GitHub Username: pstuashiqcse

Ghurbo - Let's Travel

Description

Ghurbo (Spell:Ghurabō , 'ঘুরবো ' in [bengali](#) language, 'I want to travel' in english) - Let's Travel, for people travelling in [Bangladesh](#) or outside from Bangladesh. Using Ghurbo one can book the ideal deals for any hotels and tour packages. Here we make travelling exquisite for all. It aims to significantly handle various problems faced by many travelers in Bangladesh. Using the inventory of hotels and tour packages, Ghurbo works as a virtual travel manager, facilitating for travel search, compare and book. Furthermore, using the Ghurbo search feature, users can even create their own travel plan.

Particularly Ghurbo focus on hotel search and booking in any desired region inside the . It allows searching hotel with location/hotel name, check in-out time and number of persons wants to stay. In an initial list, a list of hotels will be visible. Direct booking is also available here through the application.

Also, user can search for tour packages using this application. User can search tour package by location, type (Couple, Holidays etc), date and number of person wants to travel.

The application has a sign-in option to rate and review the service that means Ghurbo provide personalized feedback about hotels and packages which helps a lot to take decision.
App also allow user to chat with travel agents through facebook messenger bot. It helps users a lot by providing personalized guideline as a virtual travel assistant.

Intended User

Any people can be an user of Ghurbo, specially who travels a lot and move across this region. Foreign travellers are a big user group. Also we want to encourage and engage people through the application as most of the people wants to travel but they merely have authentic information and guidance.

Features

- Search hotels with following search query parameters
  - Location or Hotel name
  - Check-in time
  - Check-out time
  - Number of adults
  - Number of childs

- Search tour packages with following query parameters
  - Location
  - Type (i.e: Couple, holidays etc)
  - Date
  - Number of persons
- Sign in using username-password, facebook and google
- Show search result page for Hotel and Tour package search
- Show details page of a Hotel or Tour package
- Book hotel and tour packages
- Invoke Ghurbo facebook messenger bot for personalized guidance.

User Interface Mocks

Screen 1
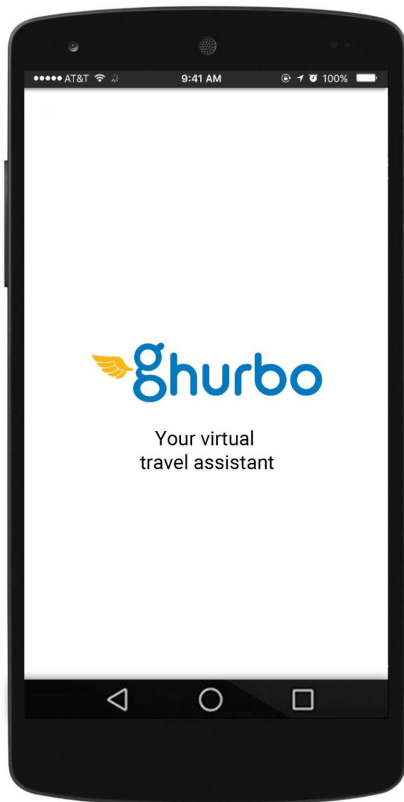

This is the splash screen of the application. Also the app will validate user registration in this page. If the app has been invoked for the first time then the registration page will be invoked. If user already registered or skipped registration previously then homepage will be invoked automatically. User will experience 2.5 sec delay in this page as this is a splash screen.

