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| Project ICARUS | |  | | --- | | November 18, 2016 | | 12:30 | | w1.76 | |

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| Meeting called by: PST |  | Type of meeting: Gateway |  |
| Facilitator: Luke Cattle |  | Note taker: Ben Peall |  |
| Timekeeper: Calum Newman |  |  |  |

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| Attendees: Ben Peall, |  | |
| Luke Cattle, Calum Newman, |  | |
| Chis Gunn, Josh Crawford |  | |
| Jonny Balakumar, Simon Pomeroy |  | |
| **Ella-Mae Hubbard, Paul Lepper**  **Alford Chauraya** | |
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## Minutes

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| Agenda item: 1 Raspberry pi err |  | Presenter: Luke Cattle |  |

#### Discussion:

#### A presentation was made about the current progress made in the project this presentation, this included details of the methods that we plan to use to solve the problem

#### Conclusions:

The PST found this presentation a little bit difficult to understand so for the next meeting the presentation needs simplifying

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| Action items | Person responsible | Deadline |
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| Agenda item: 2 |  | Presenter: Calum Newman Newman |  |

#### Discussion:

The laser method to control the Tri-track was talked about in more detail, the points discussed in more detail included were how will the laser deal with loss of sight to the dani bot, would it be possible to use the Kinect to detect the laser point instead on an array of photodiodes?, or could photoresistors be used instead? Instead of using servos to control the angle of the laser could a gimble like system be used instead?

#### Conclusions:

The methods suggested need more detailed research to find the best solution, these include; testing the kinnect instead on an array of photodiodes?

Would it be possible to use photoresistors instead?

Would a gimble like setup work better than servos?

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| Action items | Person responsible | Deadline |
| * Investigate to see if a kinnect can be used instead | Calum Newman | 25/11/16 |
| * investigate into the use of photoresistors over photodiodes | Jonny Balakumar | 25/11/16 |
| * investigate into whether a gimble system would work better than servos | Calum Newman | 25/11/16 |

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| Agenda item: 3 |  | Presenter: Ben Peall |  |

#### Discussion:

The Tri-track was discussed, the current program that was on it used keyboard commands to control the arm, this was done wirelessly but also on the botboard 2 which is a simple controller, this controller will be replaced by a raspberry pi, the method to how the Tri-track will move around the environment was also discussed, in response it was mentioned that the plan was to use a master slave relationship where the Tri-track will effectible be blind

#### Conclusions:

The bot board 2 will be replaced by a raspberry pi to allow autonomous arm control to be added, also the dynamics of the master-slave relationship will need to be outlined

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| Action items | Person responsible | Deadline |
| * Look in to the method of how to change the bot board for a raspberry pi | Ben Peall | 28/11/16 |
| * Define the dynamics of the master slave relationship | Luke Cattle | 28/11/16 |
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| Agenda item: 4 |  | Presenter: Josh Crawford |  |

#### Discussion:

The dani was the next point discussed, the dani is to be used for navigating the environment, and finding the black box, from this it was discussed that an xbox Kinect could be used for both of these capabilities as it has a depth sensor and multiple microphones.

#### Conclusions:

It was decided that the Kinect needs investigating more in order to ascertain if the Kinect will be able to handle all of the capabilities that we would like the dani to handle.

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| Action items | Person responsible | Deadline |
| * Investigate the capabilities of the Kinect to look at the potential it has for this project | Chris Gunn | 28/11/16 |
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