Introduction

This project is based on Android App Development. Android. Android is a mobile operating system (OS) developed by Google.Android currently holds 84.82% of the global market share and is a very promising and vast expanding area.

"Bon APPetit" is a simple Restaurant App which has been made by implementing some of the basic concepts in the area of mobile app development.

This project has been made using Android Studio IDE, which is the official IDE for Google's Android Operating System.

OBJECTIVE:

To connect the customers and to provide a platform for acquiring information about the restaurant and its food.The app is very user friendly and has all the basic features a simple Android application has and is fully equipped with its own database for storing customers' information.

FUNCTIONALITIES :

1. Welcome Page: This is the first page of the app which has three options of Signing up(for new users) , Logging in(for existing users) and an option of visiting the homepage directly without signing in.

2. Sign Up Page: This page is linked with SQLite. Here the user needs to enter his user-name which is the unique key and then has to enter his password and confirm it.An appropriate message is shown when the password and confirm password fields do not match..After successful registration the user is directed to Homepage.

3. Log In Page: This page is for existing users.After successful login the user is directed to Homepage.

4.Homepage: This page contains a clickable spinner whose drop down menu shows the various cuisines available at the restaurant.Clicking on a particular field takes the user to the Menu Page of that type of cuisine.Here there are 4 types of cuisines and thus there are 4 different pages for each of them.

5. Menu-page: This page shows the different food items available for the respective type of cuisine.There are four pages and each of them have a common button that takes the user to the Order Now page.

6. **Order Now page:** This page has 3 options of calling the Restaurant , giving them feedback and getting their directions.
The "call us" button directly accesses the calling feature and calls the restaurant directly.
The "Get Directions" button shows the location of the restaurant on Google Maps.
The "Rate Us" button takes the user to a page where there is a Rating Bar for the user to rate the food.On submitting it an appropriate toast message is displayed and the user is directed back to the Home Page.

TOOLS USED:

This app has been made on Android Studio which is Google's official Android Development IDE.
The basic widgets such as Text View, Image View, Button, Password, Spinner, Rating Bar, Web View, Alert Dialog Box have been used.
Appropriate "Toast" messages have been used at every step to make the app more user-friendly.
User data is stored in database using SQLite.
The app also has a Google map of the place included whose code has been written in HTML.

SYSTEM CONFIGURATION:

This is an Android app for a restaurant where the user can navigate between the various pages and check out the menu.the user can register and login by using his unique user name and password.User data is stored in database using SQLite.

Hardware requirements:

For development:

Processor	Intel I7(7th Gen)
RAM	8GB (or more)
Storage(Hard Drive)	1TB HDD(or more)

For running the app (Minimum Requirements):

Device	Any Android smartphone
RAM	2GB RAM(or more)
Storage	8GB (or more)

Software specifications:

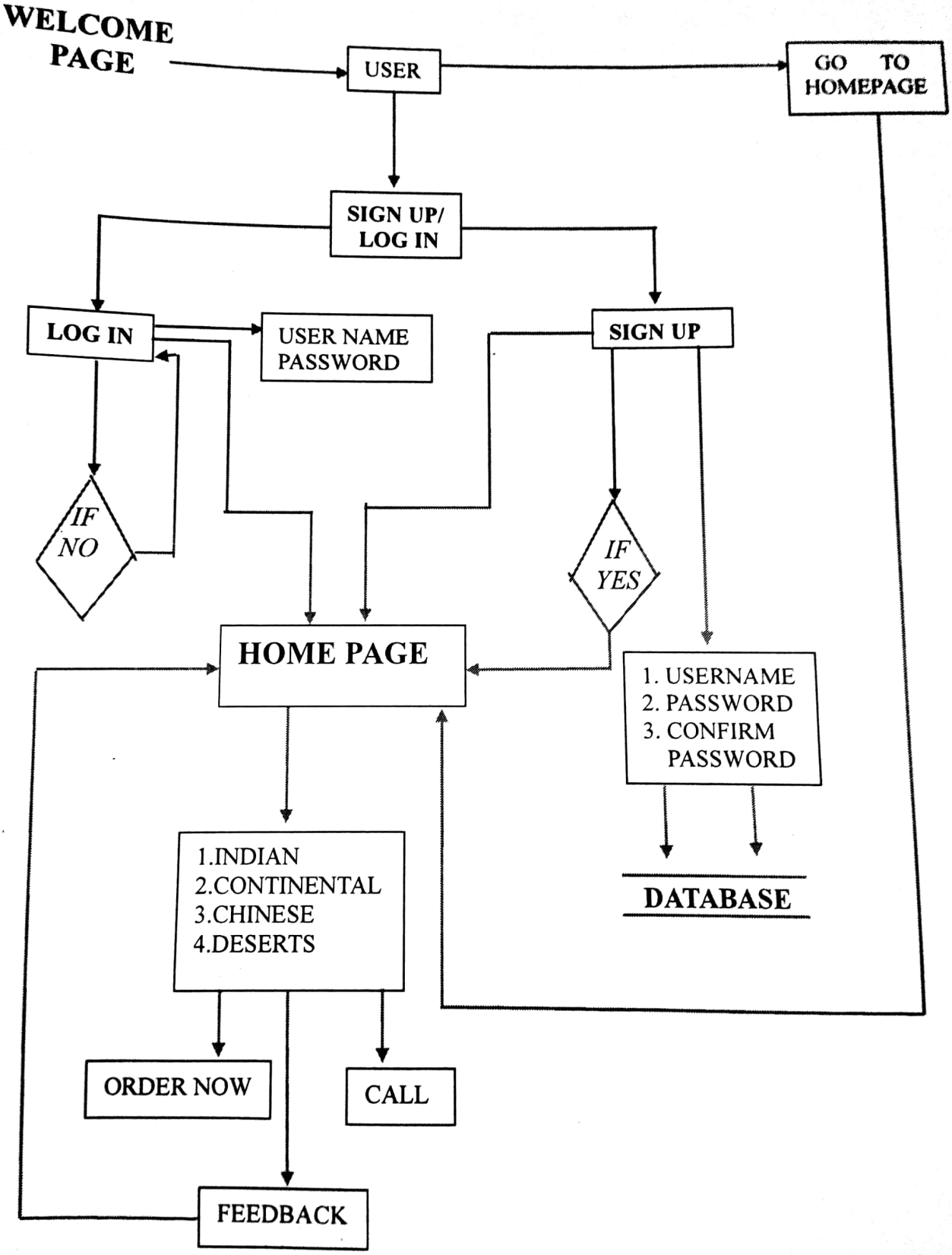
For development:

Operating System	Windows 10
Working IDE	Android Studio Version 3.0.1
Virtual Device(for testing the app)	Nexus 4 API 22 Virtual Device
Database	SQLite
Working IDE for Front End	Notepad++ Version 7.5.3
Front End	HTML
Scripts	JavaScript
Language used	JAVA

For running the app (Minimum Requirements):

Operating System	Android 4.0 (Ice-Cream Sandwich)

DATA FLOW DIAGRAM (DFD):



CODING:

Coding has been done in JAVA. For each page of the app, a java class and an XML file for the layout.The java class is where the necessary coding is done for the working of the widgets used in a given page.

CONCLUSION:

I have integrated different platforms, from SQLite to HTML to create a unique but simple Restaurant App. I have tried to make the app as user-friendly as possible.It has all the basic features of any simple Android app.I have included a database for storing user's information.Appropriate toast messages have been used.

REFERENCES:

I am highly obliged to Mr. Mourya Bhattacharyya , Ms. Indrani Chakrabarty and Ms. Payal Dasgupta.

I also referred to the following sites:

https://www.udemy.com/java-android-complete-guide/

https://developer.android.com/guide/topics/ui/dialogs.html

http://www.java2s.com/Code/Android/UI/DisableandenableSpinner.htm