

Project Phase 4 Report

App Name : TourIt

Team Number : 16

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About US: TourIt application is a one stop solution for travellers. It provides list of attractions in Chicago and also provide direction to the specific place. Guest users can see the attractions list, generate one day trip plan and can get the direction to the destination. User can have registered account using Gmail. Registered users can add an attraction to their favourites and can take photos to make memorable stories of the places they visited. TourIt will make user's Journey hassle free.

1. Features:

Visitors Attractions: TourIt application is useful to get the list of Famous Visitors Attractions in Chicago. Attractions will have details like short video clip, short description and ratings. This will help the user of TourIt to plan their travel according to their interest.

Directions: During the Journey , Directions is a first part which people worry about when they are in new places, but with the help of TourIt, users can get the details of direction to attractions based on their current location and destination provided.

Photo Stories based on user logs:

Travellers often visits many places, and it's really painful to manage the photos they take at attractions but with the help of TourIt travellers can take photos, One can easily keep the track of photos they take during their visit, as TourIt will help travellers to make stories based on pictures they take.

Plan Travel based on favourite list:

TourIt, will help travelers to plan their trip based on their like and dislike, by simply adding the Attractions which they want to visit to their Favorites. Registered users can retrieve their favorites anytime.

Generate One Day Trip Plan:

Users can generate one day trip plan based on their current location. It will be helpful to those who doesn't know where to start.

Requirements:***Device:***

- Mobile device with location enabled.
- Mobile device with good internet speed.
- Mobile device with touch screen.
- Mobile device with camera.

API:

- Google API for login.

Functional:

Req 1: Splash Screen with app logo should be displayed on start of the application.

Req 2: Attractions Screen: for guest users it should list all attractions and for registered users it should display the attractions using image switcher. Each attraction should have a detailed description.

Req 3: Registered Users should be able to add attractions to their favourites which will be stored in local database.

Req 4: Description Screen: Details like description, hours of operation and address of the attraction should be displayed. It should have a button to navigate to map.

Req 5: Get direction: User should be able to navigate to the google map to see the direction from their current location to their selected destination.

Req 6: User Account Management to efficiently track the user's activities using Google API.

Req 7: Registered Users should see the list of selected places under favourites.

Req 8: User should be able to delete an attraction from favourites list.

Req 9: User should be able to take pictures of attractions through TourIt.

Req 10: User can make the Photo stories by downloading google photos.

Req 11: Share a place with Friends.

Req 12: Auto generate one day trip plan for users.

Req 13: Provide guest login to the app users who doesn't have google account.

Req 14: Splash screen should automatically load the Login screen or it should load the Attractions screen for logged in user.

Req 15: Provide toast messages if there is no internet connection.

Req 16: Provide toast message when there is no SD card while trying to access photos through app.

Req 17: Provide animations for “Heartin” and “X” buttons in Attractions Screen of registered users.

Good to have Features:

Application can be extended to add following new features:

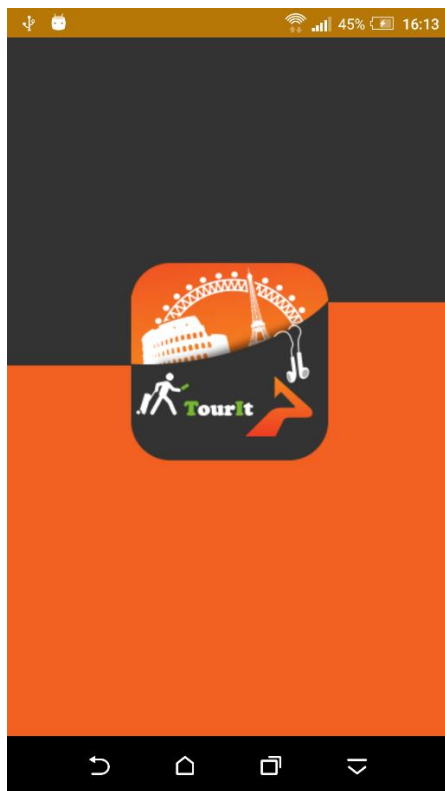
GD 1: User can rate the attractions based on their experience after visiting the place.

GD 2: Display the attractions sort by ratings.

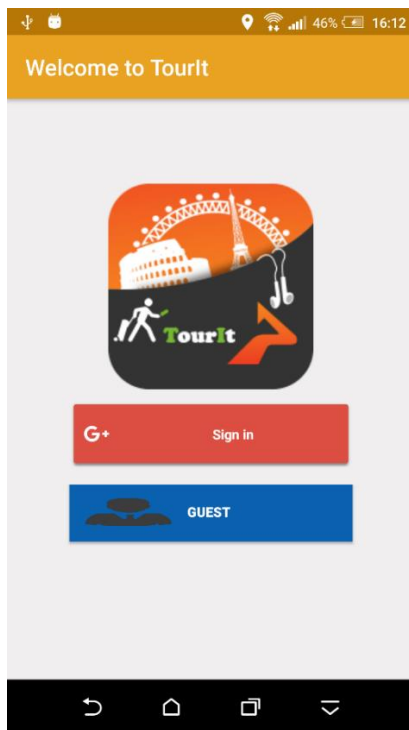
GD 3: Notify users if there is any nearby attraction.