Screen 2
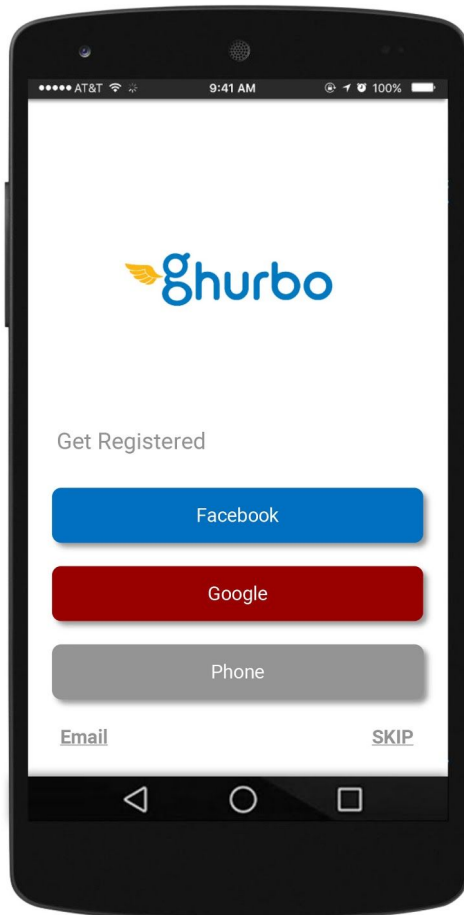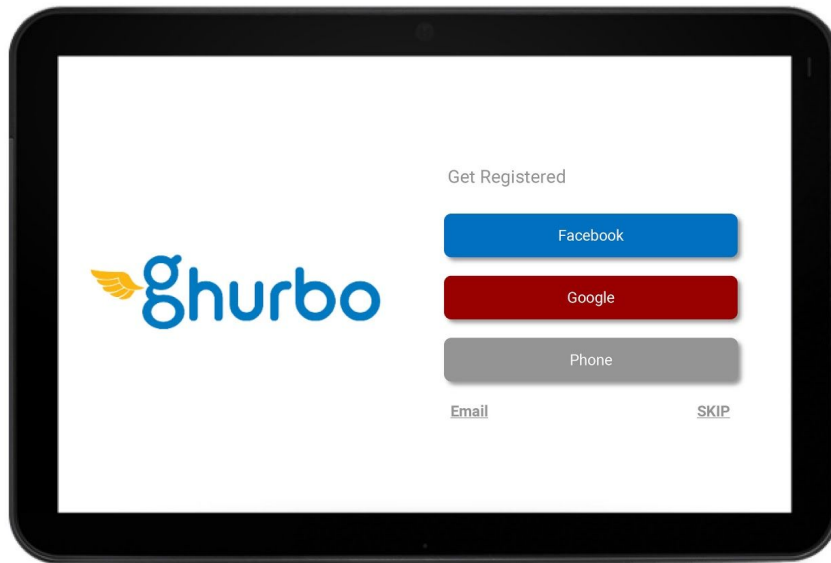
This is pretty much straightforward login page. User can login through facebook, google, phone number or email. There is also a skip functionality to skip out the login process.
If user skips this step, registration stage will be invoked again once user attempt to book hotel or tour package later.

Screen 3
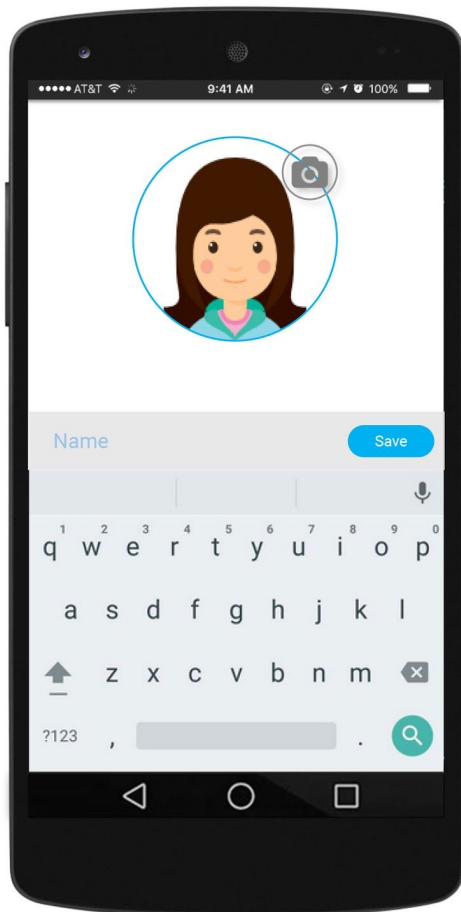
This is the profile page. Image and name will be placed automatically if user registered through social media or user has been registered previously. User can change image and name in this page.

