### **Objects Detection using OpenCv**

### **Team Roles**

#### **Presentation Team (2 members)**

**Oksana:**

* List of team members and role for each one
* What is OpenCV?
* What is Git and GitHub?
* Face and Object detection results

**Andriana:**

* What is YOLO (You Only Look Once)?
* Difference Between Using a Pre-Trained Model (YOLO) and Training a Model
* Talk about face detection and how did we do it
* References
* Project management

#### **Development Team (2 members)**

***Notes:***

* setup for environment

**Mariam:**

* Implement YOLO for Object Detection (using a pre-trained model).

**Resource:** [Object Detection with YOLO and OpenCV: A Practical Guide](https://medium.com/@tejasdalvi927/object-detection-with-yolo-and-opencv-a-practical-guide-cf7773481d11)

**Ahmed:**

* Implement
* Train the Face Detection Model.

**Resource:**

* [Training a Facial Recognition Model by OpenCV: An Example](https://medium.com/@siucy814/training-a-facial-recognition-model-by-opencv-e4717d86b7ec)
* [Data set](https://www.kaggle.com/datasets/fareselmenshawii/face-detection-dataset)

#### **Adel**

**Responsibilities:**

* Communication and coordination between team members.
* Provide necessary info for each team member
* Help Development Team with implementing the pre-trained YOLO model.
* Assist with training the Face Detection Model.
* Review the PowerPoint presentation for clarity and completeness.
* Set up the project on Git and manage the GitHub repository.
* Manage branches and handle code reviews.
* Merging dev codes
* Dividing tasks
* Draw by hand implementation
* OCR implementation

***Milestones:***

* Phase 1(25/09)
  + Research and gathering info
  + Deep dive into tasks and put your question until next meeting
* Phase 2(25/10):
  + Finalize Object detection of yolo
  + Start training of face detection
  + Update results of presentation
* Phase 3(25/11)
  + Explaining the whole code
  + Divide presentation part for each team mate
  + Finalize all project aspects.
  + Finalize draw by hand
  + Finalize OCR
* Phase 4 - Presentation(11/12):
  + Internal demo
  + Finalize powerpoint
  + Finalize face detection
* Phase 5 - Presentation(16/12):
  + Powerpoint slide
  + Explanation on code
  + Showing results by demo

***General Notes:***

* Keep everything simple and straightforward
* We Trained a Model for Face Recognition.(Face Detection)
* We used pre trained model
* We will provide:
  + Summary of Research Findings and Results.
  + list of what objects we detect in our project