat"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/button9" />

  <Button
    android:id="@+id/button11"
    android:layout_width="155dp"
    android:layout_height="52dp"
    android:layout_marginTop="24dp"
    android:layout_marginEnd="128dp"
    android:text="irrupu falls"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/button10" />

</androidx.constraintlayout.widget.ConstraintLayout>
```


6:44
Karnataka Tourism
KARNATAKA
TOURISM
NEXT

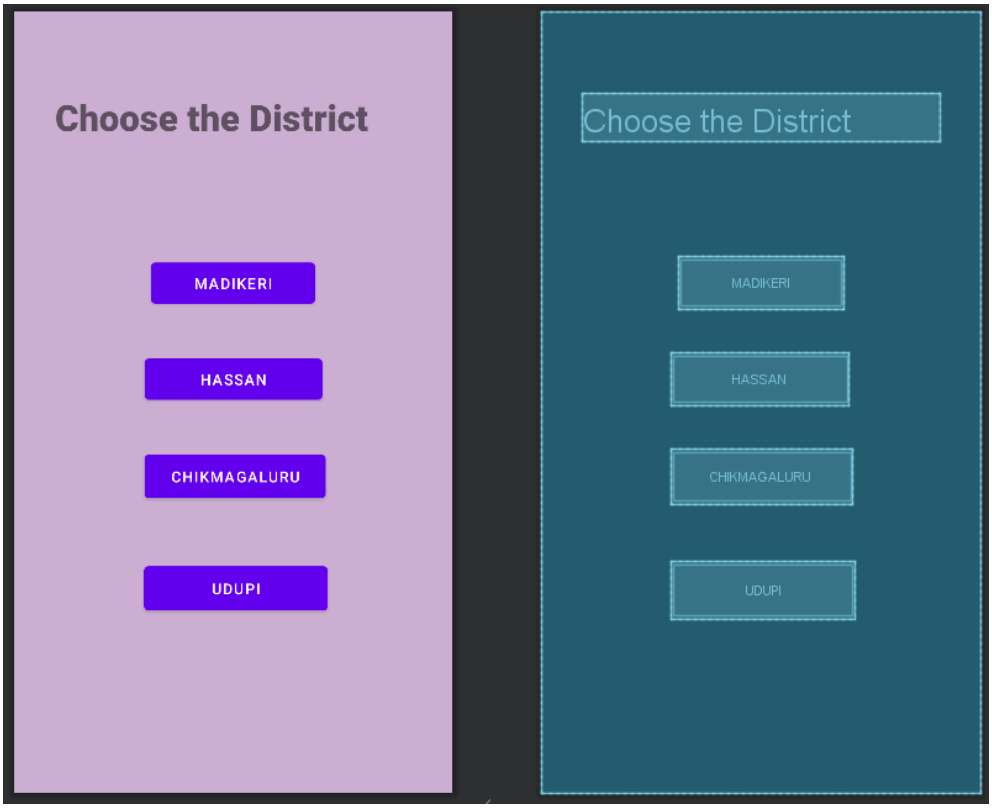


Figure 1: CardView

CHAPTER 6

RESULTS

The result contains few of the snapshots of the project.