Screen 4
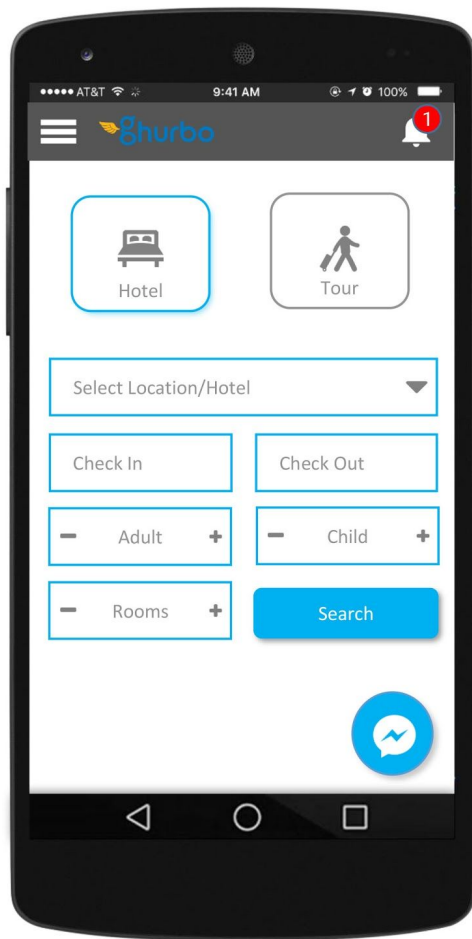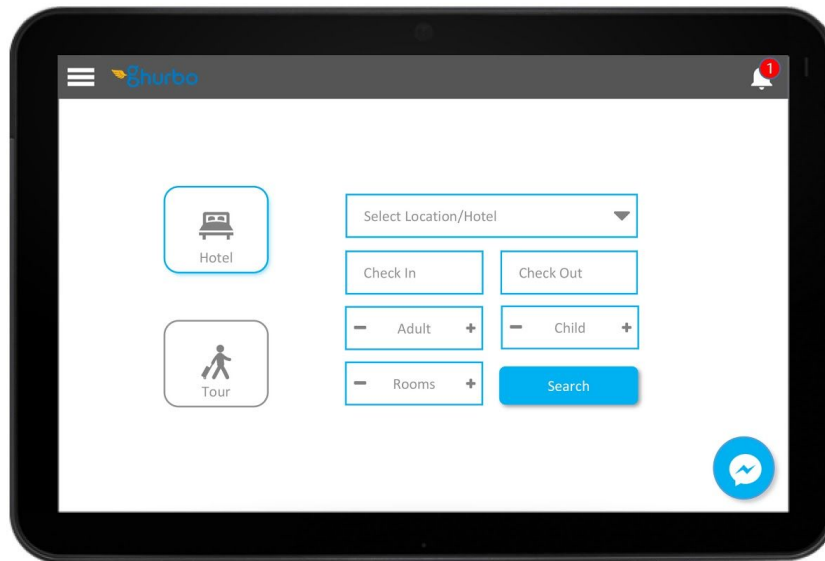
By default hotel search parameters will be visible here. User can search hotel by providing location/hotel name, check-in, check-out date, number of adults, number of child and number of rooms.
At any time user can toggle search from top toggle buttons
User also can invoke Ghurbo facebook messenger chat from the Fab button.

Screen 5
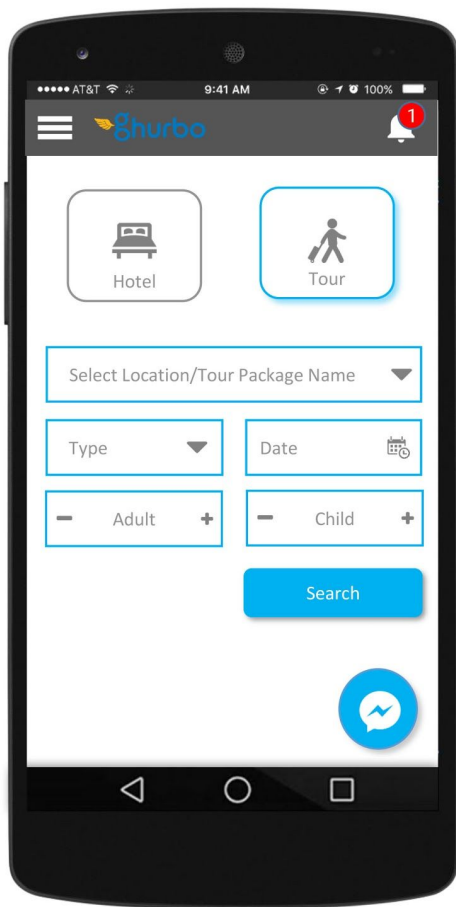
Search query input parameters will be changed once user toggle to Tour from Hotel from the top toggles.

