

How to install :-

This project consists of an android app that can be deployed by simply installing from the apk file. Ensure that the 'Install from unknown sources' setting is kept 'ON' on the device. If not, then you might receive a message saying 'Allow installation from unknown sources'. Select 'Yes' from the same. This will start the app.

The github link to the apk file as well as the android studio project is as follows:-

<https://github.com/dvij542/EasyDataLabeler>

Project :-

The code and development has been done on Android Studio IDE. I have uploaded the project on github. Link to the same is as follows :-

Features :-

- Currently, the app allows you to Sign up or make an account as a Data scientist or a Data labeler.
- Once created an account, you can login into your account. The account details database is stored on the app server which is deployed on firebase. If the credentials are correct, the account page is shown.
- If the account type is 'Data Scientist', the Project list appears, where the user can.
 - Select a project and upload data images to it.
 - Create a new project.
 - Download the label HTML files from any project.
- If the account type is 'Data Labeler', the user can :-
 - Navigate through projects, select a data image and label it using rectangle and polygon draw tools that have been deployed currently. After labeling, the label file is stored in

the required HTML format which can be deceived by the data scientist.

A proper guide through the application is given below using the screenshots from the app :

The image displays two side-by-side screenshots of a mobile application titled "EasyDataLabeler_ex".

Left Screenshot: Sign Up

The "Sign Up" screen features a purple header with the app name. Below the header, the title "Sign Up" is centered. The form includes the following fields:

- Email
- Password
- Full name
- Adhar card no.
- Designation/Position
- Contact no.

Below these fields, the text "Register as :-" is followed by two radio button options:

- ☐ Data Scientist
- ☐ Data Labeler

A large red "CONTINUE" button is positioned at the bottom of the form.

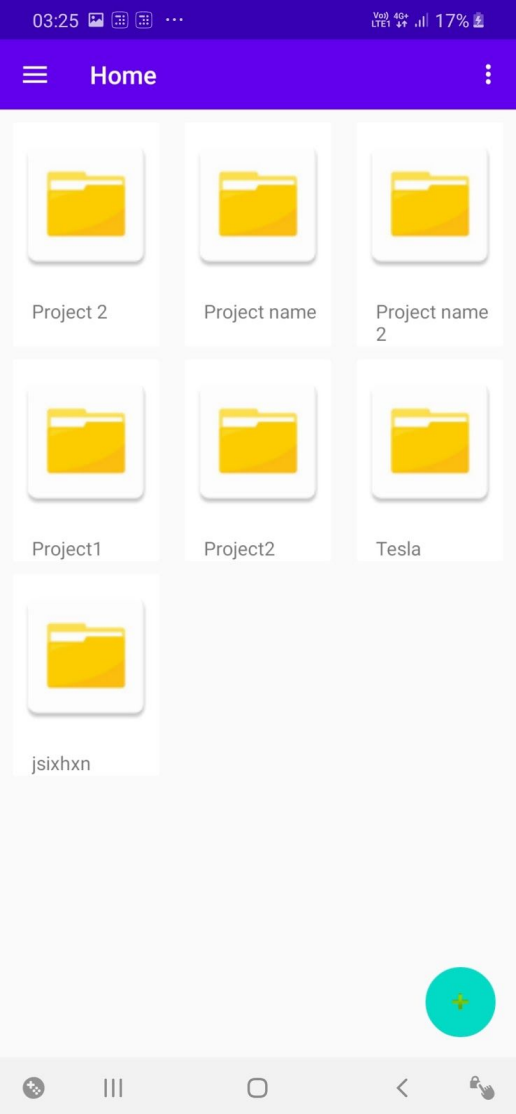
Right Screenshot: Register as data scientist