2. Design:

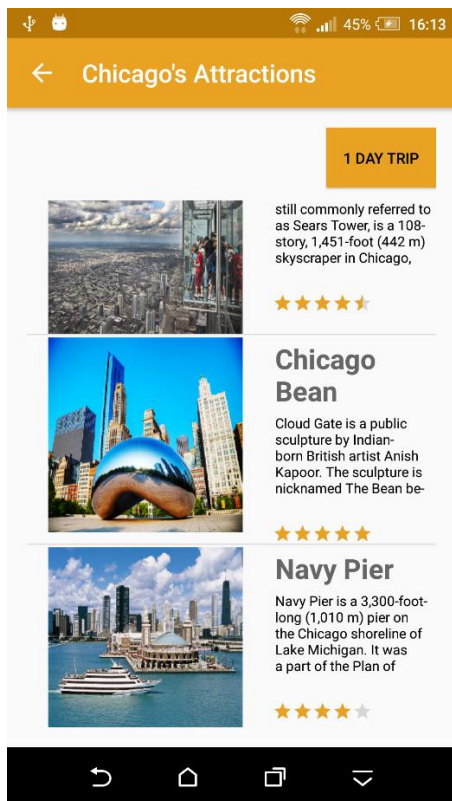
Splash Screen



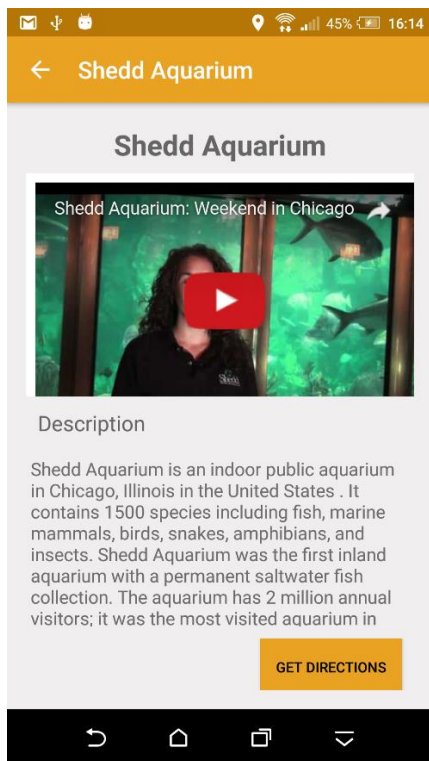
Login Screen



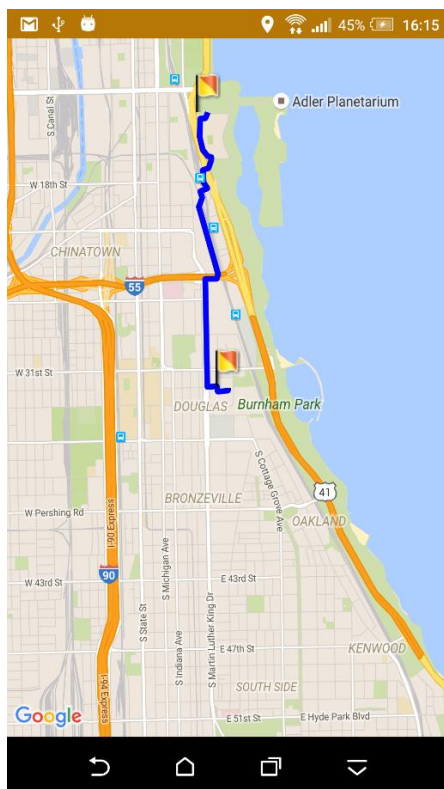
Guest User's Attraction Screen. (Attractions are displayed in a listview)



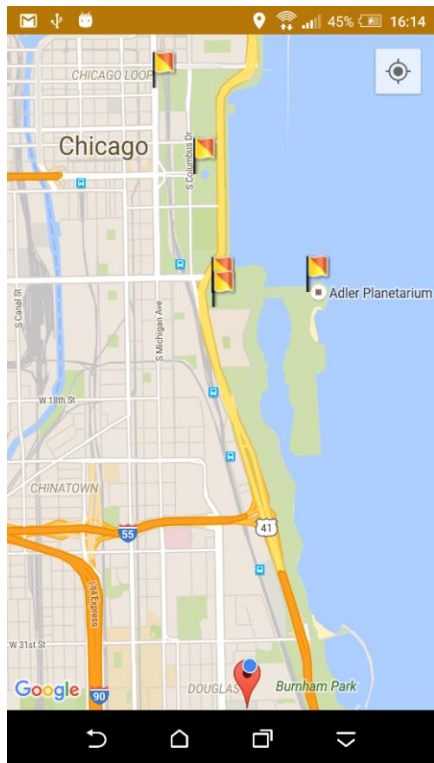
Description Screen: For guest



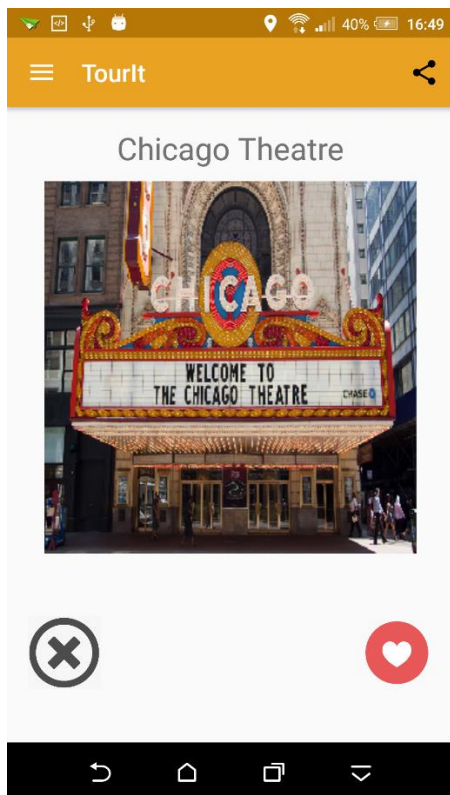
Get Direction: Google Map



One-day trip plan Generator

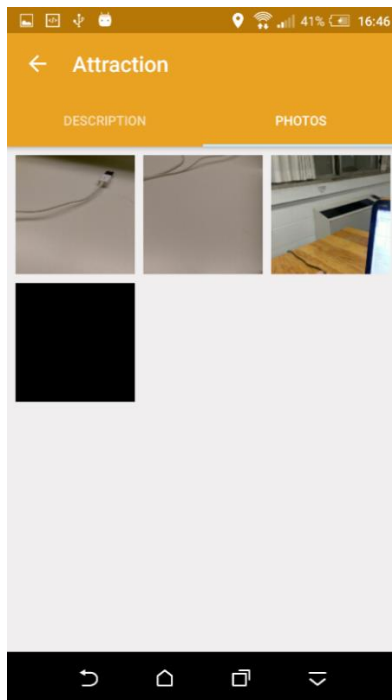


Registered User's Attraction Screen. (Attractions are displayed using image switcher)