As same to previous, user can search tour packages by hitting search button here

Screen 6
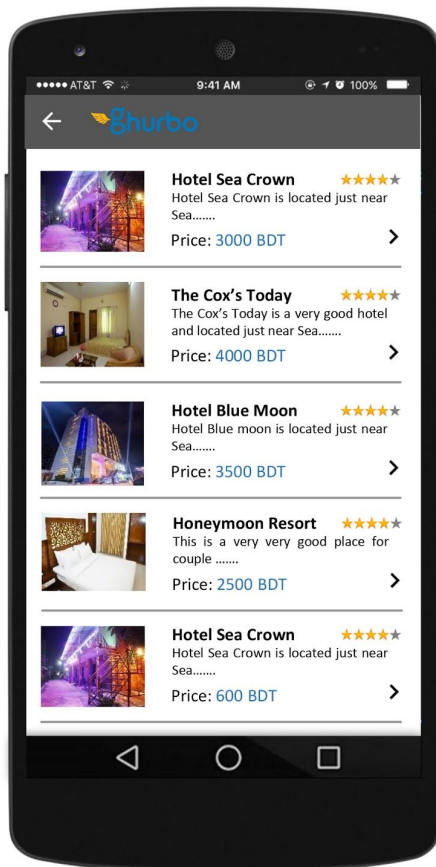
Here the basic view of a search result list. Both hotel and tour package will provide output in same type of view like this.

Image, title, description, rating and price will be visible in this list

Screen 7
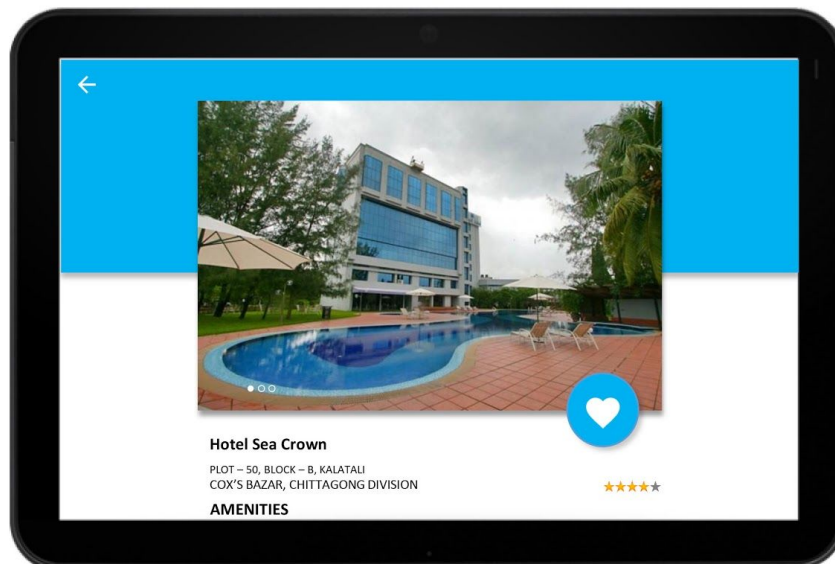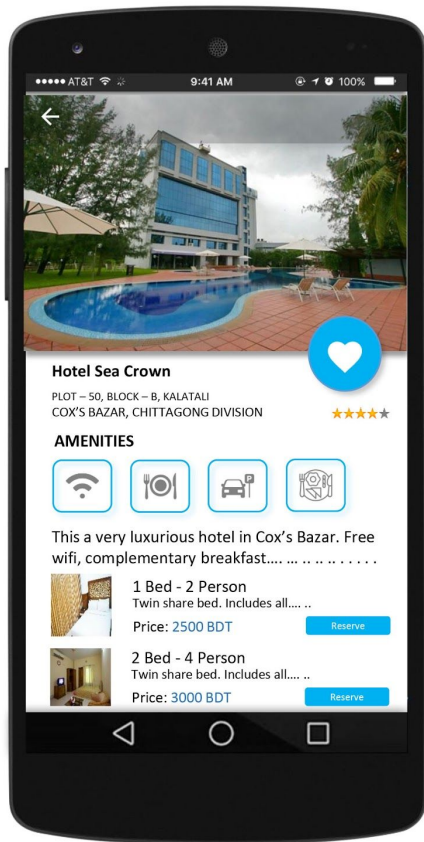
Here is the view of hotel details. Top image is collapsible. There is a fav button to make the item favorite. Fab button has been placed on the image.