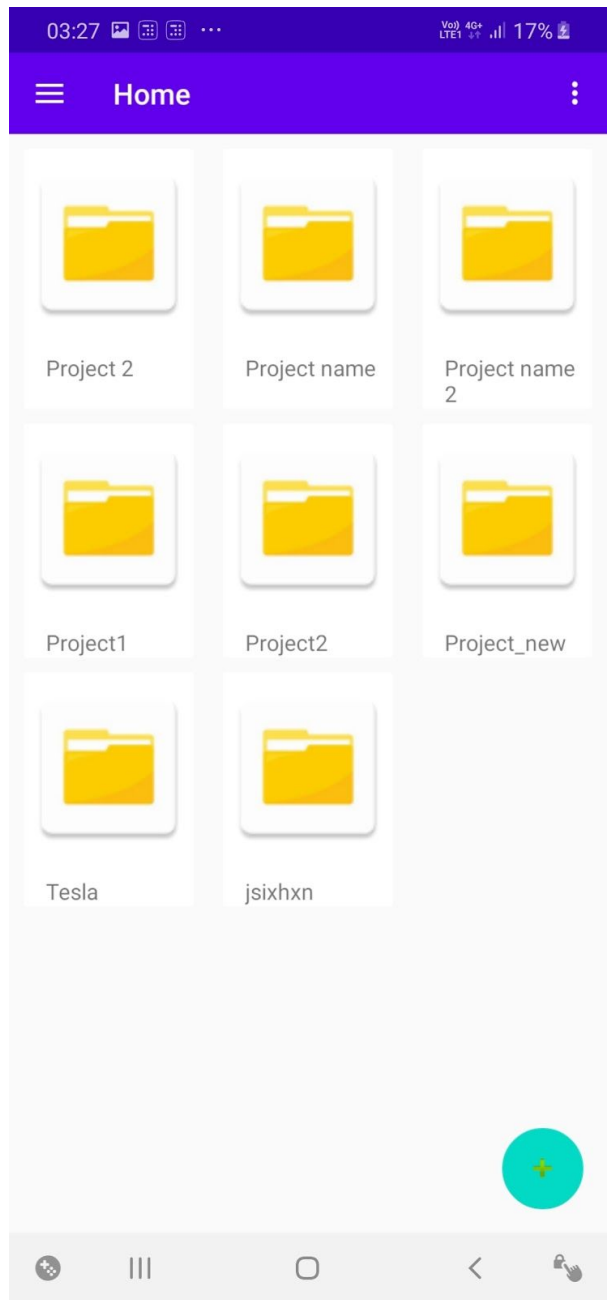
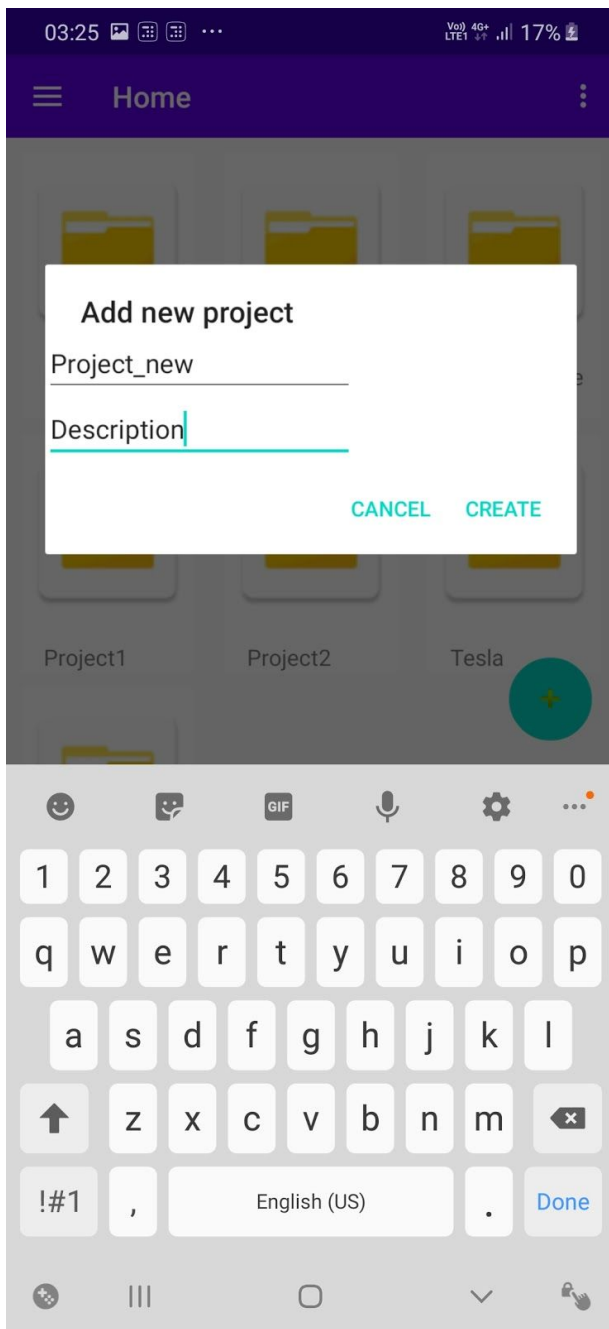
The "Register as data scientist" screen also has a purple header with the app name. The title "Register as data scientist" is centered. The form includes the following fields:

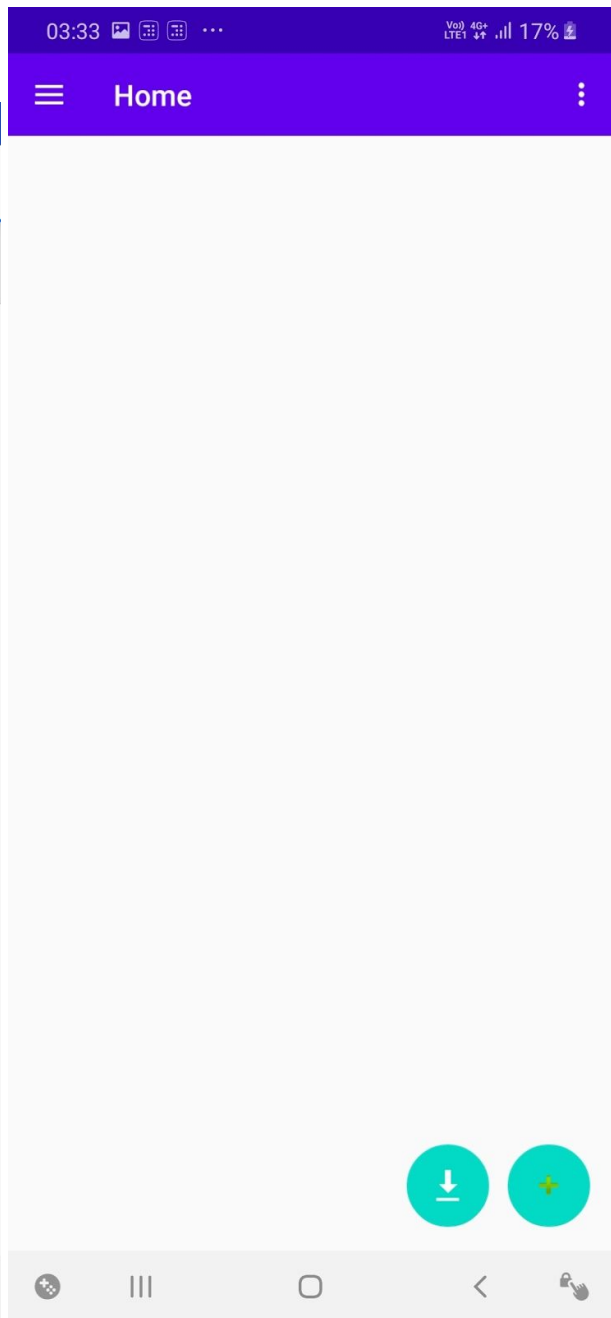
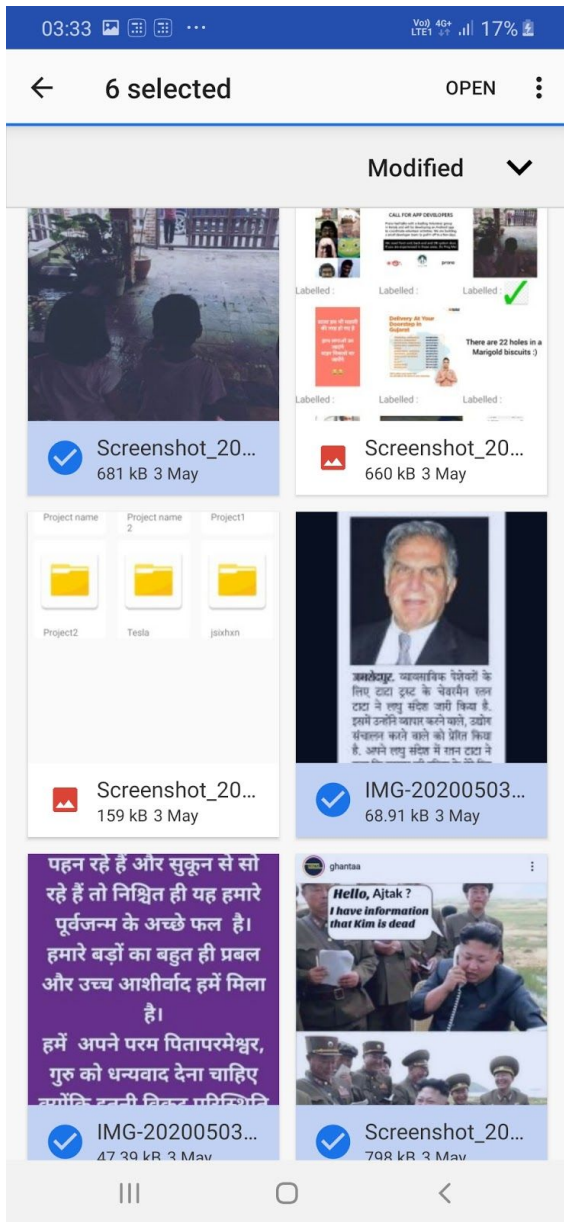
- Education/Qualification :-
- Publications :-
- Expertise/Field of research :-
- University/Institute

