**LIST OF REQUIREMENT**

**Project Title :**  Real Time Object Detection

**Project Owner :** Mert Altuntaş

**Project Description**

The aim of this project is to detect the objects in real time with good accuracy. Objects will appear live on webcam in a squared or circled area.

**Tools and Frameworks**

For this project required softwares are ;

* Python 3.7 (or above) as programming language
* Anaconda Distributions to use Python libraries
* Pycharm Pro and Spyder as a developing environments
* OpenCV Libraries to detect objects
* Numpy Libraries to create matrices and making calculations
* Github Student Developer Pack for keeping project files and tracking project versions.

**Required Equipment**

* Windows 10 or Linux based computer
* Webcam or Additional Camera

**Functional Requirements**

1. The program will detect objects from a webcam. Users can see the objects in a squared or circled area.
2. The program also should work in real time. All detections have to be live.

**Additions**

1. The program will detect objects, that includes human bodies, eyes and faces.
2. Also, the program will be able to detect facial emotions (like smiling) in real time.
3. The Project might have a User Interface. (If the time allows.)