

QUAD CHART

Human Detector and Tracker	
Objective <ul style="list-style-type: none">- To detect objects using camera (sensor)- Filter humans using the reference templates and patterns available with the pre-trained model.- Continuously monitor the dynamic data from the sensor and track the objects with reference to the previous frame.	Methodology <ul style="list-style-type: none">- OpenCV C++ for image processing- YOLOv5 is used for human detection- Assign every human detected in the frame with an unique ID.
Risks and limitation <ol style="list-style-type: none">1. Module might fail if the ground is not flat and the camera is tilted.2. If the human detected is not comparable with the reference average height, the depth calculations will be erroneous.3. Live video with dynamic data may have occlusions and detection may not be proper.	Expected results <ul style="list-style-type: none">- Detected human displayed with the coordinates- Text file with trajectory for every identified person