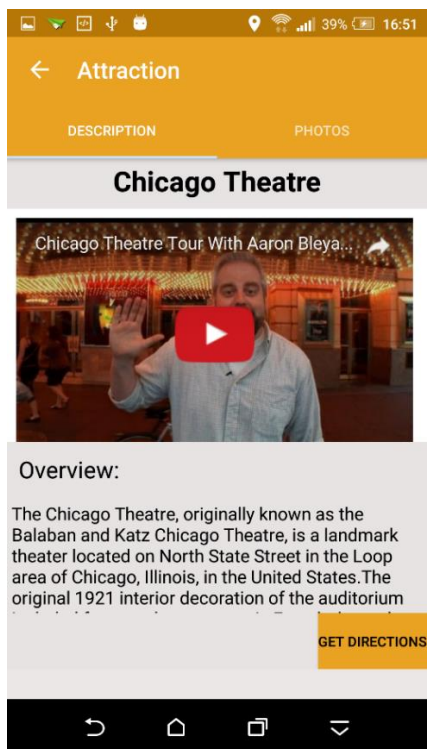


Screen for registered users

Photos tab



Description tab



Settings/ Side navigation Menu : For Registered Users

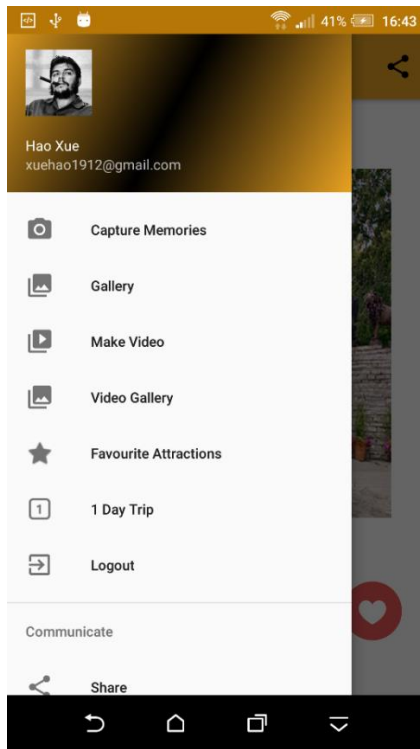
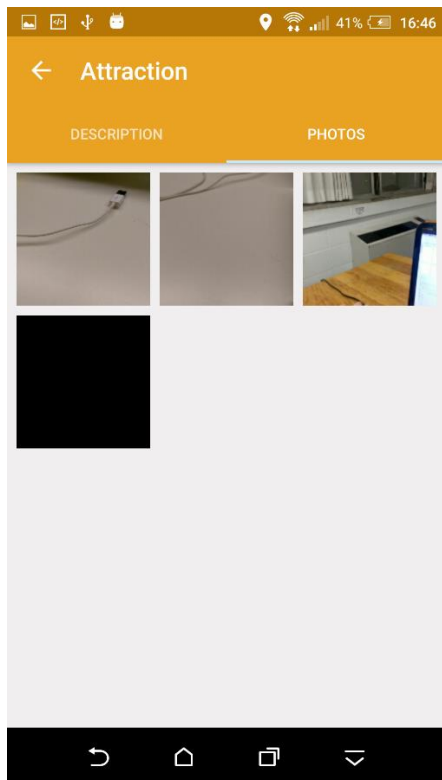
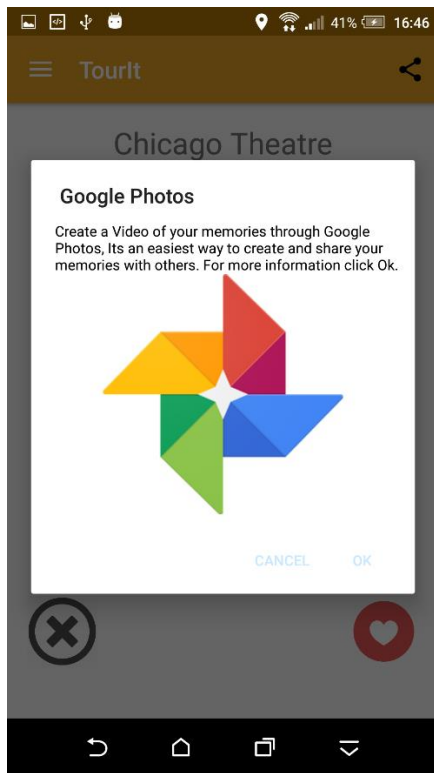


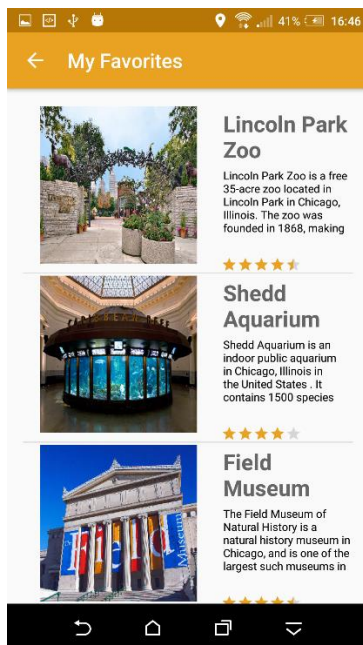
Photo Gallery. Will show the photos taken through app