6.1 LANDING PAGE

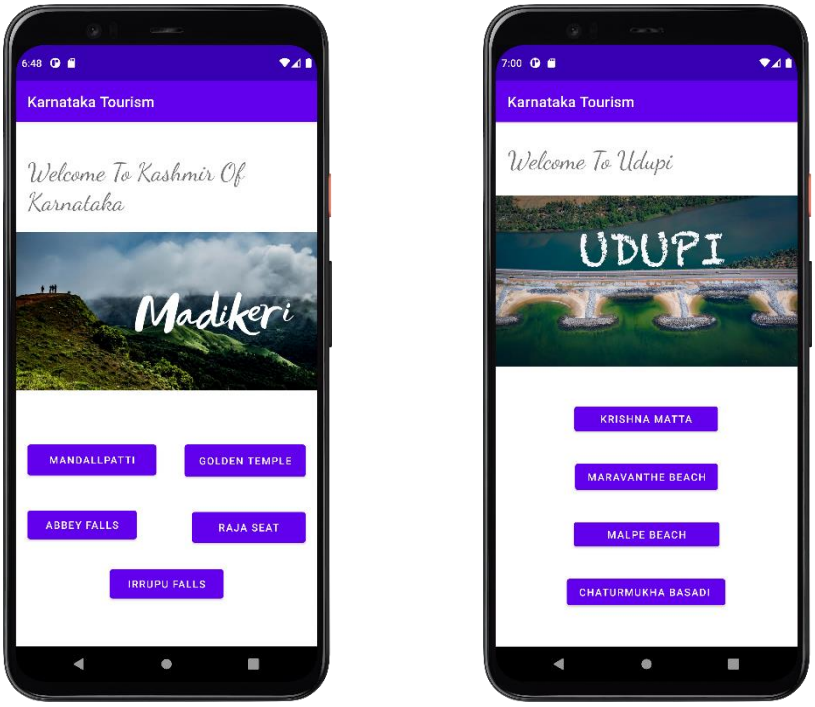


Figure 2: Landing Page

6.2 LIST OF PLACES WITH DETAIL INFORMATION

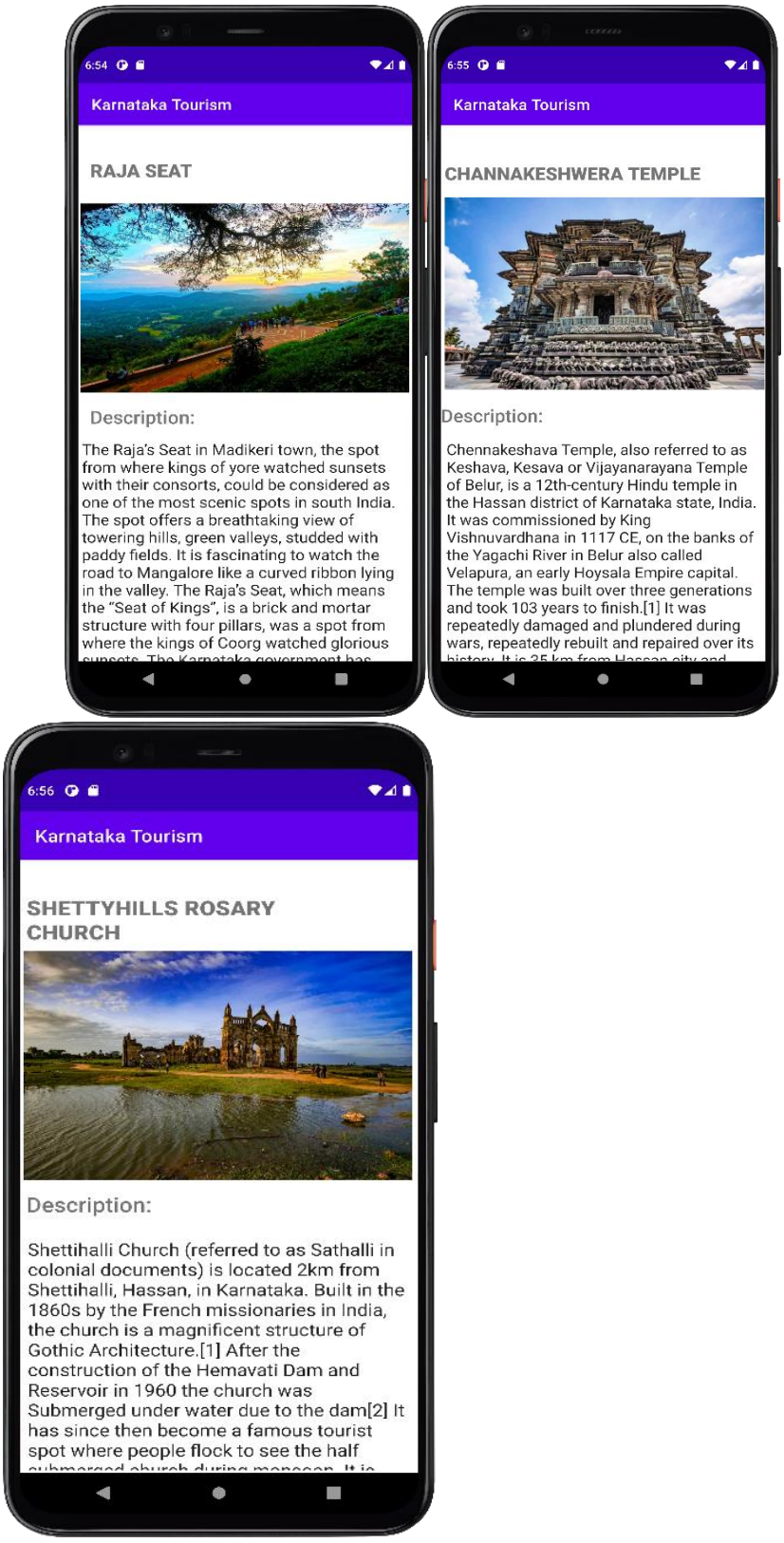


Figure 3: List of places

6.3 LIST OF PLACES

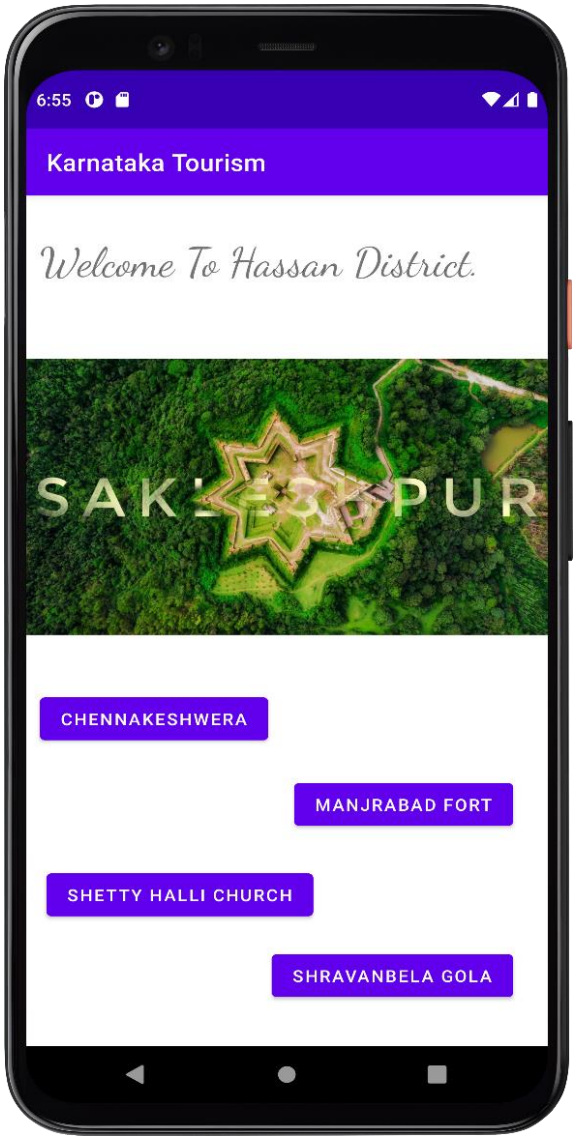


Figure 4: List of Places (Hassan)

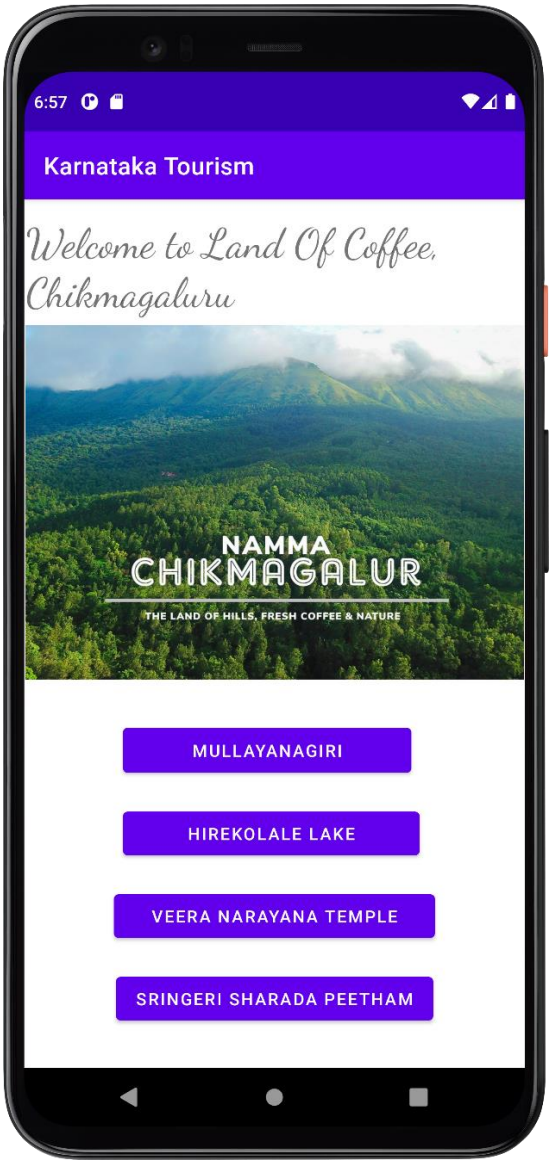


Figure 5: List of Places (Chikmagaluru)

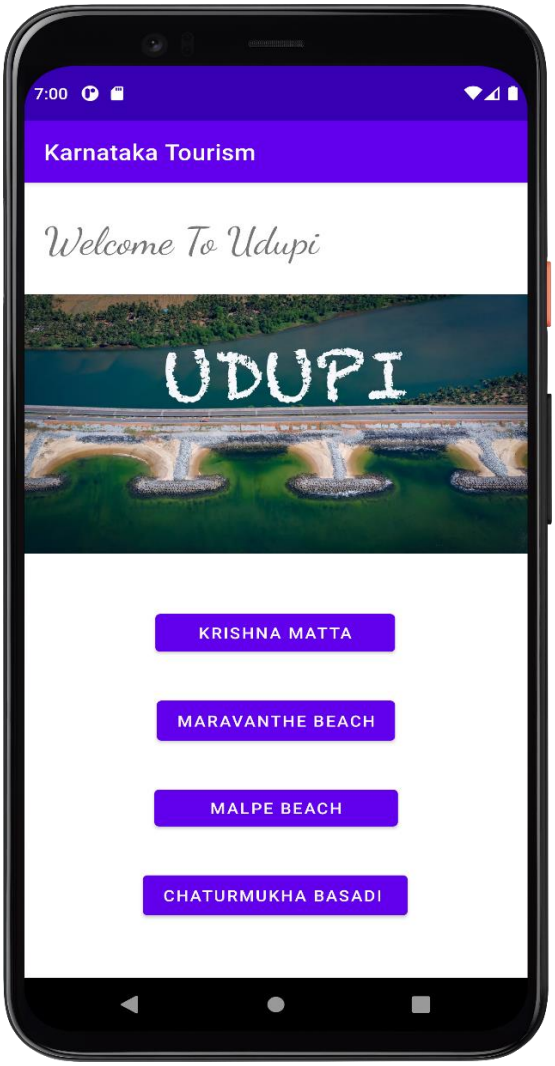
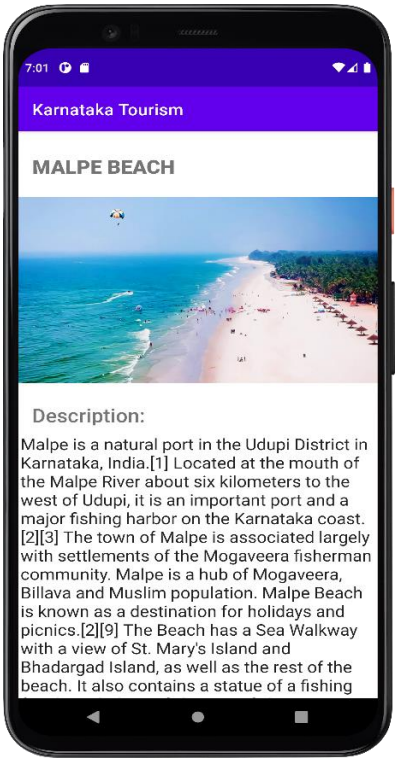
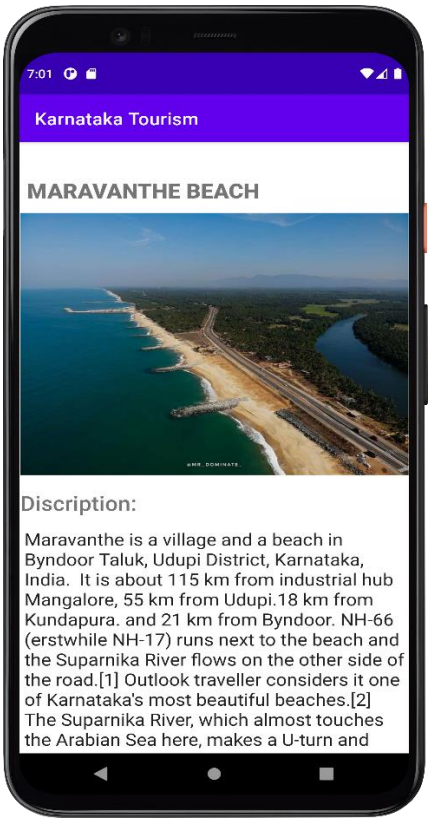
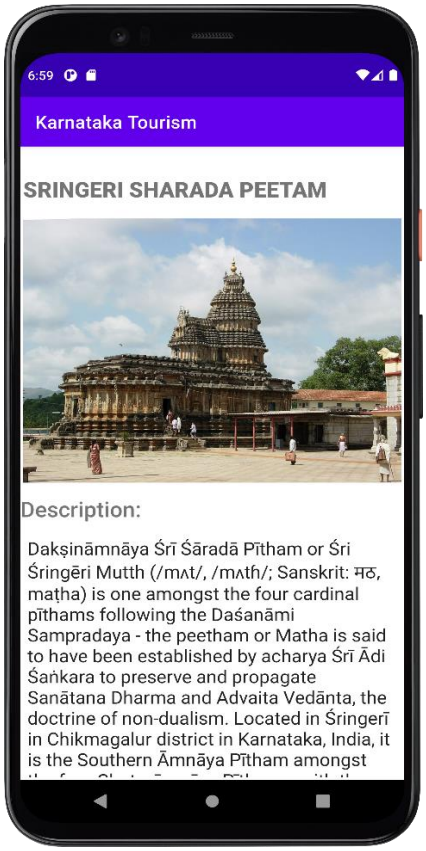


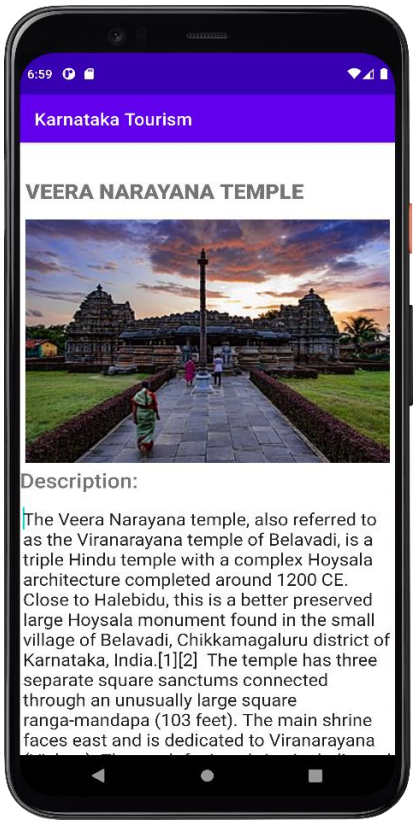
Figure 6: List of Places (Udupi)

6.5 Places with its Discription






6:59