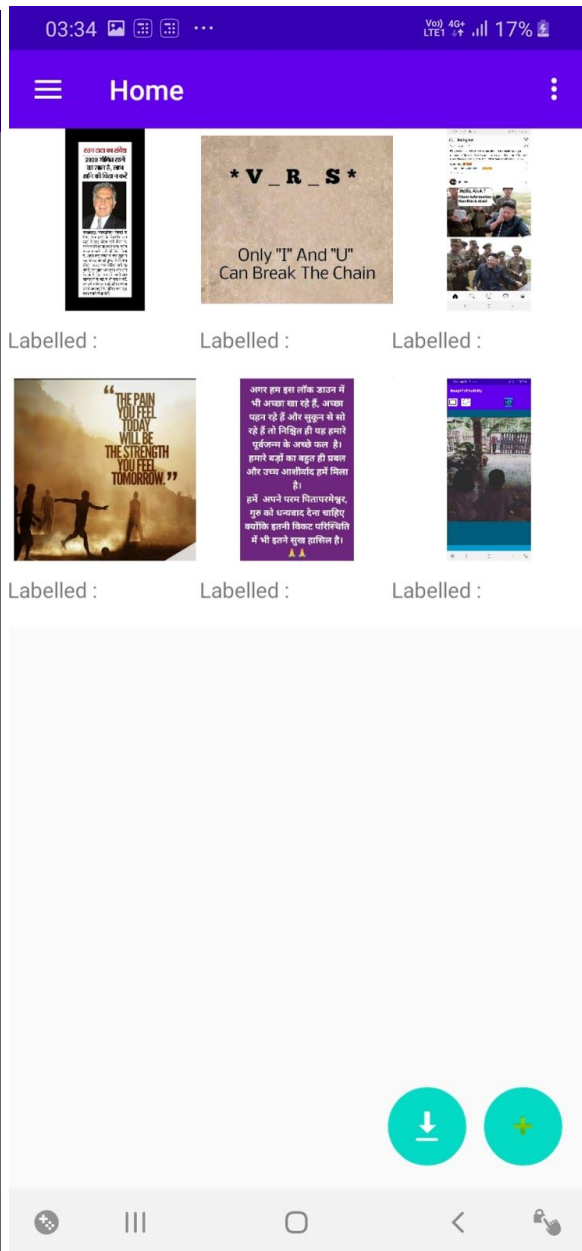
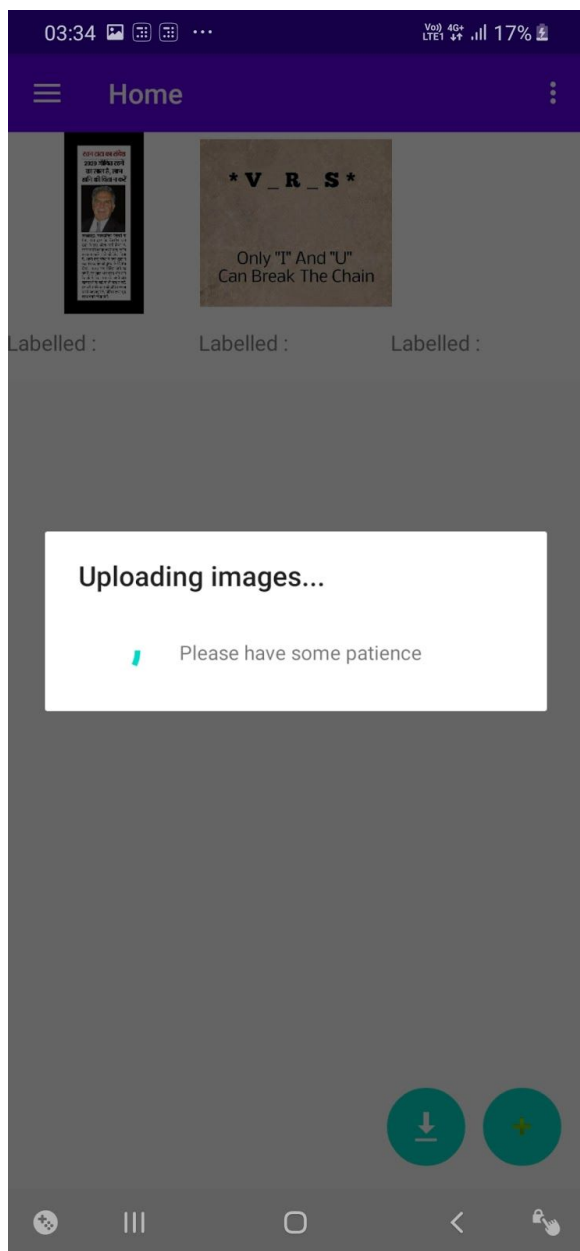
A large red "REGISTER" button is positioned at the bottom of the form.

