

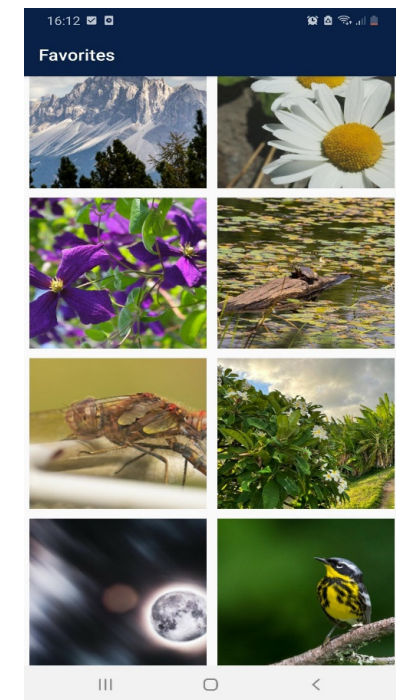
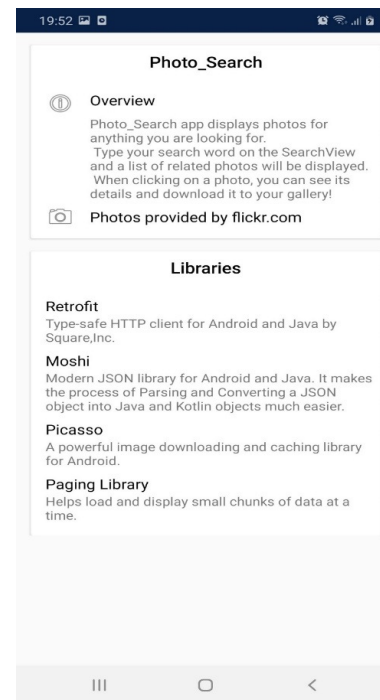
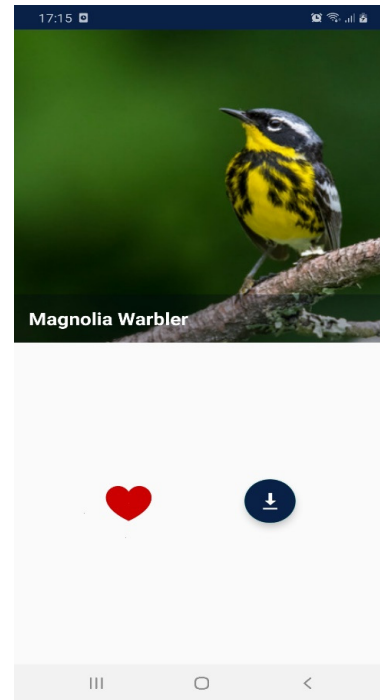
Capstone project: Photo Search App

