|  |  |
| --- | --- |
| Week Starting: | 00/00/2023 TO 00/00/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
|  |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **00/00/2023** |

|  |  |
| --- | --- |
| Week Starting: | 11/10/2022 TO 14/10/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: Also record project backlog, use notes page as required |
| Initial work was setting up GitHub repository and researching into artificial intelligence and neural networks suitable for the project. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **14/10/2022** |

|  |  |
| --- | --- |
| Week Starting: | 17/10/2022 TO 21/10/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: Also record project backlog, use notes page as required |
| Researching into artificial intelligence and neural networks suitable for the project continues.  No progress on coding.  Assignments for different projects started. This will be put on the back foot for a while |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **21/10/2022** |

|  |  |
| --- | --- |
| Week Starting: | 24/10/2022 TO 28/10/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: Also record project backlog, use notes page as required |
| Researching into artificial intelligence and neural networks suitable for the project continues.  No progress on coding. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **28/10/2022** |

|  |  |
| --- | --- |
| Week Starting: | 31/10/2022 TO 4/11/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: Also record project backlog, use notes page as required |
| Researching into artificial intelligence and neural networks suitable for the project continues.  No progress on coding.  Assignments are currently in progress for other modules. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **04/11/2022** |

|  |  |
| --- | --- |
| Week Starting: | 7/11/2022 TO 11/11/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: Also record project backlog, use notes page as required |
| No progress on coding.  Assignments are currently in progress for other modules.  Added template documentation and thesis to GitHub Repository with preliminary content. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **11/11/2022** |

|  |  |
| --- | --- |
| Week Starting: | 14/11/2022 TO 18/11/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: Also record project backlog, use notes page as required |
| No progress on coding.  Assignments are currently in progress for other modules.  Started writing documentation for what the game environment will be and deciding on if it’s in 3D or 2D. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **18/11/2022** |

|  |  |
| --- | --- |
| Week Starting: | 21/11/2022 TO 25/11/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: Also record project backlog, use notes page as required |
| Unity project was added for a 3D scene.  Assignments are currently in progress for other modules.  Priority for the main project is on the back burner unfortunately. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **25/11/2022** |

|  |  |
| --- | --- |
| Week Starting: | 28/11/2022 TO 02/12/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Assignments for other modules are currently underway.  No time available to work on this.  Some research into the Alpha GO and Micro-RTS on how they implemented neural networks and artificial intelligence. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **02/12/2022** |

|  |  |
| --- | --- |
| Week Starting: | 05/12/2022 TO 09/12/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Setting up Unity’s ML-Agents toolkit and trying to understand how they use it to train agents. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **09/12/2022** |

|  |  |
| --- | --- |
| Week Starting: | 12/12/2022 TO 16/12/2022 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Started working on an RTS camera that uses a tutorial for selecting units. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **16/12/2022** |

|  |  |
| --- | --- |
| Week Starting: | 19/12/2022 TO 06/01/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| No work completed during this time. Though some more research on the topic continued.  Most of this time was spent working on other assignments. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **06/01/2023** |

|  |  |
| --- | --- |
| Week Starting: | 09/01/2023 TO 13/01/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Tried at using the ML-Agents toolkit and trying to dissect it.  Also tried a machine learning tutorial on ML-Agents. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **13/01/2023** |

|  |  |
| --- | --- |
| Week Starting: | 16/01/2023 TO 20/01/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| No work done. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **20/01/2023** |

|  |  |
| --- | --- |
| Week Starting: | 23/01/2022 TO 27/01/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Swapped to a 2D game environment and started the basic implementation of units |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **27/01/2023** |

|  |  |
| --- | --- |
| Week Starting: | 30/01/2023 TO 03/02/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Progress on using vision cones for units.  Ported the units to using unity’s nav-mesh system with an external 2D package. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **03/02/2023** |

|  |  |
| --- | --- |
| Week Starting: | 06/02/2023 TO 10/02/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Expanded the world and a simple area for the game.  ARGO project started. There won’t be much if at all any progress to be made during this time. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **10/02/2023** |

|  |  |
| --- | --- |
| Week Starting: | 13/02/2023 TO 17/02/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| No significant work done in the project. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **17/02/2023** |

|  |  |
| --- | --- |
| Week Starting: | 20/02/2023 TO 24/02/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Started working on a simple finite state machine as an opponent. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **24/02/2023** |

|  |  |
| --- | --- |
| Week Starting: | 27/02/2023 TO 03/03/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| No significant progress.  End of ARGO project. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **03/03/2023** |

|  |  |
| --- | --- |
| Week Starting: | 06/03/2023 TO 10/03/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Refactoring shooting to use hit-scan lasers instead of bullets to increase performance.  Made adjustment to the unit spawner. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **10/03/2023** |

|  |  |
| --- | --- |
| Week Starting: | 13/03/2023 TO 17/03/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Started working on formations that the units could be in.  Finished basic finite state machine for an AI opponent.  Added architecture for a behaviour tree.  Started working on a new unit. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **17/03/2023** |

|  |  |
| --- | --- |
| Week Starting: | 20/03/2023 TO 24/03/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Refactoring RTS controls and finite state machine.  Added button for spawning a unit. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **24/03/2023** |

|  |  |
| --- | --- |
| Week Starting: | 27/03/2023 TO 31/03/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Unit build queue added as well as work starting on capture points. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **31/03/2023** |

|  |  |
| --- | --- |
| Week Starting: | 03/04/2023 TO 07/04/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| No significant progress made. Laptop was slowing down with the size of the project. Unable to do more work. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **07/04/2023** |

|  |  |
| --- | --- |
| Week Starting: | 10/04/2023 TO 14/04/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Finished most of the code for the control and resource points.  Expanded the map again to encompass new gameplay elements. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **14/04/2023** |

|  |  |
| --- | --- |
| Week Starting: | 17/04/2023 TO 21/04/2023 |
| Student Name: | Leo Chen |

|  |
| --- |
| **Description of work completed since previous meeting**  Notes: |
| Started looking into implementing the neural network and machine learning agent. |

|  |
| --- |
| Supervisor Comments |
|  |

|  |  |
| --- | --- |
|  | **Student** |
| **Signature** | **Leo Chen** |
| **Date** | **21/04/2023** |