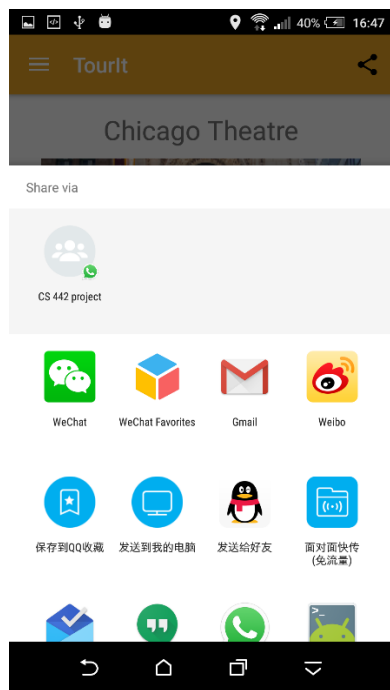
Video Gallery. Open google play store to download the app to make video



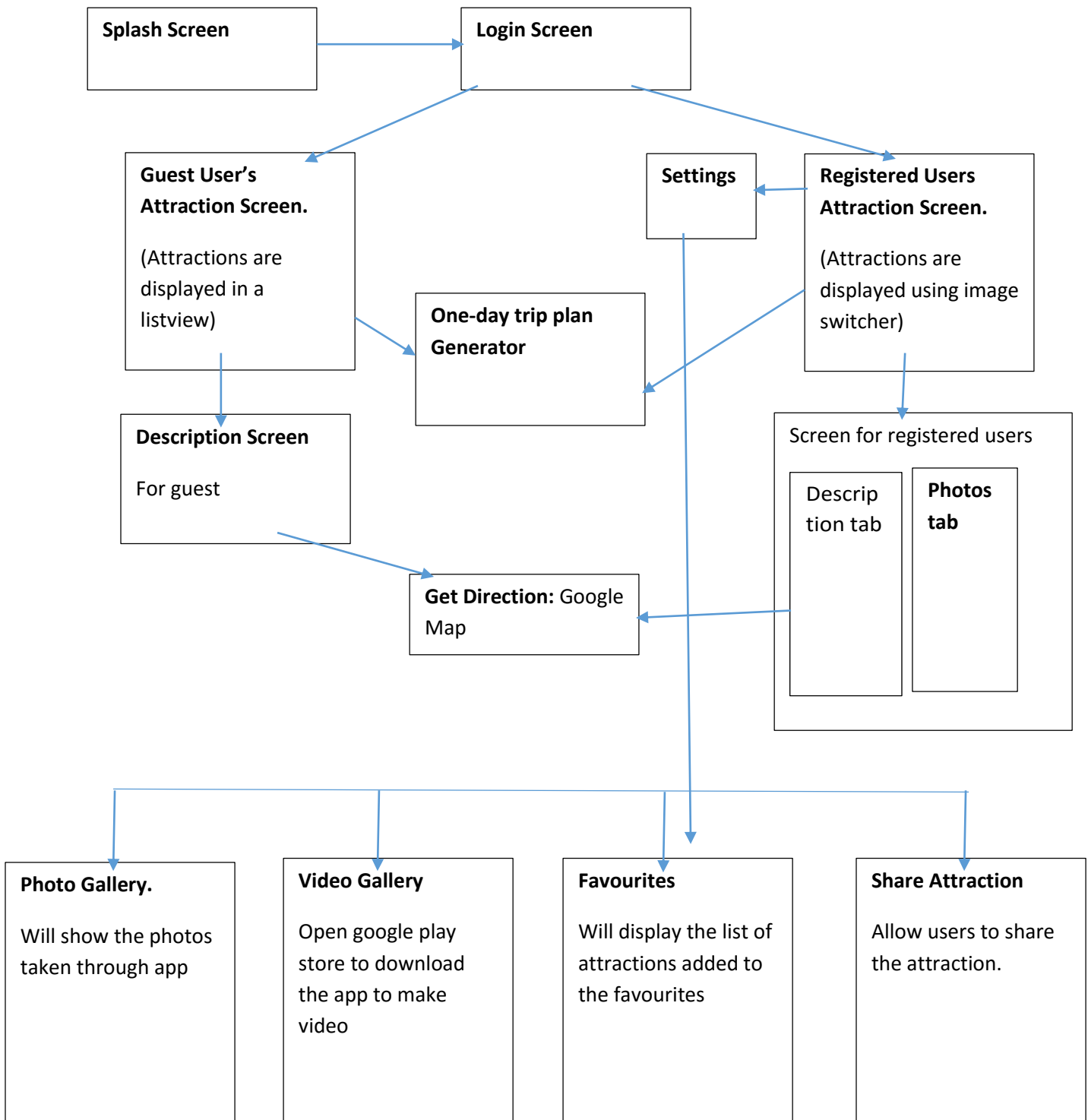
Favourites.Will display the list of attractions added to the favourites.



Share Attraction. Allow users to share the attraction.



Activity transition/App Navigation:

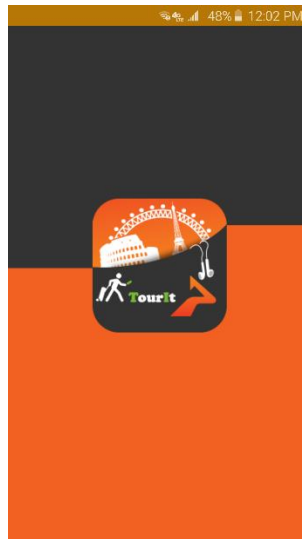


Design

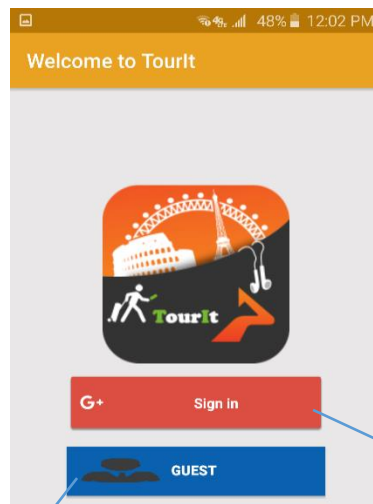
Start the app by clicking the app icon:



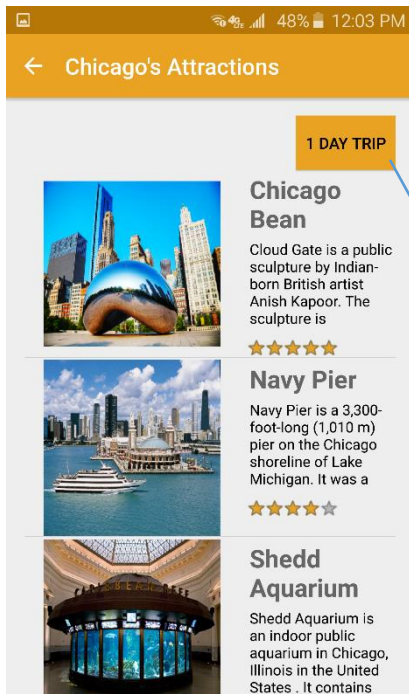
It will open the splash screen



From Splash Screen it automatically navigates to the login screen



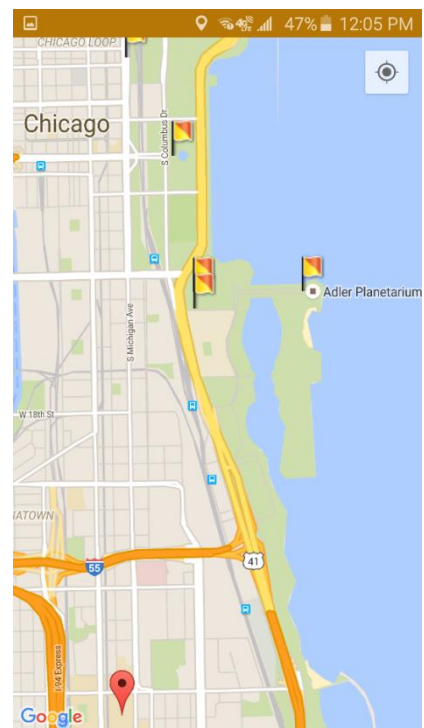
User can login as Guest. The attractions are displayed in a listview.



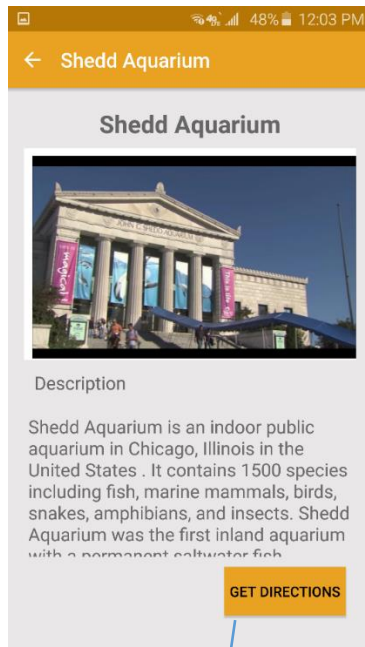
Select an attraction. Description screen will be displayed



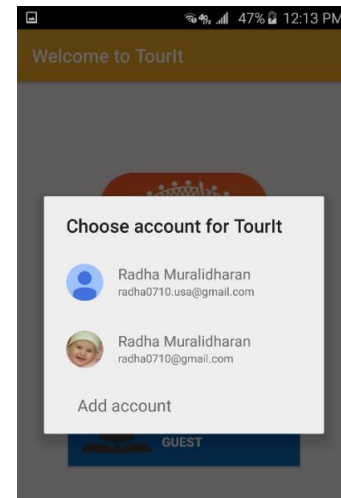
Click on the 1 Day Trip button: 5 nearest attractions will be displayed.



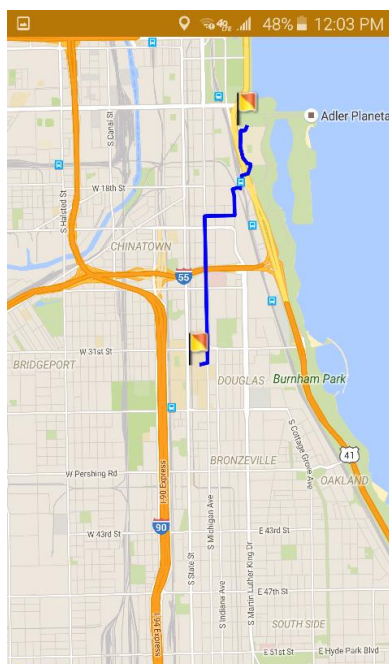
Click the play button. Video should be played within the frame.



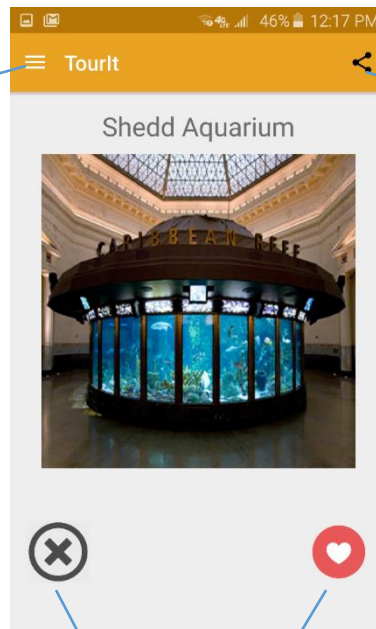
User can login with their google account



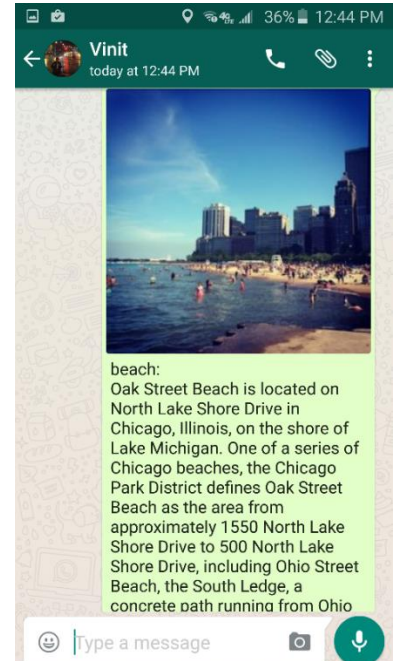
Click the get direction button: Show a route to the selected destination.



