SOFTWARS' Project Team Charter

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).
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

TEAM MEMBERS	• Bridget Free
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	• Tate Waters
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EXTERNAL TEAM	• Dr Sura De Silva
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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
	
	• Aim: meeting every week at 1230 on Thursday with Client (flexible)

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. • Methodology: Kanban **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_1-2012.html Entity State PDU Summary - 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.

Name	Signature	Date
Do Tran		13 Mar 20
Andrew Russell		13 Mar 20
Bridget Free		13 Mar 20
Tate Waters		13 Mar 20