Both screenshots show a status bar at the top with the time (03:44 and 03:46), signal strength, and battery level (17%). The bottom of each screen features a standard Android navigation bar with icons for back, home, and recent apps.









03:34

Vo 4G+ LTE1 17%

EasyDataLabeler_ex

dvij.kalaria@gmail.com

.....

Type :-

Data Scientist

Data Labeler

SIGN IN

1 2 3 4 5 6 7 8 9 0

q w e r t y u i o p

a s d f g h j k l

↑ z x c v b n m ↵

!#1 , @ EN(US) . .com Next

03:34

Vo 4G+ LTE1 17%

Home

Project 2

Project name

Project name 2

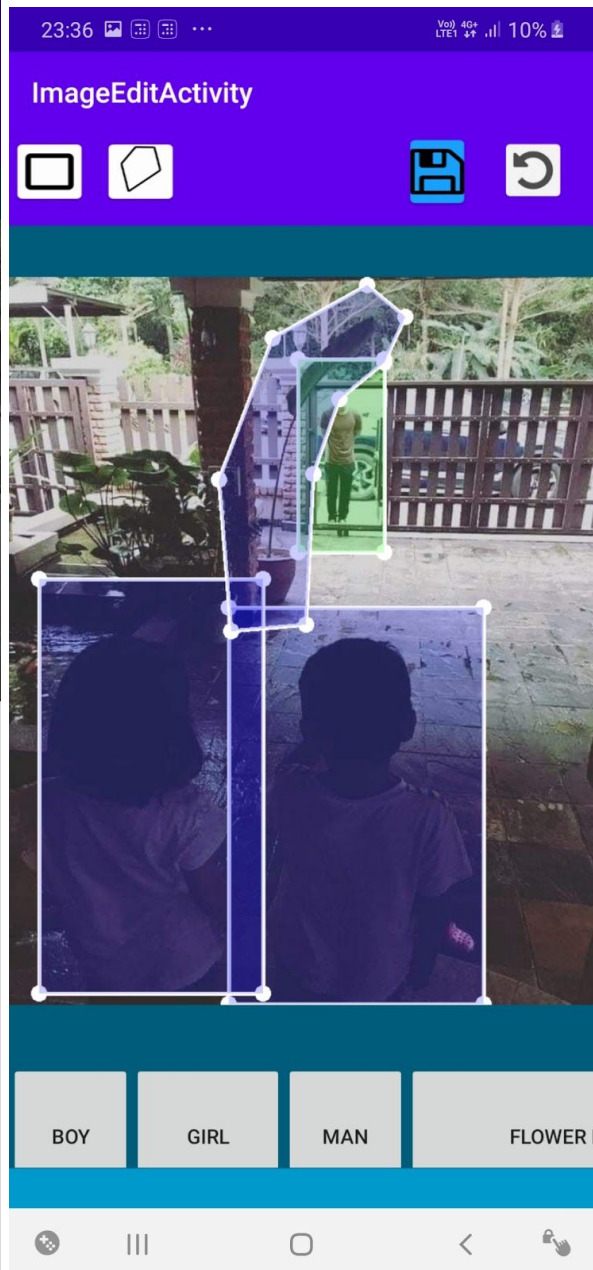
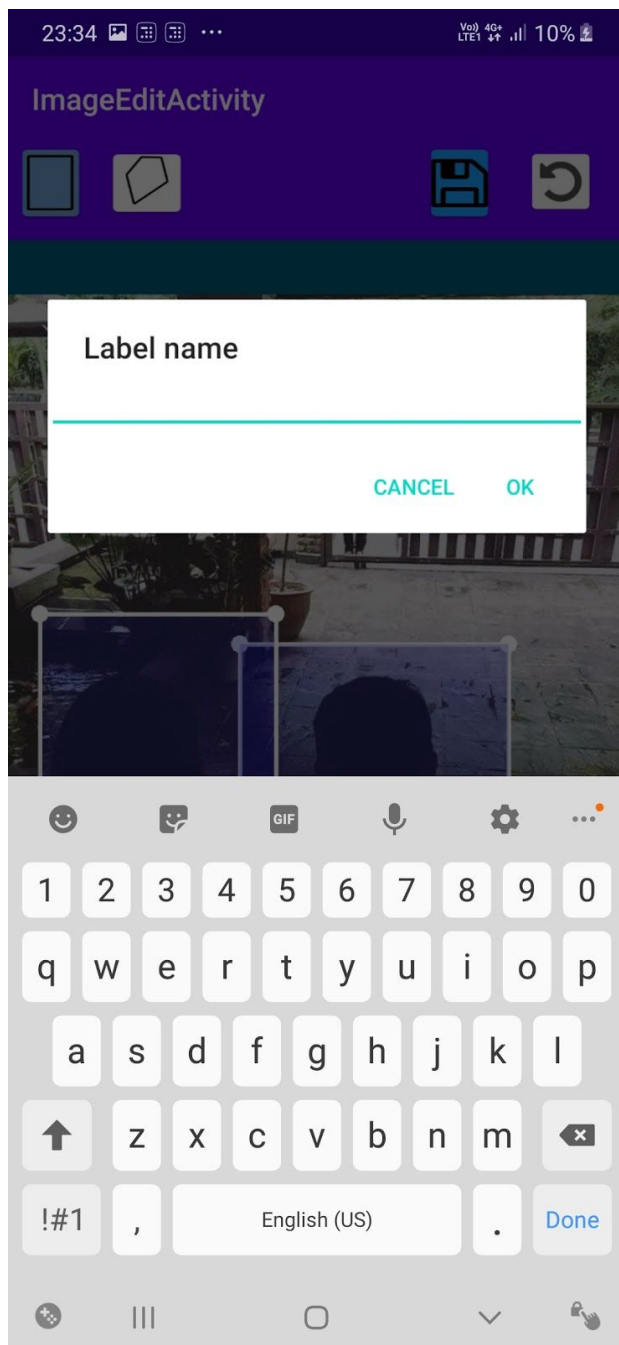
Project1

