School of Informatics & IT

**Diploma in Applied Artificial Intelligence**

AY2023 Semester Level 3

**MP Weekly Project Progress Report**

|  |  |
| --- | --- |
| **Project Title: Nvidia TX Autonomous Vehicle** | |
| **Student Name: Maximilian See Tze Jie** | **Adm No: 2102869A** |
| **Supervisor Name: Mr Tan Sio Poh** | **Week No: 1** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Tasks Completed** |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Completed Intro to C++ |  |  |  |  |  |
|  | Completed Intro to Python OOP |  |  |  |  |  |
|  | Read through what is ROS and documented what I have learnt on Notion |  |  |  |  |  |
|  | Analyse Mr Tans Code |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | **Issue/Risk Tracking** |  |  |  |  |  |
|  | Issue/Risk Name |  | Status | | |  |
|  |  |  |  | | |  |
|  | Acquiring the Image of the ubuntu |  | Not done | | |  |
|  | Find out how to import the robot we have into gazebo and how to use the imported robot into gazebo to do simulations and how to export the file back to our robot to streamline the process |  | Not Done | | |  |
|  | Find out how to make the robot move forward |  | Not done | | |  |
|  | **Meeting minutes with MP supervisor** | | | | |  |
|  | The meeting which was 45 min long allowed us to get a high-level understanding of the robot and how it works. The meeting covered topics like how the robot communicates, what does it use to communicate and the high-level overview of the file structure. The meeting also covered the potential areas we can research or work on. During the meeting we were also allowed to physically explore the robot itself. We gained the understanding of how the robot sees (Using Cameras & Sensors), and its flaws (lack of stable power source for one of the robots) . Overall, this allowed us to get a nice high-level overview of our project, allowed us to contemplate the possible flaws and gave us some ideas on what we can do to further improve the bot | | | | |  |
|  |  | | | | |  |
|  |  | | | | |  |
|  |  | | | | |  |
|  | **Weekly Self-Reflection** *(no more than 150 words)*  For week 1 I have gained a better understanding of how the robot works. This is regarding how the robot navigates and what It uses to navigate its surroundings. Other than the physical knowledge of the robot I also gained some software knowledge on how this robot maybe programmed. The knowledge on the software used drove me to do some research on the Software (ROS) and how it is being used and how I might use it to complete the project. | | | | |  |
|  | While researching I have also gained some ideas for further improving the robot like uploading of data to the machine itself as a way of logging the information which could be used to further train the networks model. | | | | |  |
|  | I have created a notion page where I have noted down what I have done and have proceeded to share that notion page with Ryu to further enhance our knowledge database. | | | | |  |
|  | We hope that by doing so we can help our juniors if they so choose to attempt this project. 😊 | | | | |  |
|  |  | | | | |  |
|  |  | | | | |  |
|  |  | | | | |  |