

TRAVEL ASSISTANT APP

A complete travel guide, Travel destinations, hotels and more

### **TEAM MEMBERS:**

- Muhammed Musthafa Shahal V
- Mohammed Saif
- Anoos M
- Athul C P
- Ahammed Shaheedhudheen

### INTRODUCTION

The number of people who take travelling seriously has been increasing for the past few years. If we reckon with people from India we can see a tremendous change in the realm of globetrotting. People are exploring different strategies for travelling, they are riding their motorcycles, hitchhiking, some of them even go to the extremes like walking and cycling. They are expected to face many difficulties this voyage. We have developed EasyGo as a solution for their struggles.

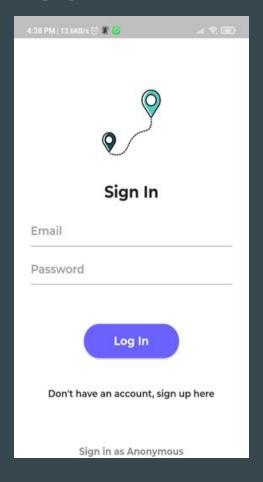
## FRONT END

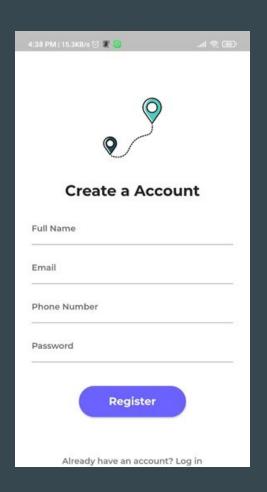
- Flutter SDK
- Dart Language
- Flutter Widgets

## **BACK END:**

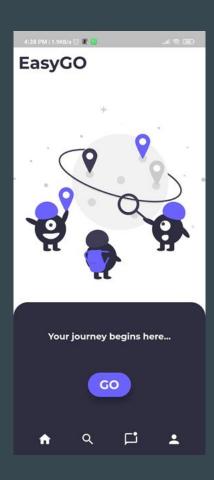
- Firebase
- Maps API
- Places API
- Autocomplete API
- Dialogflow

### **LOGIN SCREEN:**

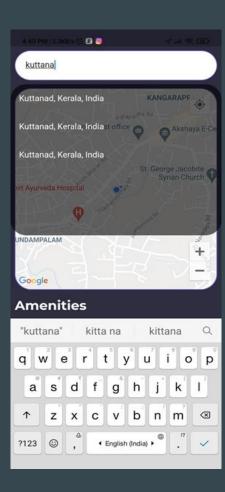




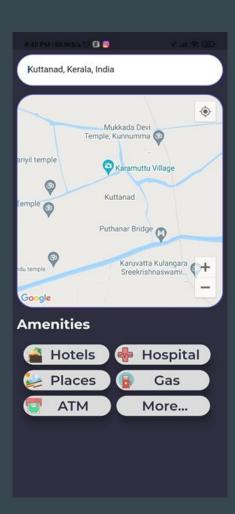
## **HOME SCREEN:**



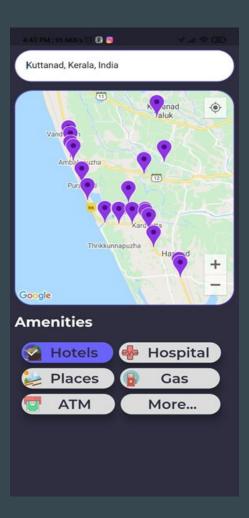
## **SEARCH AUTOCOMPLETE:**



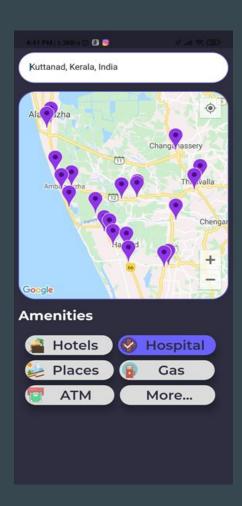
## **SEARCH LOCATION VIEWER:**



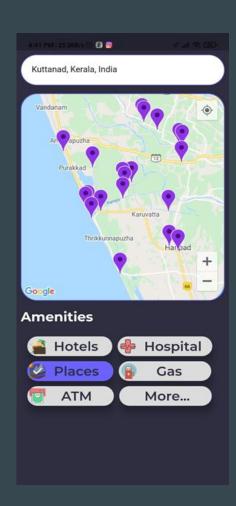
## **HOTELS**:



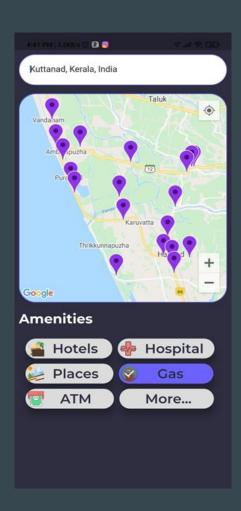
## **HOSPITALS**:



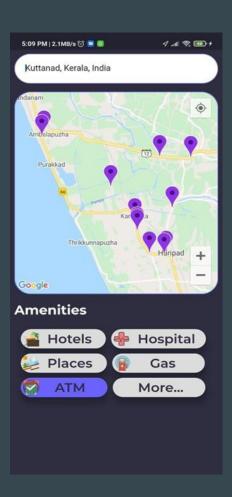
## PLACES:



## **GAS STATIONS:**



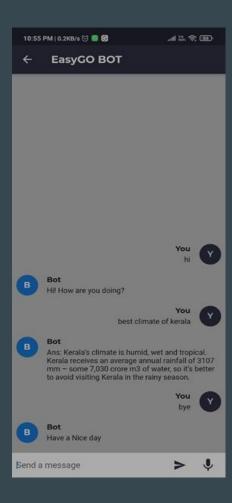
## ATMS:



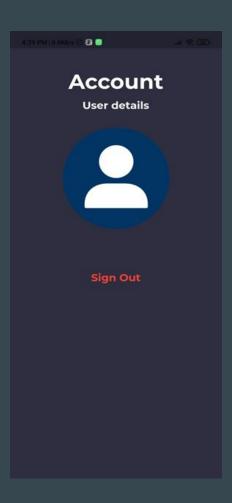
## **AMENITY DETAILS:**



## **CHATBOT**:

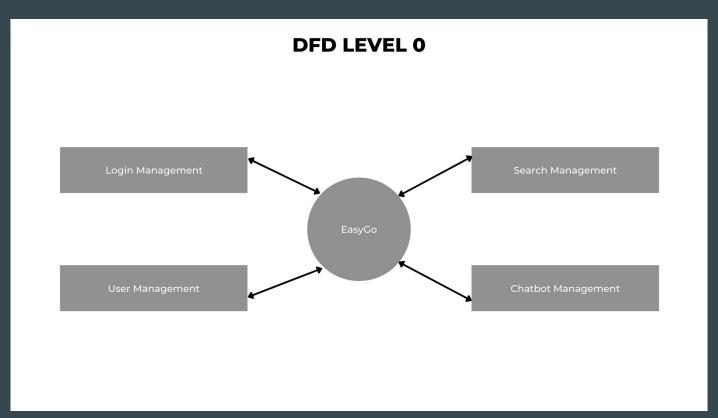


## **ACCOUNT SCREEN:**

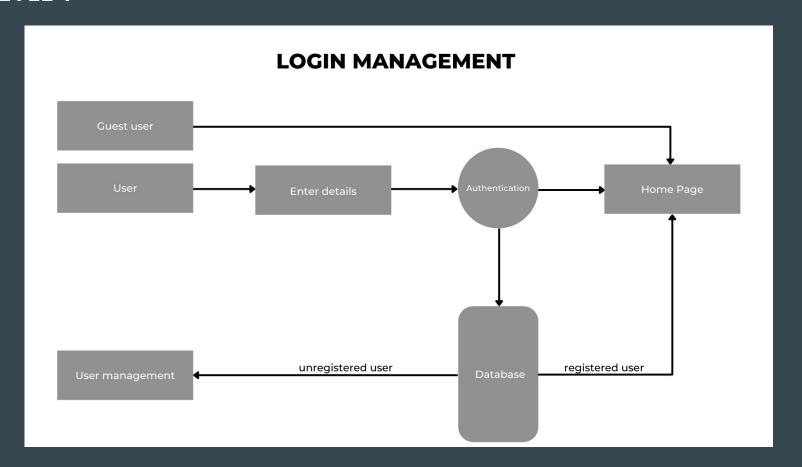


## DFD

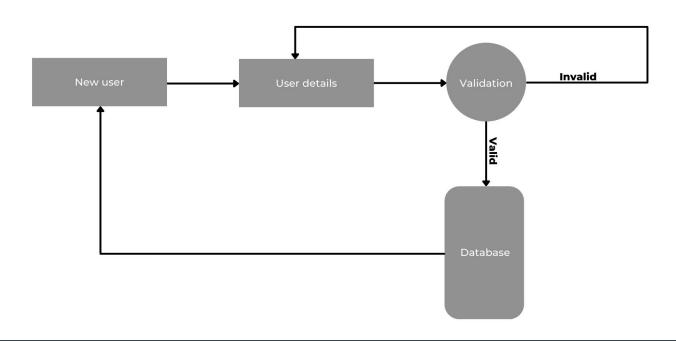
### **DFD LEVEL 0:**



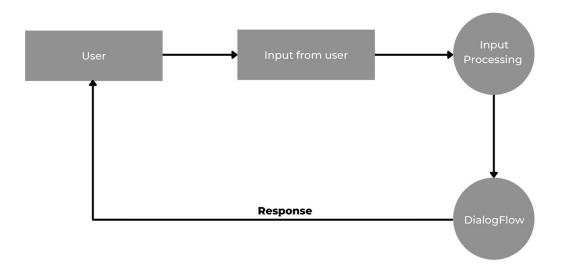
### DFD LEVEL 1:



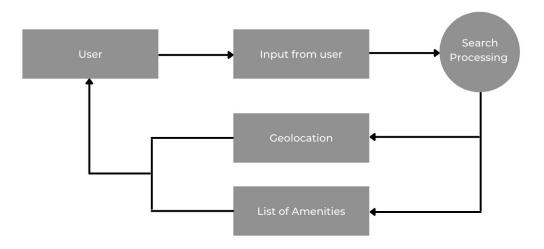
#### **USER MANAGEMENT**



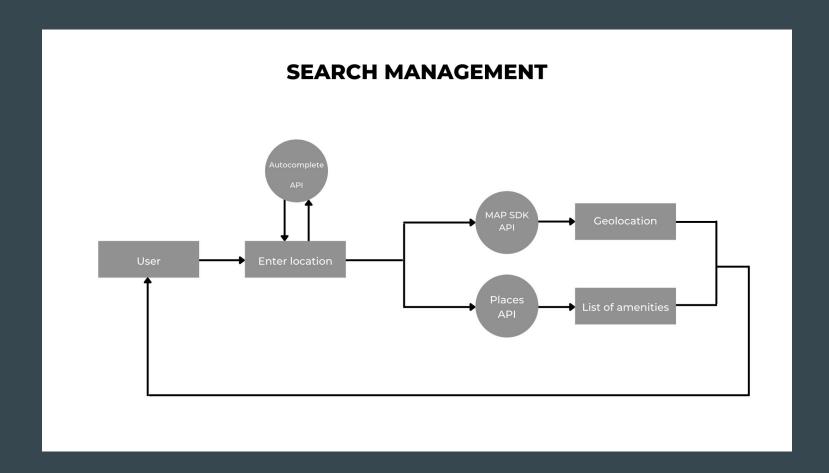
#### **CHATBOT MANAGEMENT**



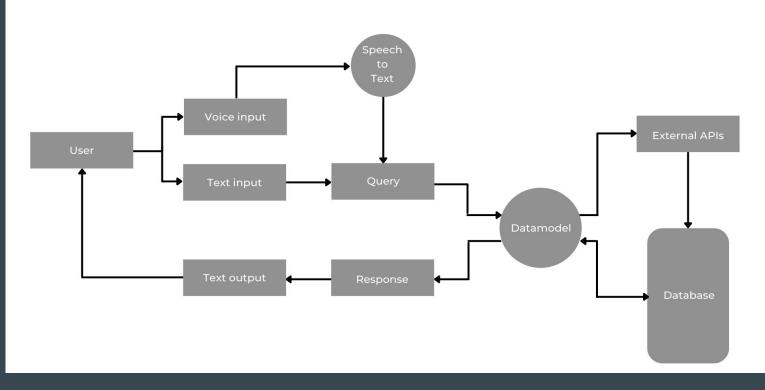
#### **SEARCH MANAGEMENT**



### DFD LEVEL 2:



#### **CHATBOT MANAGEMENT**



### **ALGORITHM**

**Step 1:** Start

**Step 2:** Load the user login Screen

**Step 3: If** the user already have account then

Load the login screen prompting user to enter email and password

If email and password are verified then Load the home

screen

Else

Show an error message "could not sign in with those credentials"