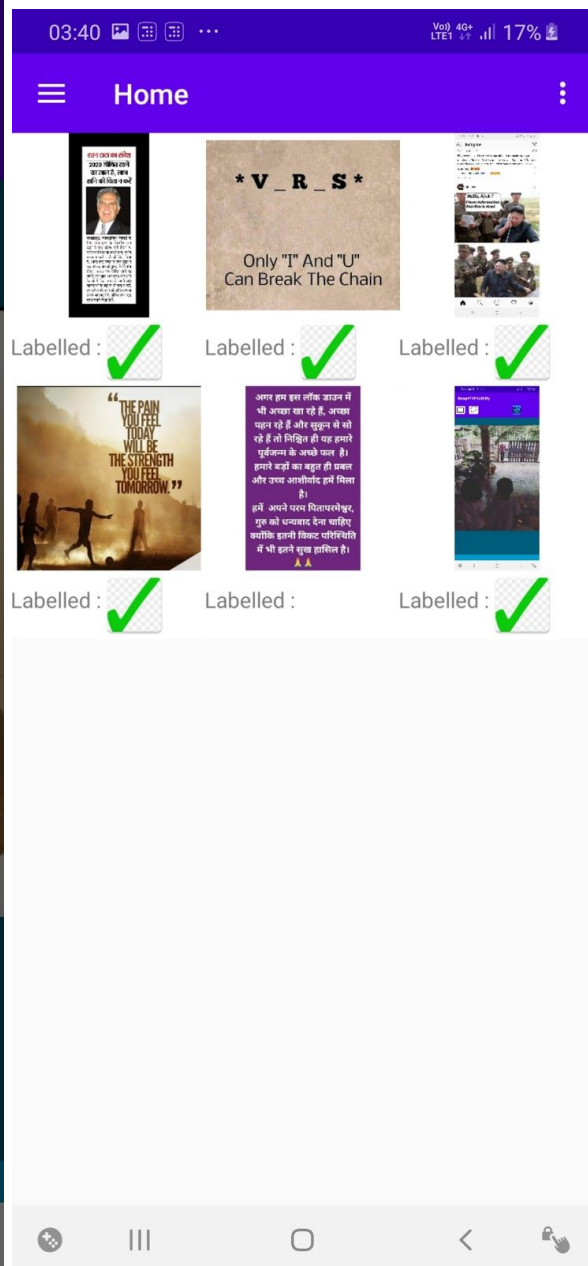
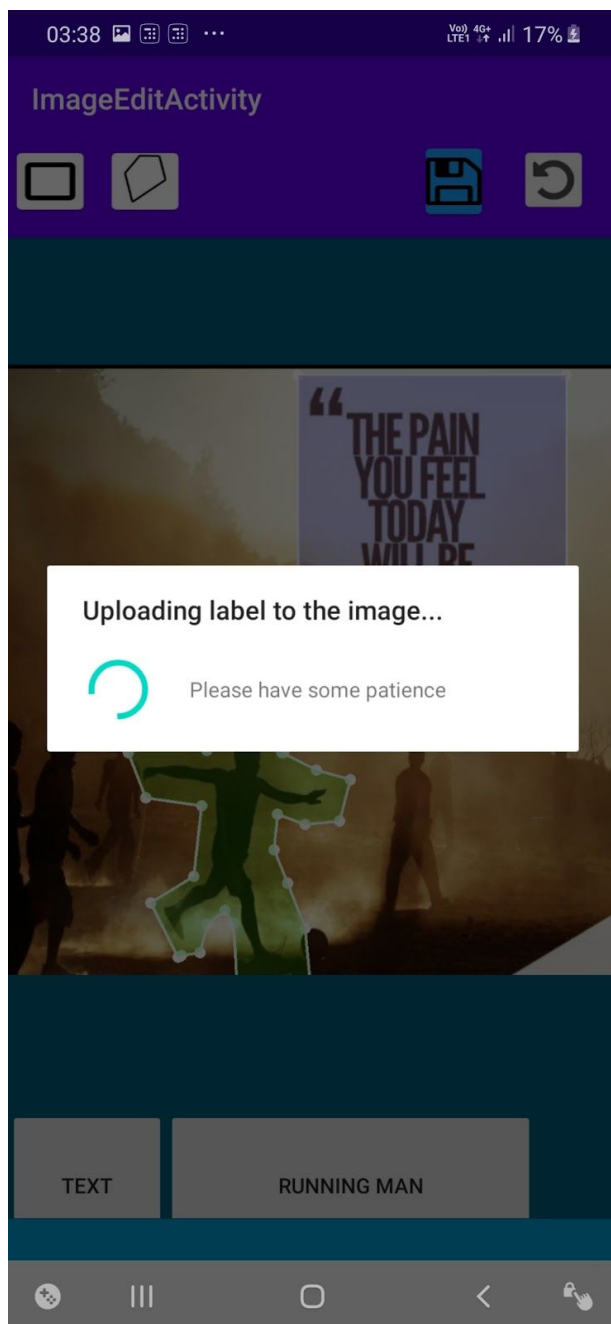
Project2

