



TripList – Kotlin App

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Our Team



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Project Summary

Our project is an android application that allows its users to manage their trip list in an efficient and convenient way

Users can add, edit and delete trips and even use artificial intelligence to identify the objects in the photos they uploaded





Project Goals

The application is designed to help users efficiently manage and track their trips. Users can easily save and organize trip details such as location, photos, and descriptions, and conveniently view and access all these details





Target Audience

ADVENTURES

The target audience of our app is anyone who loves traveling and wants to organize their travel list in a convenient way





Fragments

01

AllItemsFragment

Here the user can see a list of all his trips

02

AddItemFragment

Here the user can add new trip to the list

03

EditTripFragment

Here the user can edit a specific trip

04

DetailItemFragment

Here the user can see all the trips details (title, description, location, image)



05

ImageLabelingFragment

Here image labeling is performed on the image the user entered





AllItemsFragment

01

The user can see all his trips

02

Add

By clicking the plus button, the user will be taken to a screen where he can add a new trip to the list

03

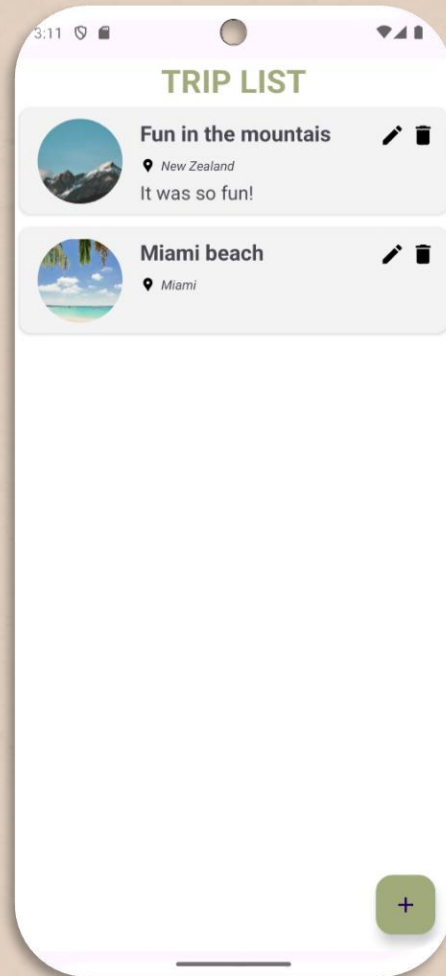
Edit

By clicking the edit button found on each trip, the user will be taken to a screen where he can edit all the details of the trip he has chosen

04

Delete

By clicking the delete button found on each trip, a pop-up will be displayed to confirm deletion, if the user approves - the trip will be deleted from the list





AddItemFragment

01

The user can set a title and description

02

The user can type the trip location or decide to set it to their current location

03

The user can add a photo from the gallery or from the camera

04

The user can save the trip or go back without saving (a pop-up window will appear to confirm the exit without saving)

The screenshot shows a mobile app interface for adding a new trip. At the top, the title 'New Trip' is displayed in green, followed by a right-pointing chevron. Below the title are three text input fields: 'Enter trip title', 'Enter trip description', and 'Enter trip location'. Under the location field is a checkbox labeled 'Set location as current location'. Below the checkbox is a button with a camera icon and the text 'Add Image'. At the bottom of the form is a large green button with the text 'Add To Trip List'. The app's status bar at the top shows the time as 3:10 and various system icons.



EditTripFragment

- 01 The user can see all the details he entered about the trip, with the ability to edit and change each of them
- 02 The user can set the location to his current location
- 03 The user can save the changes or go back without saving (a pop-up window will appear to confirm the exit without saving)

A screenshot of a mobile application interface for editing a trip. The screen is titled 'Edit Trip' in green text at the top right. Below the title, there are three input fields: 'Enter trip title' with the text 'Miami beach', 'Enter trip description', and 'Enter trip location' with the text 'Miami'. Below these fields is a checkbox labeled 'Set location as current location'. Underneath the checkbox is a button labeled 'Change Image' with a small image icon. Below the button is a rectangular image of a tropical beach with palm trees and a blue sky. At the bottom of the screen is a green button labeled 'Save Changes'. The top status bar shows the time '3:11' and various icons.