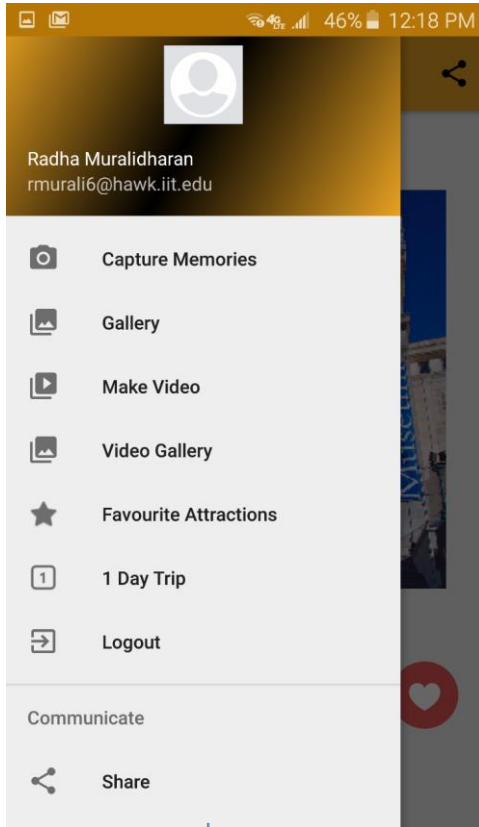
After Login, Attractions will be displayed using image switcher.



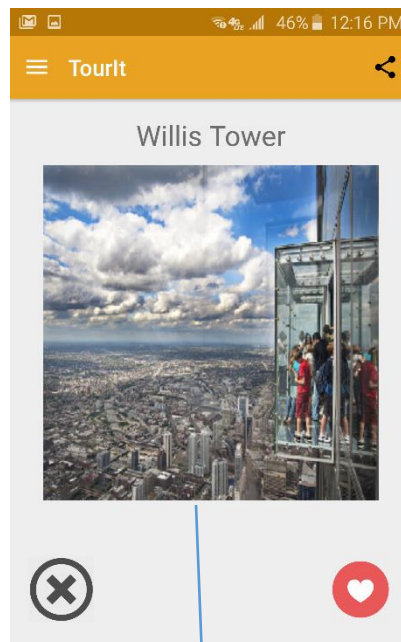
User can share the attraction.



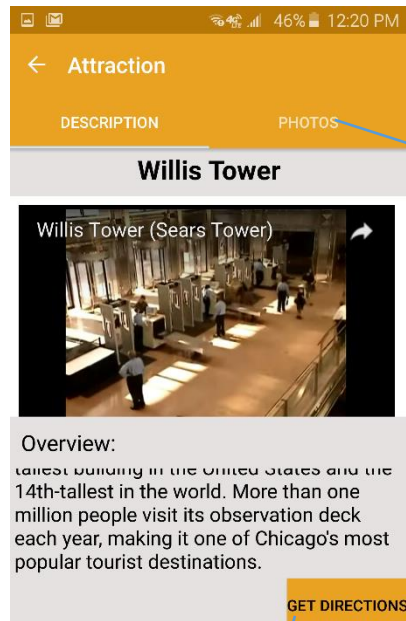
Click of Menu/Settings
(for registered users only)



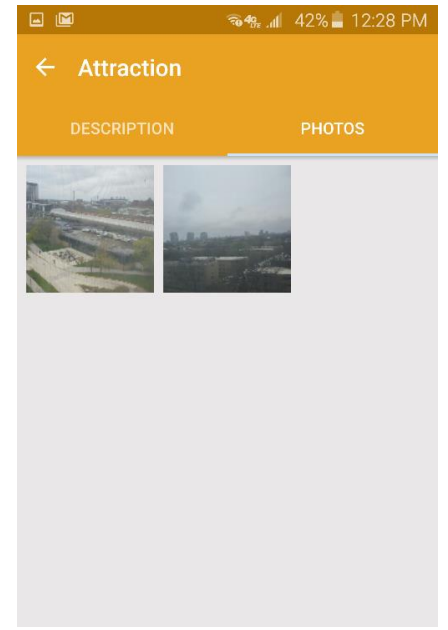
Click the hearting button: attraction will be added to the user's favourites. Click X button. It will load the next image.



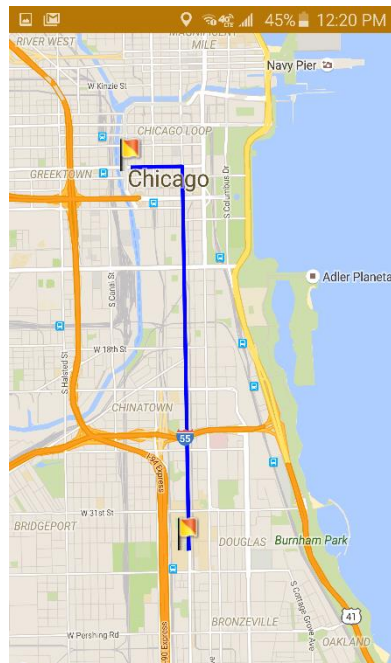
Click the image. Description Screen will appear.



Click the Photos tab to view the photost taken through the app.