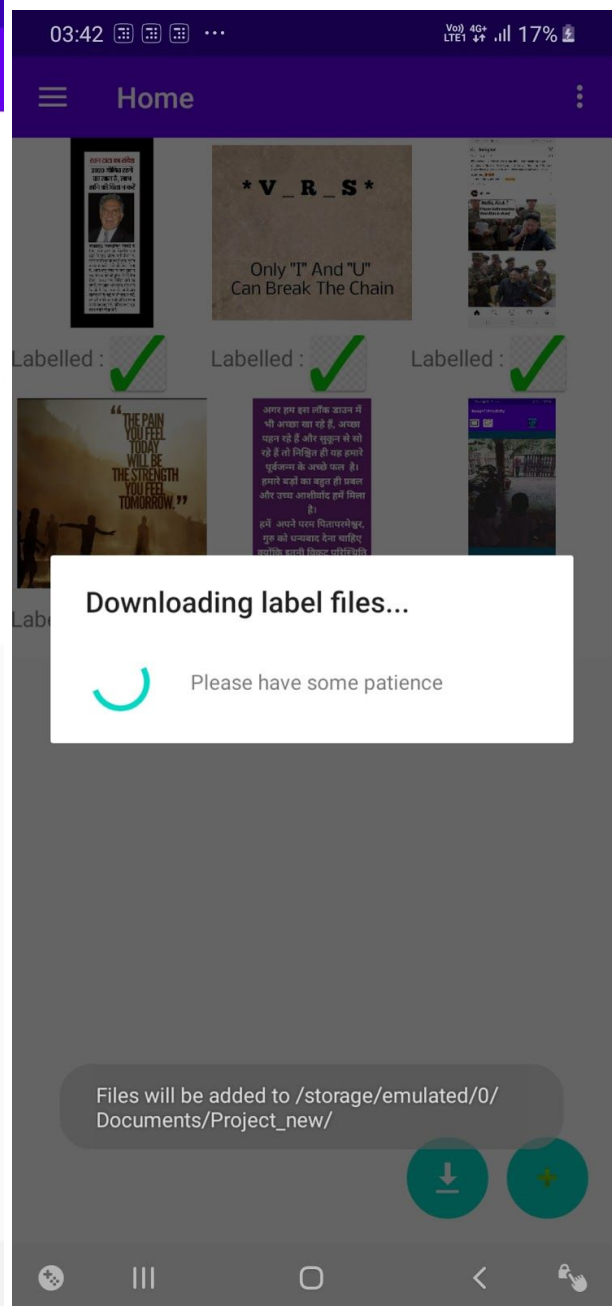
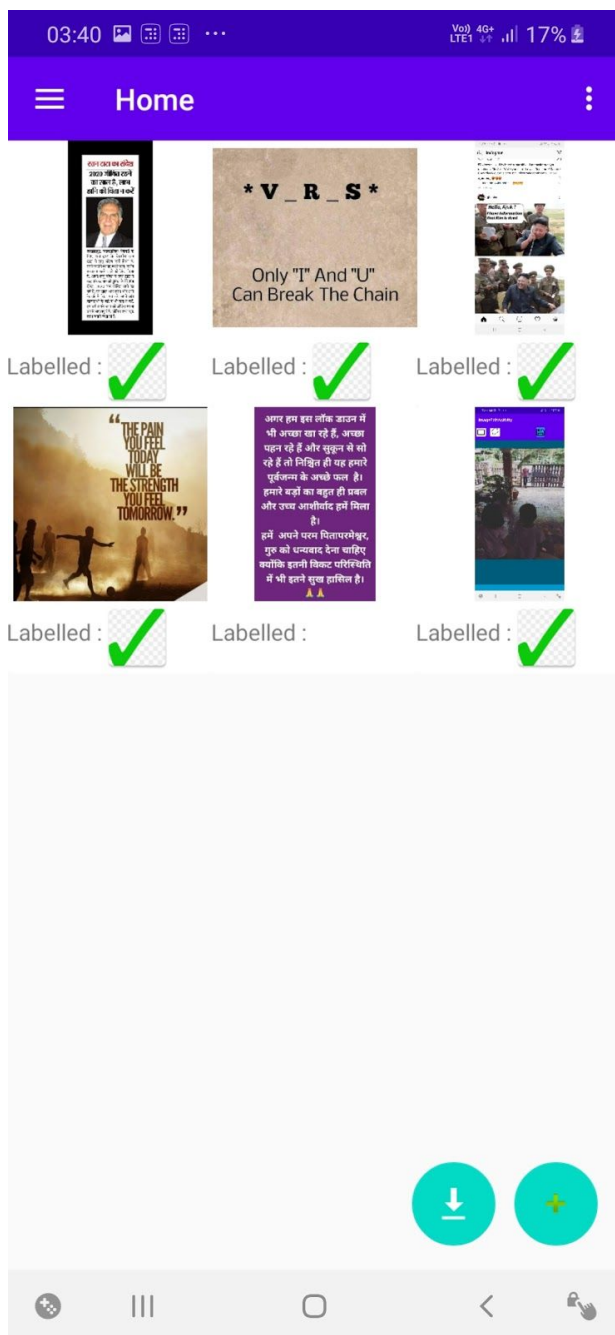
Project_new