DetailItemFragment

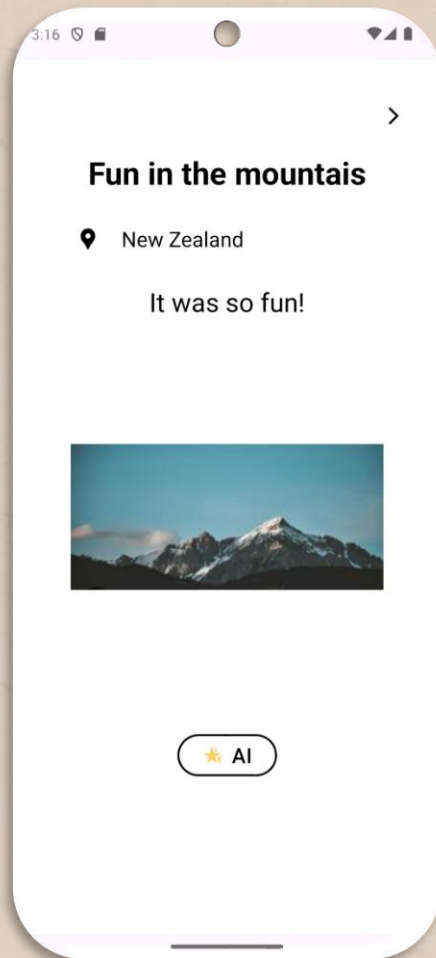
01

The user can see all the details about the trip (By clicking on it)

02

AI button

Clicking this button takes the user to a screen where he sees the image he entered, and image labeling is performed on it



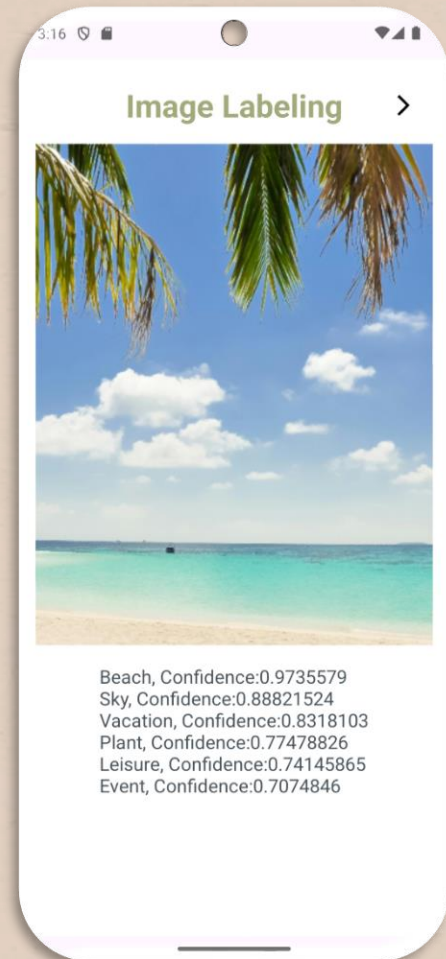


ImageLabelingFragment

01 Image labeling is performed on the image that the user entered

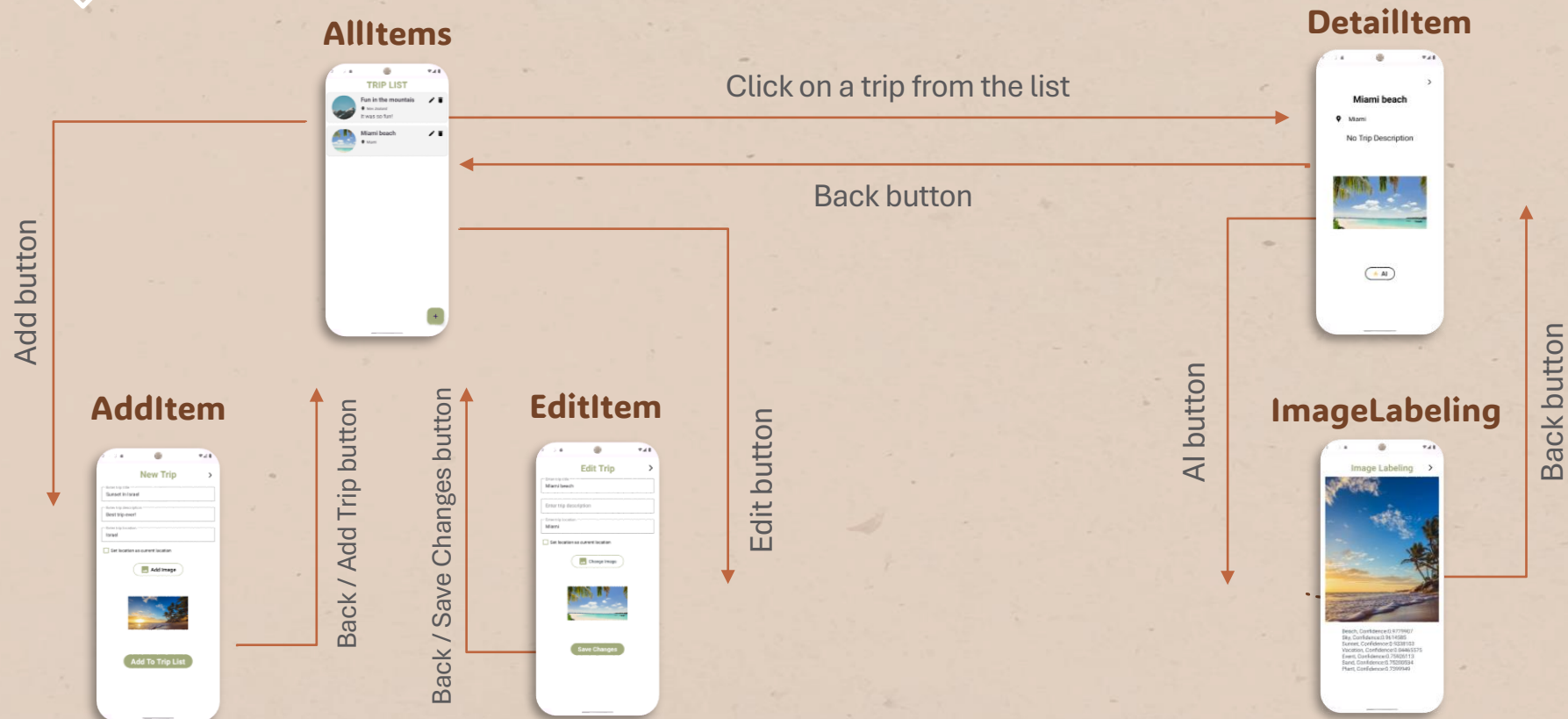
* **Image labeling** - is the process of identifying and marking various details in an image.

