

Sprint 1 totaled 849 minutes of work which is 29 minutes more than the anticipated 820. Many items changed during the sprint as the unknowns in the project were revealed to the team. This outline will highlight the work that was done as well as the main discoveries of the sprint. It will also introduce a high level plan for sprint 2.

The main learnings from sprint 1 came from depth perception and yolo research. The team found that the best path forward would be to run inference models through OpenCV as classes that would be components of the main analyzer module. The UML diagram was updated to reflect this discovery and the header files were written with declarations for the necessary functionality. The team successfully implemented C++ demos from both monocular depth perception and YOLOv5 models, and used these demos to plan the integration into the perception module. The project repository was brought to a state where it can be built, so failing tests can be run.

Sprint 2 was updated with the new roadmap to complete the project. The tests will be written first and then the implementations will be written to pass those tests. The UML diagram is updated as a guideline for writing the tests. Once the tests have been written and implementations are passing, the baseline will be analyzed for bugs/missing features and the documentation will be written. The team is prepared to close sprint 1 and open work on sprint 2.