Overview of Implemented App Features and project milestones

by Mariem Mezghani

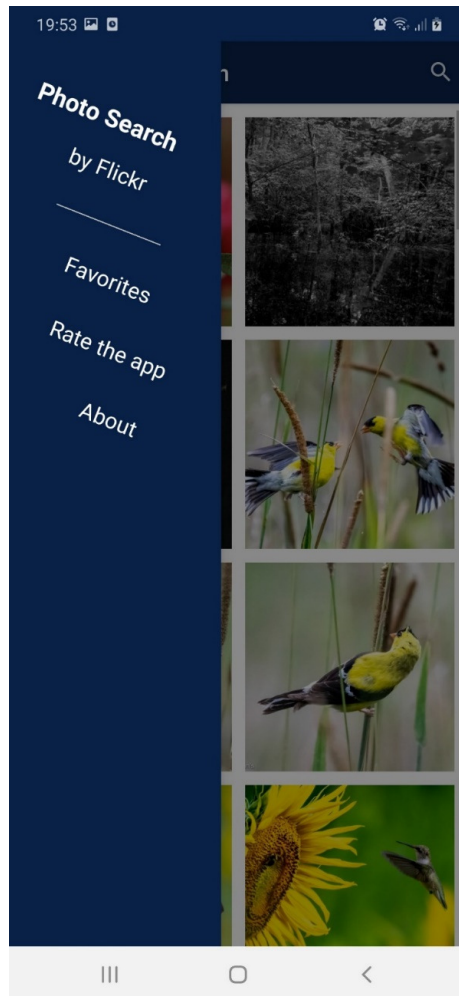
06.09.2021

Feature 1



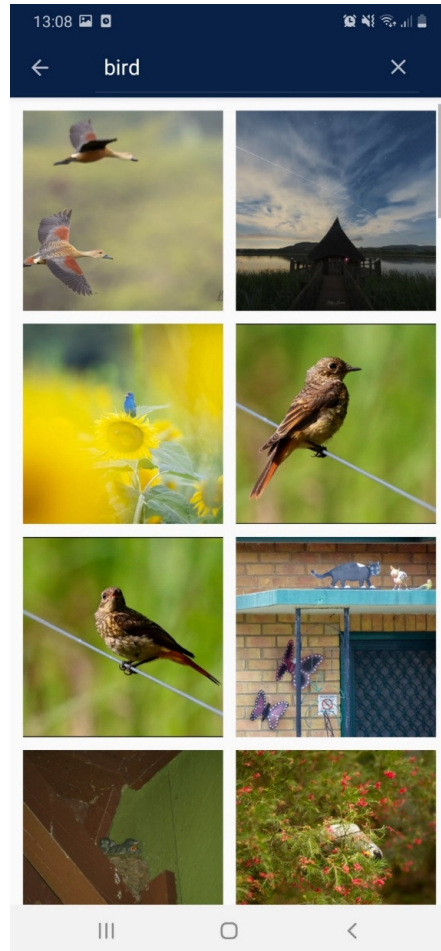
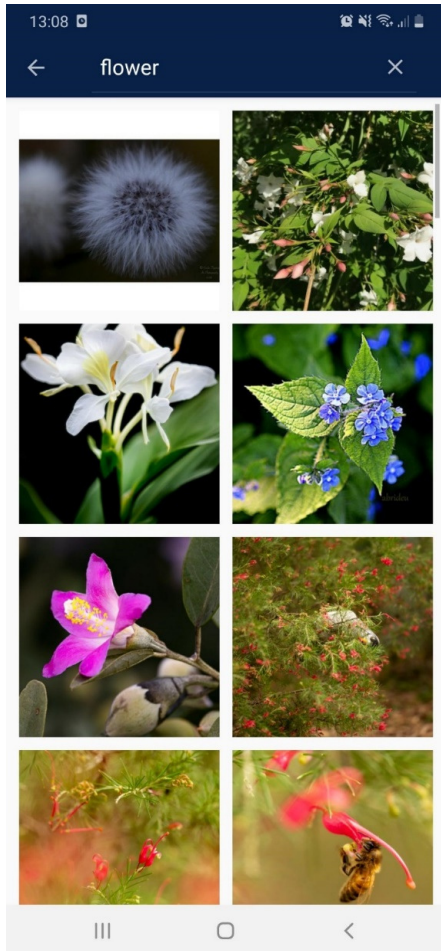
- The app consists of 4 screens: Main Screen that displays all searched photos, Detail Screen to show and download a selected photo, an About Screen that can be displayed from the navigation drawer and a Favorites Screen.

Feature 2:



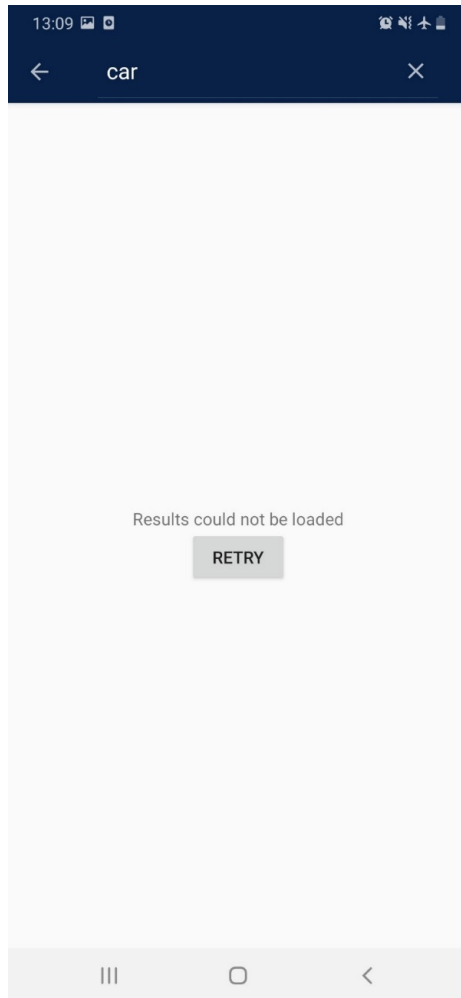
- A Custom navigation drawer with Motion Layout was implemented to display an animation of the items when opening or closing the drawer.