* The **confidence** is the probability that indeed this label is found in the image



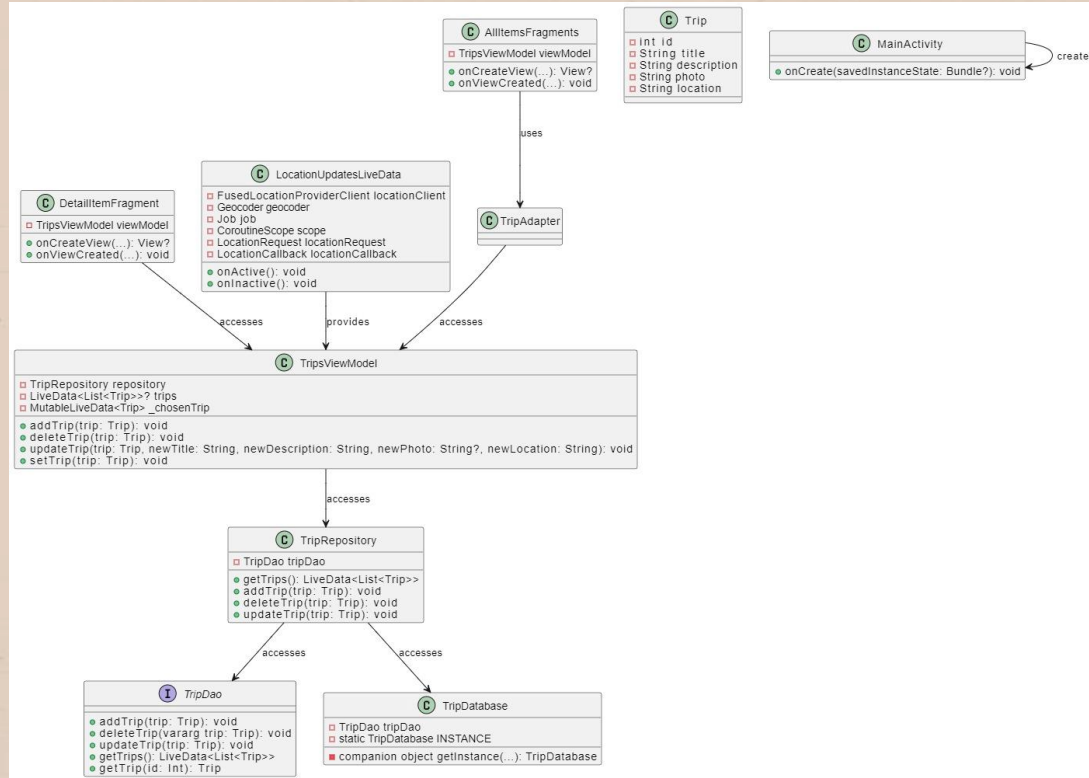


Flow Chart





UML





Libraries

- 01 **Room** - A directory saving data in a local database allows saving and retrieval of data in a convenient and efficient manner
- 02 **LiveData** - Is an observable data holder class that is lifecycle-aware, updating only active lifecycle observers. This helps prevent memory leaks and ensures efficient UI updates
- 03 **Coroutines** - Help manage I/O tasks that might block the main thread and cause the application to become unresponsive





External Libraries

01

ML-Kit - Is used to identify data from images using machine learning technologies. It allows performing actions such as image labeling, text recognition etc.

02

Google Play Service - Provides thousands of APIs that make it possible to provide high-quality experiences in applications such as using location and Google Maps





Video Link



https://youtu.be/9ctYFaT5_1c



Thank You!