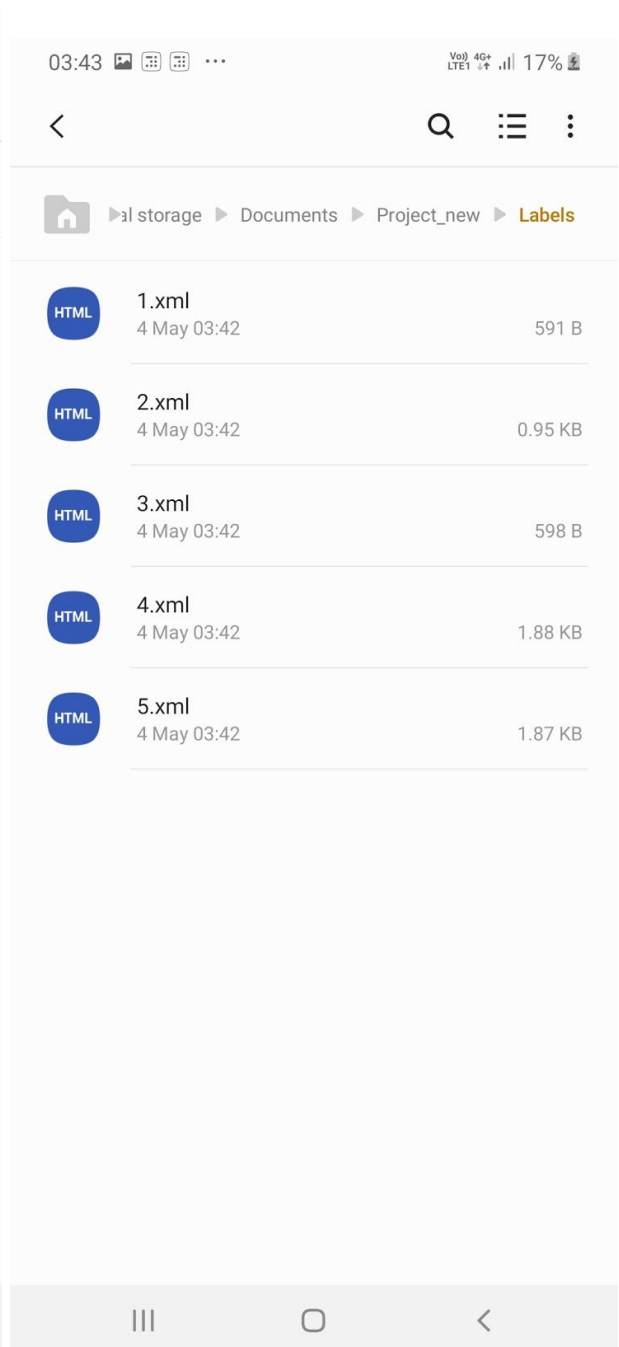
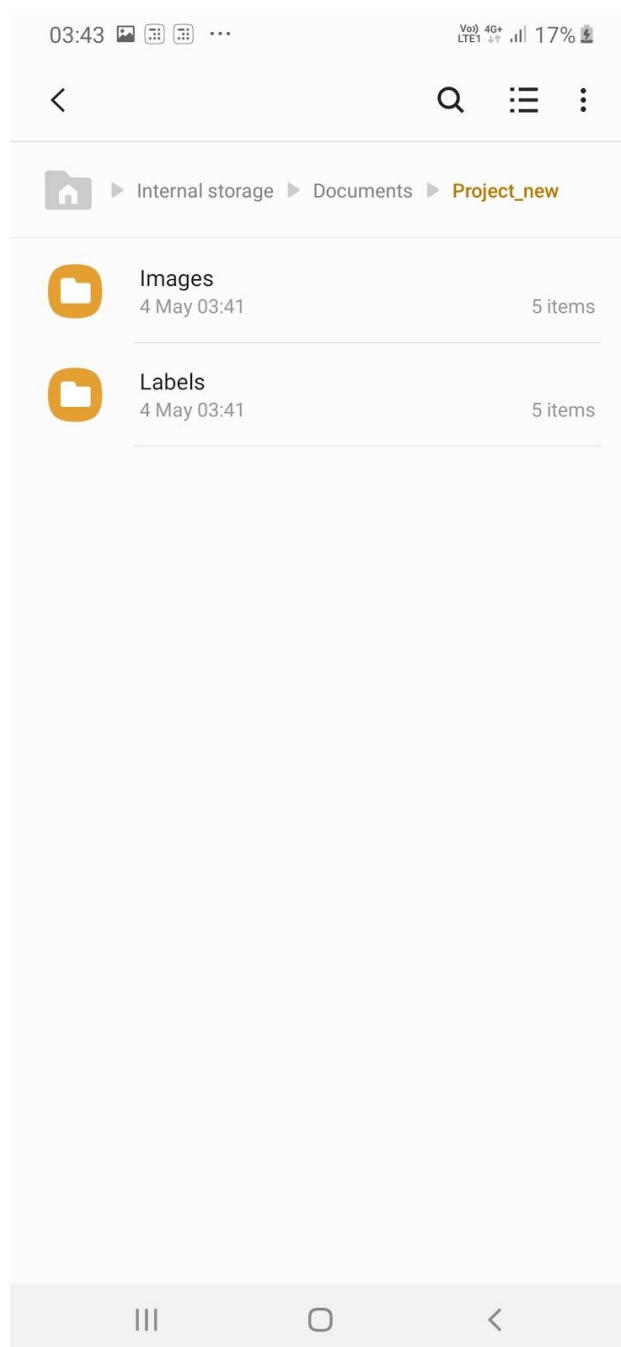
Tesla