Karnataka Tourism
SRINGERI SHARADA PEETAM
Description:
Dakṣināmnāya Śrī Śāradā Pītham or Śri Śringēri Mutth (/mʌt/, /mʌtʰ/; Sanskrit: मठ, maṭha) is one amongst the four cardinal pīthams following the Daśanāmi Sampradaya - the peetham or Matha is said to have been established by acharya Śrī Ādi Śaṅkara to preserve and propagate Sanātana Dharma and Advaita Vedānta, the doctrine of non-dualism. Located in Śringerī in Chikmagalur district in Karnataka, India, it is the Southern Āmnāya Pītham amongst


6:59
Karnataka Tourism
VEERA NARAYANA TEMPLE
Description:
The Veera Narayana temple, also referred to as the Viranarayana temple of Belavadi, is a triple Hindu temple with a complex Hoysala architecture completed around 1200 CE. Close to Halebidu, this is a better preserved large Hoysala monument found in the small village of Belavadi, Chikkamagaluru district of Karnataka, India.[1][2] The temple has three separate square sanctums connected through an unusually large square ranga-mandapa (103 feet). The main shrine faces east and is dedicated to Viranarayana

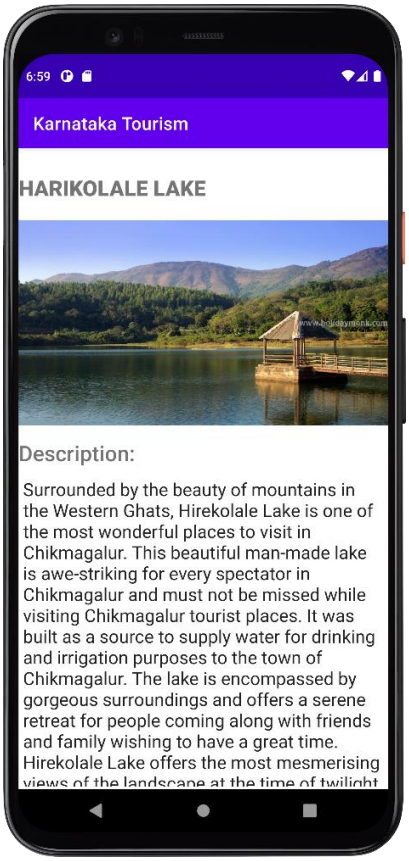


Figure 7: Places with its Discription

CHAPTER 7

FUTURE ENHANCEMENTS

This project was developed to allow users to view food recipes using an intuitive and simple to use mobile application. It supports users using android devices with 3.0 and upwards only. Features like sharing recipes, quick access to favourite places, with its detailed information are expected in the future.

A feature that we would like to implement in the app is a user system. This system would allow the users to create an account using an email address. This would then allow the recipes to be added only by the register users, instead of anyone using the app. In the end, the final goal of this mobile application is to provide a platform that allows anyone to share and good travel guidence conveniently. And implement this app on IOS, improve graphical user interface.

Another feature that we would like to integrate is a shopping list and google maps feature of the nearby shop for user's convenience.

CHAPTER 8

CONCLUSION

Android as a full, open, and free mobile device platform, with its powerful function and good user experience rapidly developed into the most popular mobile operating system. This report gives an overview of the different challenges and issues faced in android app development. The experience of developing an android app is quite challenging, motivating as well as satisfying. This Application is a simple tourism app which contains few places along with the pictures and discription.

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