


# Expression Face Recognition (EFR)

Expression Face Recognition (EFR) app lets you capture your face and checks whether you are authorized and what your expression was. Before using the app, please make sure that you have uploaded the latest coded files on the server.

**STEP 1:** Download the AI/ML - EFR  from Playstore.

**NOTE:** This application is not available for Apple users.

**STEP 2:** In order to collect team data in a mobile app, ensure the server is active.

- Open terminal (Command Prompt)
- Type `"ssh b15h3XXX@aiml-sandbox1.talentsprint.com"`
- Type `"source venv/bin/activate"`
- Type `"sh runserver.sh"`

**STEP 3:** To connect to your app server, go to Menu => Give Username. Each team will be given a unique Username. Enter Username and click on continue.

**STEP 4:** To collect your team's images' data, go to "Data Collection". Each person in your team will click the image and select either of the 'Person1' to 'Person7' and select upload. Upload as many images as possible for each person.

For eg. The First member in the team, Click the camera icon-> Select "Person1"-> Click upload. So, the first member of the team will upload as many images as possible under 'Person1'

**STEP 5:** For Face Recognition, Go to Menu => Face

Three tasks in the face type are:

- 1) **Face Recognition:** Capture your face and know who you are
- 2) **Face Similarity:** In this task, you have to capture twice, and then it will return the Floating-point numerical similarity measure that you coded in `get_similarity` function.
- 3) **Anti-face Spoofing:** In this task, you will do the following two tasks:
  - a. Capture face with random expression and the output predicts face.
  - b. Capture face with given expression and the output predicts whether the facial expression matched with given expression or not.

**STEP 6:** For Expression Recognition, Go to Menu => Expression

Two tasks in the expression type are:

- 1) **Expression Recognition:** Capture your face to find the expression.
- 2) **Sequence Expression Recognition:** In this task, three expressions should match in a row. In each step, you have to select an expression and capture an image with that expression on your face. If your facial expression and selected expression matches, then you can go to the next step, otherwise the previous step will be repeated. You can redo the process again.

**NOTE: TAKING PICTURES WITHOUT SPECTACLES AND IN BRIGHTNESS WILL BE MORE EFFECTIVE IN RECOGNIZING THE IMAGES.**