Multiple images and its current position will be indicated by dot indicator.

Also there will be a horizontal list of amenities and description below it.

Screen 8
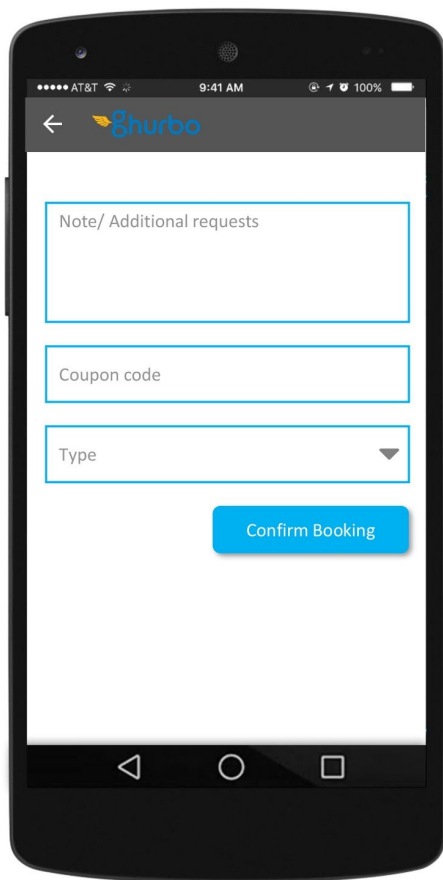
Here is the final confirmation page which takes few other parameters.

Screen 9
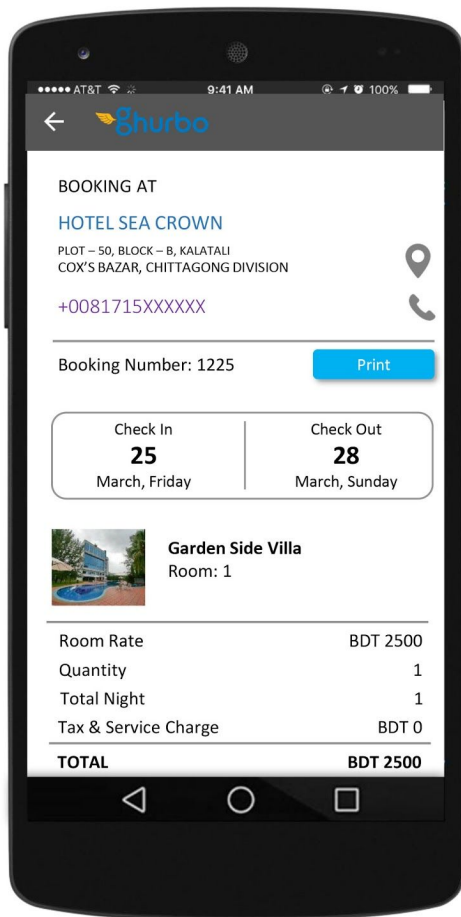
This page will show some information regarding to the booking. User can print confirmation from this page.

Screen 10
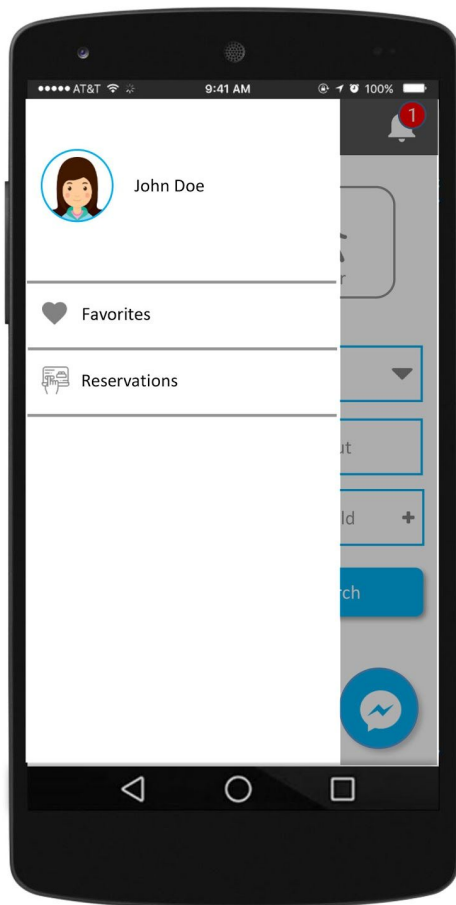
This is the conventional drawer menu. User can navigate to Favorite list and Reservation list from here.