Feature 3



- Search results are fetched from the Flickr Api using Retrofit and Moshi Converter Library
- The results are transformed into images with Picasso Library
- Searched images are displayed in a RecyclerView

Feature 4



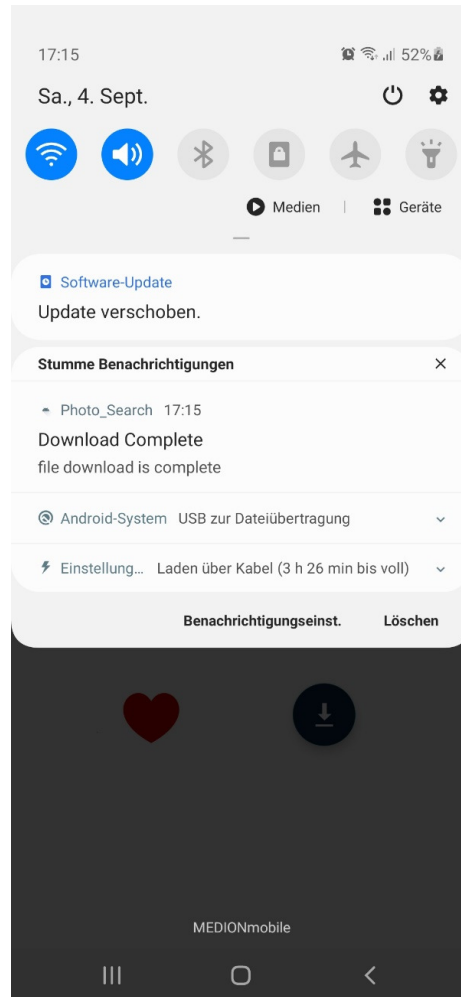
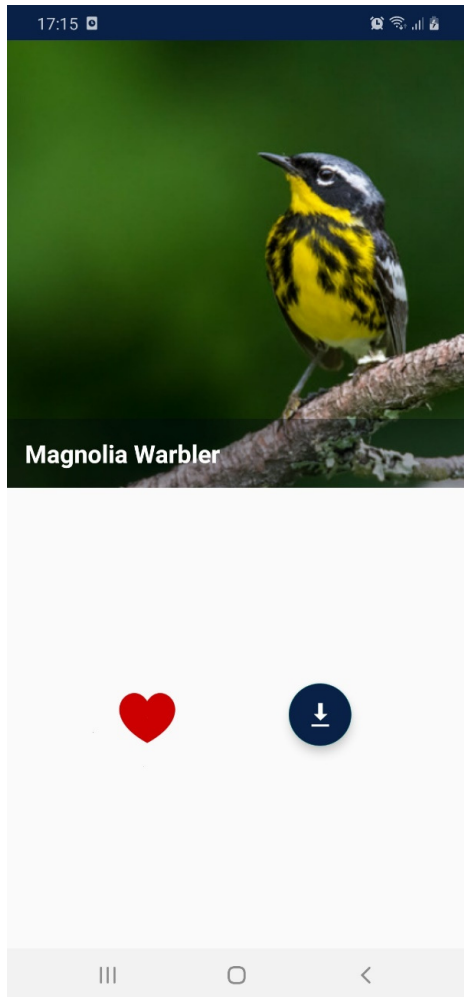
- When the user is offline, a message and a retry button will be shown
- When the user is online, clicking on the retry button displays the corresponding images for the searched query

Feature 5



- Paging Library was used to add endless scroll to the RecyclerView
- When the internet connection goes off while scrolling, a message and a retry button are displayed

Feature 6



- The user can store the image locally on the device with shared storage by clicking on the download button.
- When the image is downloaded, the user receives a notification to notify him that download is completed
- When the user clicks on the ShineButton, the image is stored on a local database. When the user unchecks the ShineButton, the image is deleted from the database.

Feature 7



- MVVM architecture was used to separate responsibilities amongst classes.
- When the user rotates the screen, the UI data does not change.
- When the user rotates the screen, the scroll position of the RecyclerView does not change.

Project milestones

- 1) Implement MainFragment layout and fetch photos from the Flickr API using Retrofit, Moshi and Picasso Libraries
- 2) Implement search functionality using the Flickr API method.
- 3) Implement endless scroll using Paging Library.
- 4) Add LoadStateListener to display retry button when there is no Internet connection.
- 5) Add DetailFragment, a FavoritesFragment and AboutFragment and add navigation between all fragment with the navigation graph.
- 6) Add FAB in DetailFragment to download the image to the device.
- 7) Implement showing Notification when download is complete.
- 8) Implement a custom navigation drawer with MotionLayout. The items in the drawer are animated when opening or closing the drawer
- 9) Implement Room Database to store/ delete favorite photos and retrieve them in the FavoritesFragment

Thank you!