**SOFTWARS’ Project Team Charter**

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| MISSION & OBJECTIVES | **Team Mission Statement**  SOFTWARS’ aim is to foster a greater understanding of systems and simulation by producing the highest quality research and code.  **Project Mission**  To create “pattern of life” behaviour that is injected into one or more connected, distinct simulators via middleware.  **Desired End Result**  Presentable deliverable in Unity that accurately injects Boid-like NPC traffic into any number of simulators connected to the network (via DIS gateway). |

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| SCOPE | **Main Purpose:**  Show how a virtual environment and a specialist system can be linked to improve simulation, with particular focus on aiding LVC training exercises for military use.  **Key Deliverables:**   * Established unity scenario with behavioral algorithm (based off Boids) that generates NPC traffic and sends entity information via DIS * Two distinct VBS scenarios connected via DIS * Developed middleware (either custom-built or COTS) that can capture DIS traffic and update game environments of both distinct VBS scenarios |

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| TEAM MEMBERS | * Bridget Free   + Project Manager and Documentation   + [bridget.e.free@gmail.com](mailto:bridget.e.free@gmail.com) * Tate Waters   + External Liaison and Client Manager   + [tatememate@gmail.com](mailto:tatememate@gmail.com) * Andrew Russell   + Assistant Technical Developer and Testing   + [andrew.russell9899@gmail.com](mailto:andrew.russell9899@gmail.com) * Do Tran   + Lead Technical Developer   + [tranngocdo6111998@gmail.com](mailto:tranngocdo6111998@gmail.com) |
| EXTERNAL TEAM | * Dr Sura De Silva   + Client   + [sura@terraschwartz.com](mailto:sura@terraschwartz.com) * Dr Erandi Lakshika Hene Kankanamge   + Supervisor   + [e.henekankanamge@adfa.edu.au](mailto:e.henekankanamge@adfa.edu.au) * Dr Daryl Essam   + Supervisor   + [d.essam@adfa.edu.au](mailto:d.essam@adfa.edu.au) |

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| COMMUNICATION  GUIDELINES | **Communication methods**   * Internal Team Communications   + Communications occur over Facebook Messenger.   + Response expected within the working day – 12-24 hours (48 hours over the weekend).   + Email     - Not to be used for emergencies or short messages     - Large communications that require varied attachments   + Jira used for task management (https://softwars.atlassian.net/jira/software/projects/SOF/boards/1)   + All key artefacts on Git.   + All members responsible for updated Jira tasks and informing team of challenges, * External Communications   + Email Client for all important communications or add to weekly meeting agenda.   + Meeting agenda confirmed NLT 1200 Wednesday and confirmed by all members NLT COB Wednesday (uploaded under Jira task)   + All email content is external liaison’s responsibility with input from all members on content.   + All external comms uploaded under relevant task.   + Meeting note-taking shared – project manager to collate and confirm details.   **Meeting frequency**   * Meeting every week at 1230 on Thursday with Client |

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| APPLICATIONS, DEVELOPMENT & GIT | **Applications and Game Engines**   * VBS and Unity * Possible open source libraries   **Development**   * Focus on achieving small deliverables. * Separate tasks tested fully before integration.   **Git**   * Be thoughtful and reasonable with git commits.   + Small commits will be utilized to update the team – comments required. * Only commit to master on approval from team |
| RESOURCES & SUPPORT | **Resources**  Open Source Implementation of DIS – KDIS, Portico, OpenDIS  DIS Spec - <https://standards.ieee.org/standard/1278_1-2>[012.html](https://standards.ieee.org/standard/1278_1-2012.html)  Entity State PDU Summary - <http://faculty.nps.edu/brutzman/vrtp/mil/navy/nps/di>[sEnumerations/JdbeHtmlFiles/pdu/29.htm](http://faculty.nps.edu/brutzman/vrtp/mil/navy/nps/disEnumerations/JdbeHtmlFiles/pdu/29.htm)  Crowd Behaviour Algorithms: Boids (Bird behavior)  <https://medium.com/swlh/boids-a-simple-way-to-simulate-how-birds-flock-in-processing-69057930c229> |

**Signatures:**

I will abide.

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