Also a little profile information will be visible on the top of the navigation drawer

Screen 11
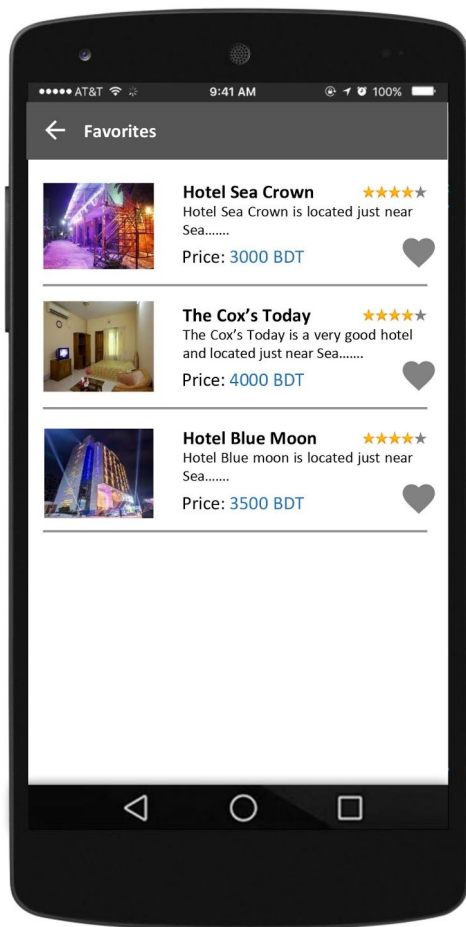
User can navigate favorite list from the navigation menu. Here is an option to un-favorite any item from the list.

Also user can go to details page from this list on tapping on any item

Screen 12
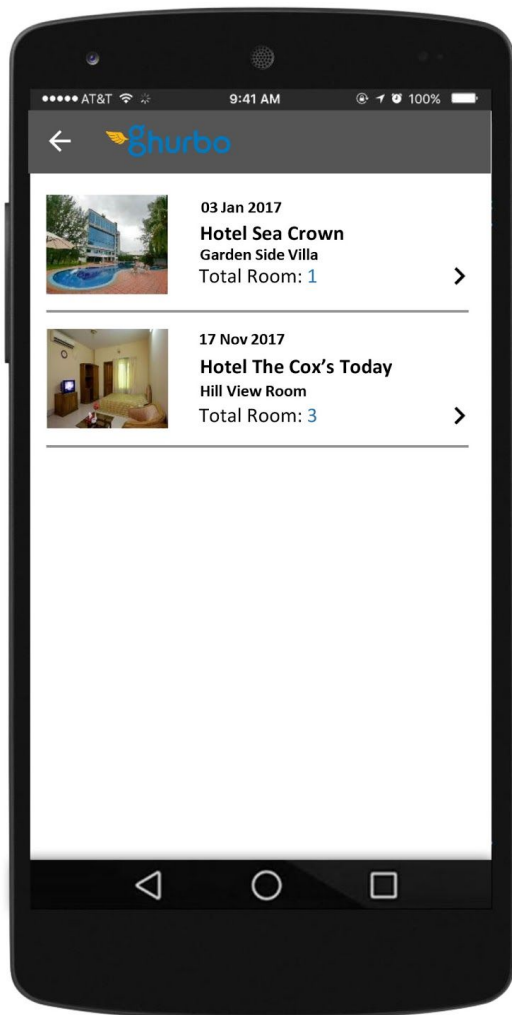
User can invoke this page from navigation drawer menu. A list of previous reservation will be listed here. Each item will contain necessary information.

User can open confirmation page with print option by tapping on any item from here.

Key Considerations

How will your app handle data persistence?

The application will provide hotel and tour package related data and those type of data can change any time. Also output will vary based on different query from different users. So I'll fetch data from server based on user query on that time, every time.

