

Model Development Phase Template

Date	8 November 2024
Team ID	team - 740058
Project Title	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	5 Marks

Model Selection Report

YOLOv5 is selected as the most suitable model for the Virtual Eye Lifeguard project. Its combination of speed, accuracy, and real-time performance makes it ideal for detecting active drowning incidents in swimming pools, where timely intervention is crucial. Additionally, its ability to handle various objects and scenarios in real-time aligns well with the project's needs.

Model Selection Report:

Model	Description
YOLOv5	<p>YOLOv5 is a state-of-the-art real-time object detection model that predicts both the bounding boxes and class labels of objects in images in a single pass. It is designed for speed and accuracy, making it suitable for real-time applications. YOLOv5 is lightweight, easy to implement, and optimized for fast processing, which allows it to efficiently detect multiple objects in complex images or video streams. It is widely used in tasks like surveillance, autonomous vehicles, and safety systems due to its robust performance.</p> <p>YOLOv5 is a real-time object detection model that identifies and locates objects in images with high speed and accuracy. It predicts bounding boxes and class labels in one pass, making it ideal for applications requiring fast and efficient object detection, such as real-time surveillance and safety systems.</p>