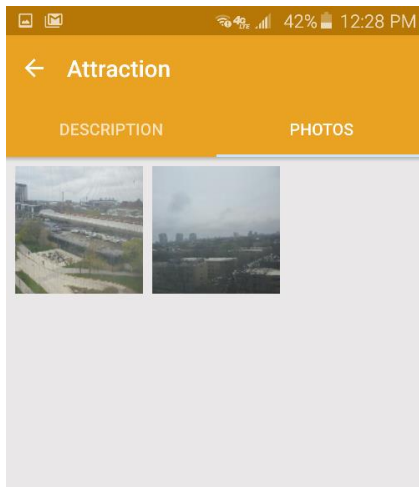
Click the Get Direction button.
Route for the destination will appear.



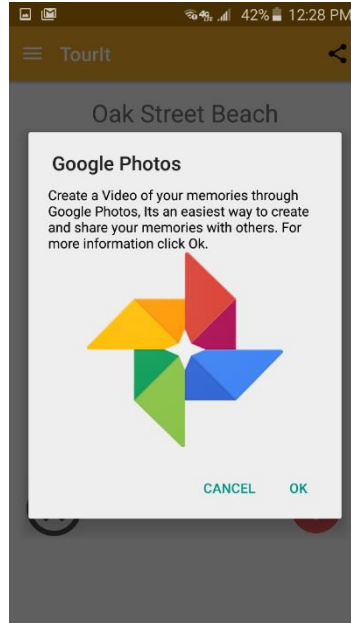
Click the Capture Memories. User can take a photo



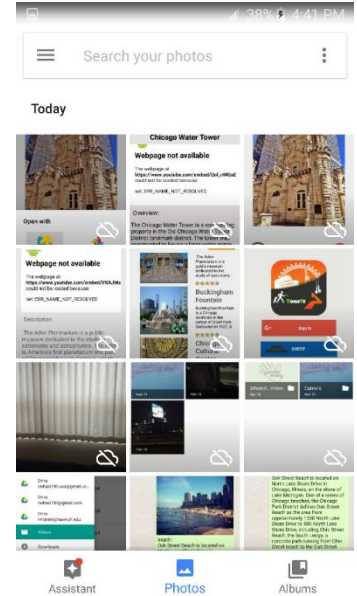
Click the Gallery: photost taken through the app is displayed.



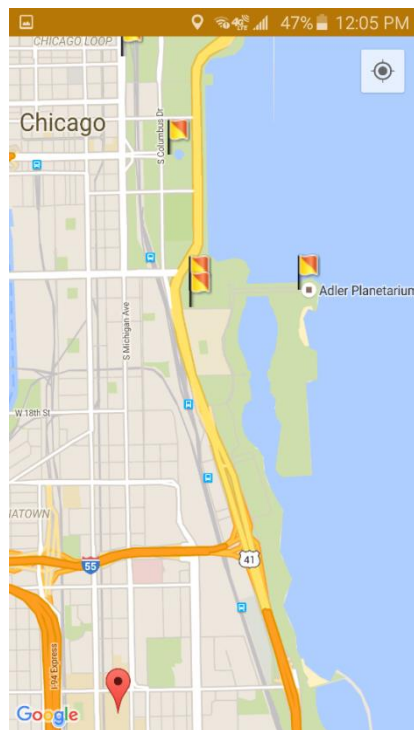
Click the Make Video. Direct the User to download Google Photos.



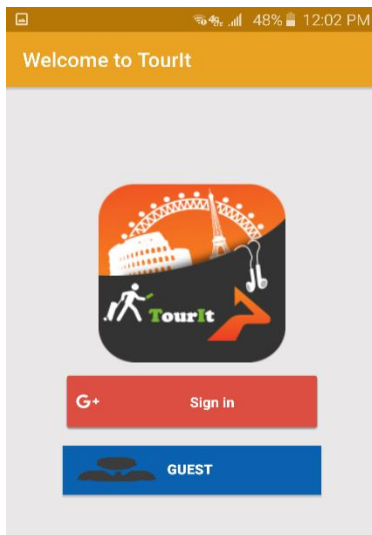
Click the Video Gallery. Opens the gallery



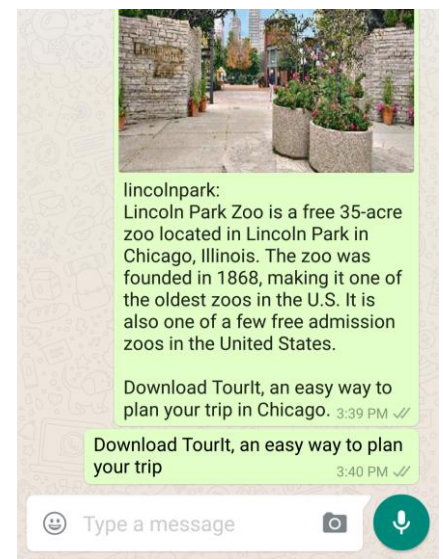
Click on the 1 Day Trip button: 5 nearest attractions will be displayed.



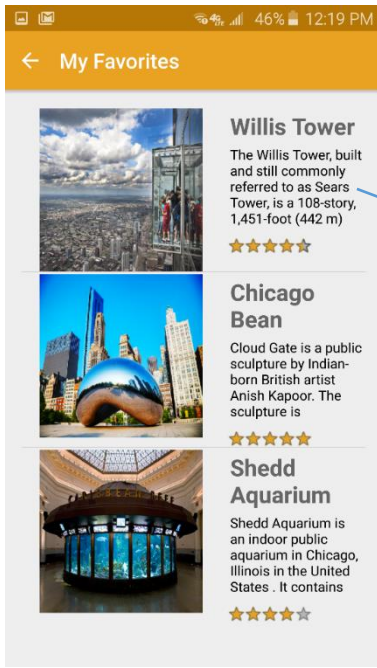
Click Logout: Login screen will appear



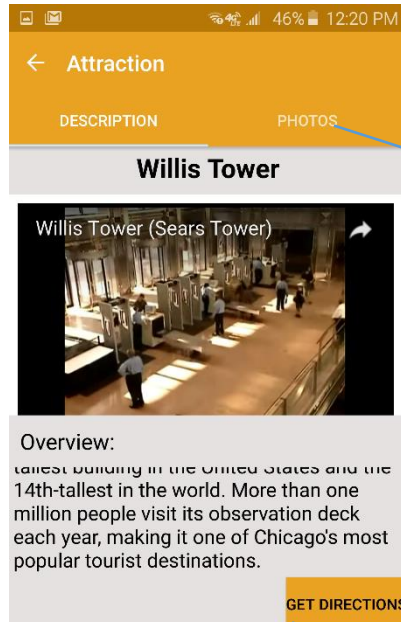
Click the Share. User can share and promote TourIt app.