I'll use content provider to store favorite hotel/tour packages. App will show favorite list from content provider immediately, then app will hit API to get updated data. If any new changes found in the server then new will be added/removed from view.

Describe any edge or corner cases in the UX.

This app is pretty much straightforward in the sense of UX navigation. Homepage (Hotel/Tour search page) is the base Activity and the activity will not be finished if we go to another activity so that user can see Homepage from backstack if he/she returns by finishing the new Activity.

In the case of login, user can skip the login process. The login process will be invoked automatically once user attempt to book/reserve anything. In that case booking or reservation process will be resumed if user logged in successfully.

Describe any libraries you'll be using and share your reasoning for including them.

Here are the list of libraries I'll use to implement the project:
- Glide - to load network images smoothly
- Retrofit by Squarup- to load data from server
- GSON by Squarup - JSON parsing from server response data
- Circleimageview - to view circular profile picture in navigation drawer
- Firebase - to implement push notification
- Circleindicator - Show image position in viewpager
- Facebook SDK - to implement login through facebook
- Facebook Acc Kit SDK - to implement phone number and email login with integrating any external payment gateway

Describe how you will implement Google Play Services or other external services.

I'm gonna implement google play service for Google authentication. In that case play-service-auth will be used. I'll not use any other external services.

Next Steps: Required Tasks

Task 1: Project Setup

- Finalize project package name, git and create basic project in android studio
- Import all custom handy custom libs I use all of my project build by me while working on different projects, i.e: NotificationUtils, ActivityUtils, RuntimePermissionUtils, AppCommonUtils, BaseActivity, LoaderUI etc.
- Prepare API documentation, finalized request and response params.
- Test all API request and response, revise and resolve (in case of any issue)

Task 2: Implement UI for Each Activity and Fragment

- Build UI for SplashActivity
- Build UI for RegistrationActivity
- Build UI for ProfileActivity
- Build UI for MainAcitivity
- Build UI for HotelSearchFragment
- Build UI for TourSearchFragment
- Build UI for SearchResultActivity
- Build UI for HotelDetailsActivity
- Build UI for TourDetailsActivity
- Build UI for ConfirmationActivity
- Build UI for BookingConfirmedActivity
- Build UI for Navigation Drawer
- Build UI for FavoriteActivity
- Build UI for HistoryActivity
- Build UI for other custom stuffs, i.e: Push notification result view, custom dialogs etc.

Task 3: Implement Splash and registration state feature

- Implement handler with static delay
- Check internet connection, if internet not found show warning and educate user to turn on device internet connection
- Check registration state on that time and take action as following
  - Invoke registration page if not registered (newly installed)
  - Invoke application if previously skipped registration process
  - Invoke application if previously registered

Task 4: Implement network operation module

- Add retrofit and other related dependencies necessary for network operations
- Prepare all the models and JSON parsers for all the network operations - REST API's
- Prepare a custom wrapper lib of retrofit to implement network module efficiently with clean code over the project in different activities and fragments
- Make necessary model parcallable

Task 5: Implement login and profiling features

- Add Google Authentication and Facebook Account Kit SDK to implement login feature
- Implement facebook, google, email, phone registration functionality

Task 6: Implement profiling functionality

- Implement image picker from gallery and camera
- Get name from user
- Login API integration, create new user and save profile information if not logged in previously. Validate if existing user and get user information.

Task 7: Implement MainActivity, hotel search and tour search fragment

- Implement functionality of main activity with navigation menu and fragments
- Hotel search API integration into hotel search fragment
- Implement form data validation in hotel search fragment
- Tour package search API integration into tour package search fragment
- Implement form data validation in tour package search fragment

Task 8: Implement Hotel and Tour package result listing and details activity

- Implement search result activity for hotel search result
- Implement search result activity for tour package search result
- Implement hotel/tour package details details API
- Implement hotel and tour package details page with collapsible toolbar

Task 9: Implement Confirmation and Booking confirmed activity

- Create an activity with data validation for Booking/reservation prerequisite data

- Implement booking/reservation API for final booking
- Get booking/reservation confirmation information from the API response
- Implement print functionality
- Implement call functionality
- Implement map functionality

Task 10: Implement Favorite and history feature

- Implement content provider to store any hotel or tour package
- Show a list of favorite packages
- Show a list of booking/reservation history
- Implement all menu action to navigation drawer