Else If user wants to create account

Load the sign up screen prompting user to enter the details such as name, email, phone number and password

**If** all credentials are satisfied Load the home screen

Else

Show error message

Else

User can login as anonymous getting a temporary UserId

Load the home screen

#### **Step 4: While** user is logged in Input option chosen as ch **Switch**(ch)

#### Case 1:

Search Option (selects the search option from home screen) Directed to place search screen where map is displayed By default user's current location is displayed, When user prompts to search a location, autocomplete suggestions are given as a list below the text field,

When user selects a location, it is shown in the map

While the selected location is displayed in map Input option is chosen as am

#### Switch(am)

Case 1.1: Hotels Option( selects the hotel option from the amenities menu

Hotels nearby the searched location is displayed as different markers on the map

**If** any marker is selected Shows the name of the hotel

**If** the name of the hotel is selected again Shows the details of selected hotel - address and rating

Case 1.2: Hospitals Option( selects the hospital option from the amenities menu

Hospitals nearby the searched location is displayed as

different markers on the map

**If** any marker is selected

Shows the name of the hospital

**If** the name of the hospital is selected again

Shows the details of selected hospital - address and rating

Case 1.3: Places Option( selects the places option from the amenities menu places nearby the searched location is displayed as different markers on the map

If any marker is selected

Shows the name of the place

If the name of the place is selected again

Shows the details of selected place - address and

Gas stations nearby the searched location is displayed as

**Case 1.4**: Gas Option( selects the gas option from the amenities menu

rating

different markers on the map

**If** any marker is selected

**If** the name of the gas station is selected again

Shows the name of the gas station

Shows the details of selected gas station - address and rating **Case 1.5**: ATM Option( selects the ATM option from the amenities menu ATMs nearby the searched location is displayed as different markers on the map

**If** any marker is selected

Shows the name of the ATM

**If** the name of the gas station is selected again

Shows the details of selected ATM- address and rating

**Case 2**: ChatBot Option( selects the chatbot option from home screen ) Directed to the chatbot screen

If user sends a message by keyboard Chatbot responds to the question

Else If user sends message by voice

Voice is converted to text using AI, Converted text is

send to bot, chat bot responds to the question

Else

Chatbot remains idle

**Case 3**: Account option( selects the account option from home screen )Directed to the accounts page

**If** user selects signout

Sign Out the user session, Direct to login screen

Step 5: End

#### CHATBOT ALGORITHM

Step 1: Start

**Step 2**: A user sends a text/voice message to App

**Step 3**: **If** user sends voice it converted to text

**Step 4**: The App transfers the message to Dialogflow

**Step 5**: The Message is categorized and matched to a corresponding intent (intents are defined manually by developers of Dialogflow)

**Step 6**: We define the following actions for each intent in the fulfillment (Webhook).

**Step 7**: When a certain intent is found by Dialogflow, the webhook will use external APIs to find a response in external database

**Step 8**: The external Database send back the required information to the webhook

**Step 9**: Webhook sends formatted response to the intent

**Step 10**: intent generates actionable data according to different channels

Step 11: The actionable data go to output App

**Step 12**: The user gets a text response.

**Step 13** : End

### CONCLUSION

The main role of this application is to provide all kinds of information and basic needs to the user. The application is successful in

- The interfaces implied in the application are user friendly and easy to understand.
- The application has been designed in a manner to help the user with the specified needs in a travel.
- The application is effective and efficient

The system gives good results in the testing phase and the functioning of the application is quite simple and in regular order.

Any person can use this application for their assistance in their travel and can use the application efficiently

The application also has an extensibility feature that enables its updating to provide an upgrade in the abilities of the application.

# THANK YOU