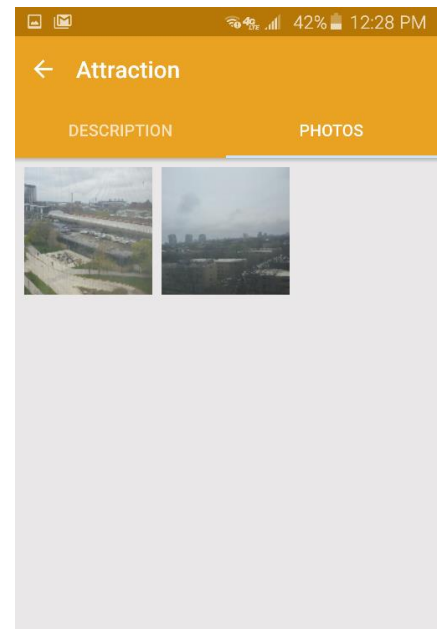
Click the favorites: Display the attractions that the user liked/added



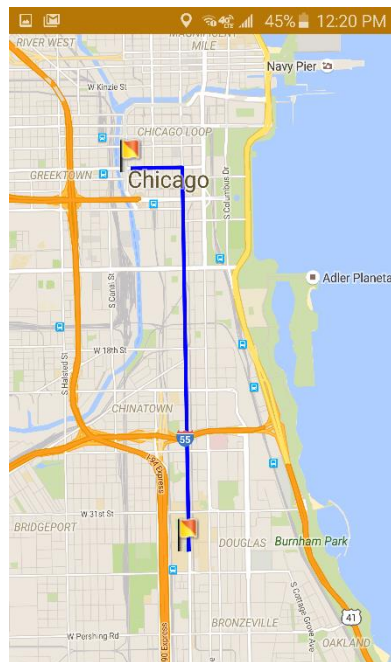
Click an attraction. Description Screen will appear.



Click the Photos tab to view the photost taken through the app.



Click the Get Direction button. Route for the destination will appear.



3. List Of Classes

Package: AdaptersPacakge

1. AttractionAdapter: a class that extends BaseAdapter to provide list of attractions for list view.
2. FullScreenImageAdapter: a class that extends PagerAdapter. A custom view to display full size image from photo gallery.
3. GridViewAdapter: a class that extends BaseAdapter to display photos from gallery in a grid view.
4. GridViewImageAdapter: a class that extends BaseAdapter to help with the view for on click of image from photo gallery.
5. TabFragmentAdapter: a class that extends FragmentPagerAdapter and provides custom view of photo and video content for DescriptionFragment

Package: Fragments

6. DescriptionFragment: a class that extends Fragment to show description of attraction in tab view
7. Photos Fragment: a class that extends Fragment to show photos of attraction as a grid view
8. VideoFragment: a class that extends Fragment to help user make video with photos of attraction and display it in the fragment.

Package: helper

9. AppConstant: contains constants that helps in saving photos to sd card
10. AppContext: a class that extends Application which helps to maintain the app context throughout the application.
11. Attraction a class that implements Serializable and helps to retrieve each attraction as serializable objects.
12. AttractionsDBHelper a class that extends SQLiteOpenHelper: and helps to store and retrieve the attractions data from the database.
13. FavoritesDBHelper a class that extends SQLiteOpenHelper and helps to store and retrieve the user specific favourites data from the database.
14. GPSTracker a class that extends Service implements LocationListener and helps in finding the current location of the user.

15. TouchImageView a class that extends ImageView to help zoom in and zoom out functionality for photos in the gallery.

16. Utils: a class that provides dimensions and properties for photos in the gallery.

Package: phonebook.vinitshah.com.tourit

17. AttrDescription: a class that extends AppCompatActivity to show description of attraction.

18. MapsActivity: a class that extends FragmentActivity implements OnMapReadyCallback to show the path between current location and destination for register users

19. AttractionList: a class that extends Activity to show activity that contains a list of all attractions for guest.

20. FavoritesActivity : a class that extends AppCompatActivity to show activity that contains a list of favourite attractions for register users

21. MapsGuestActivity: a class that extends FragmentActivity implements OnMapReadyCallback to show the path between current location and destination for guest.

22. Attraction: a class that defines (sets and gets) attributes of an attraction.

23. FullScreenViewActivity: a class that extends Activity to display photos in full screen.

24. HomePage: a class that extends AppCompatActivity and maintains shared preferences for the app.

25. MainActivity: a class that extends AppCompatActivity and controls the google login functionality.

26. OneDayTrip: a class that extends FragmentActivity implements OnMapReadyCallback and provides one day trip plan.

27. Splash: a class that extends Activity and provides a splash screen for the app.

28. TabActivity: a class that extends AppCompatActivity and provides tabbed activity for registered users.

29. ViewImage: a class that extends AppCompatActivity and helps to view images from photo gallery.

APIs and android features used in the project:

- Google API
- Maps
- SQLiteOpenHelper
- Logs and Toast
- Animation
- 9 patch
- ListView
- Custom View
- Shared Preference
- Fragments
- Image Switcher