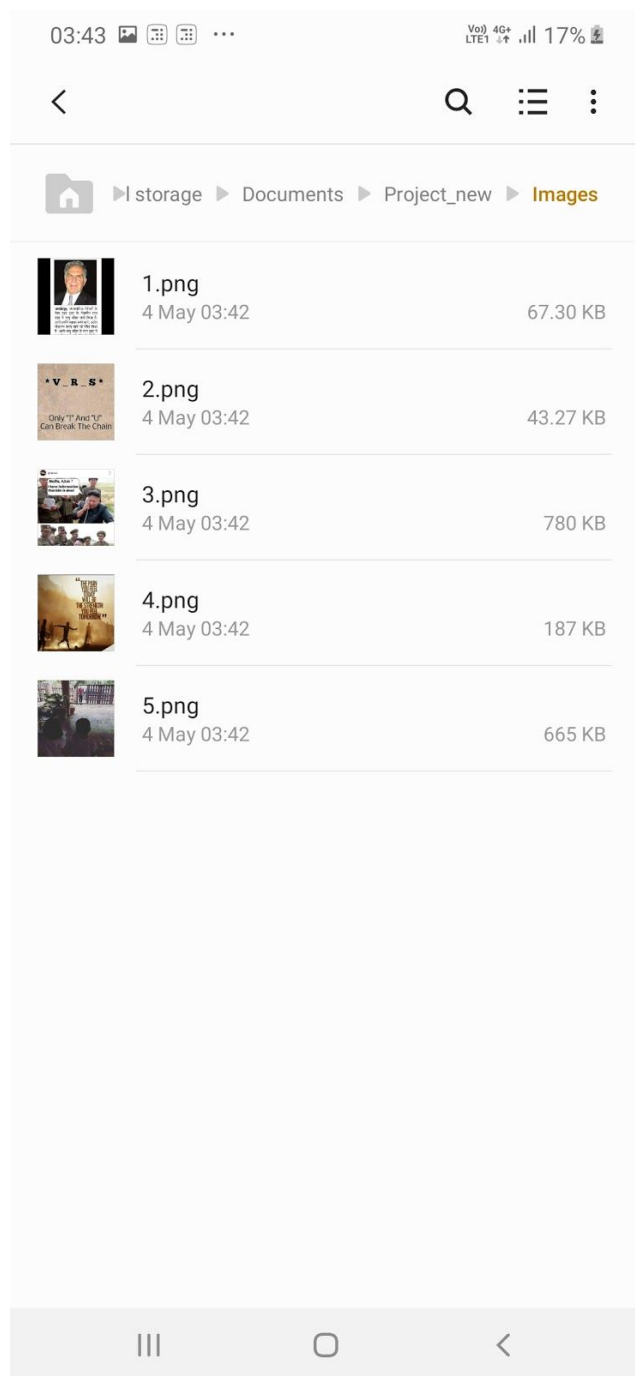
jsixhxn

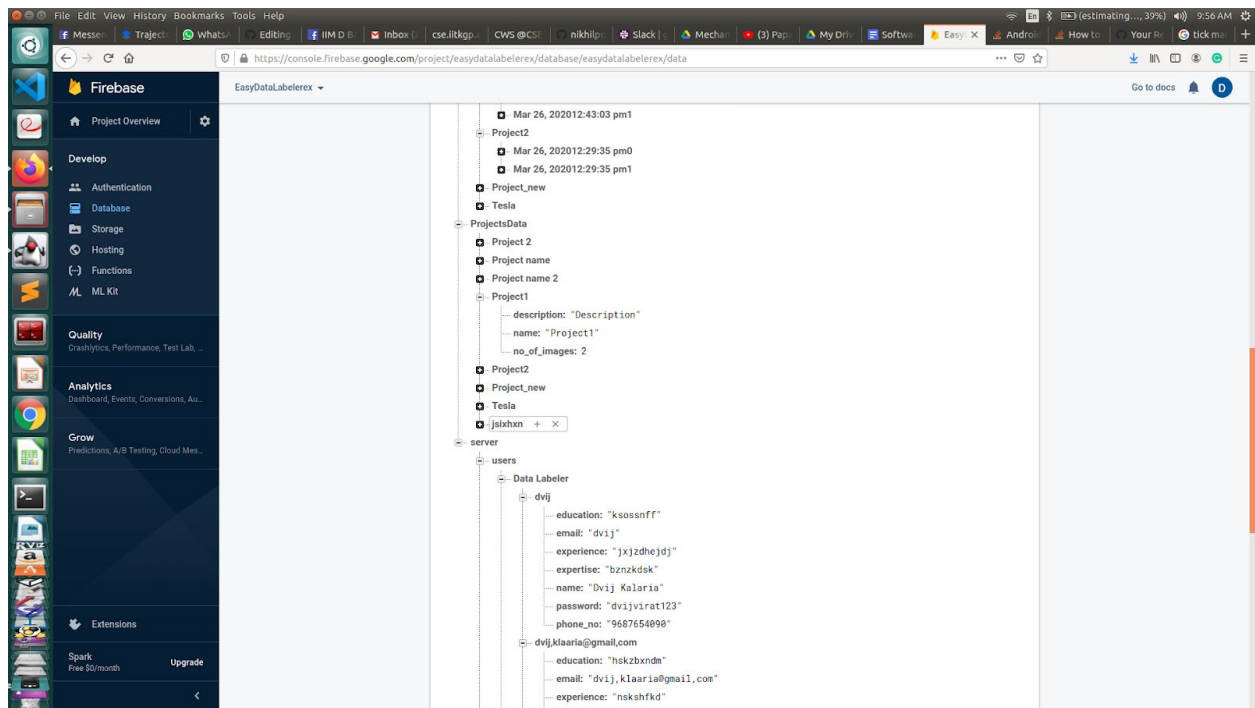












Future scope/enhancements :-

- Many enhancements can be made, some of which are :-
 - Allowing different levels of accessibility for a project like whether to keep it as open/private such that it is accessible to only some community of people.
 - Integrating monetary pay to the labelers directly on the basis of how many data images they have labeled. The data uploaders can customize their individual rate card/ rules for the pay.
 - Data images of a particular project can be arranged on the basis of their difficulty level. The labelers with less expertise can be given access to easier images and the difficulty can be increased thereby. Also verification tasks can be given to some section of users.
 - Interface and UI can be highly improved. Actually, this is just a prototype version of what I had thought, I didn't get time to work on the UI.
 - Filter images on the basis of how many times they have been labeled.

- Allow labeling the same image to multiple labelers and the label which is more overlapped among all the labels can be considered.
- Same idea can be extended to audio, text, video annotations for NLP based models.