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| Project Name | Wargaming for AI (Group F) | | |
| Project Sponsor | Dr. John Reisner | Customer | Mr. Michael Seal |
| Project Manager | Abdulrahman Albaiz | Group | F |
| Project Start date | Jan 17, 2022 | Project End date | Mar 21, 2022 |

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| 1. Organization | | | |
| WSU | Computer Science and Engineering | Portfolio | NA |
| Department Head | NA | Cost Center | NA |

| 1. Project Description & Objectives |
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| **Background**: The broad Department of Defense wargaming community is interested in applying Artificial Intelligence and Machine Learning (AI/ML) to its craft. However, there are significant structural barriers to achieving AI/ML based gains because true war-games or serious games are currently digitally-supported analog constructs.  **Project**: A limited, turn-based Wargame-for-AI engine will be developed to demonstrate the features and functionality of an AI/ML friendly game construct. There is a significant need to educate potential future users on wargaming specific aspects of the representation problem for AI/ML. Regardless of AI application, digital representations which present detailed in-game expected outcomes information stands to significantly improve human play. The resulting product will be used to demonstrate a viable wargame-for-AI engine of robust expected outcomes data to players improves the overall game outcomes in human play.  The general scope of the initial game is constrained to an advanced board-game level, of a lower complexity than typical 1-3 hour-to-play map based games from the mid-1980’s heyday of entertainment wargaming. (For a digital example, examine Microprose Decision in the Desert and Crusade in Europe, which are more advanced than the intended product.) |

| 1. In-Scope/Out-of-Scope & Deliverables |
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| The key objectives of this engagement is as below,   * TBD * TBD   Out-of-scope:   * TBD * TBD  |  |  | | --- | --- | | **#** | **Deliverables** | | **1** | Software Solution | | **2** | Documentations | |

| 1. Initial Project Plan/Milestones |
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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **#** | **Task Name** | **Duration** | **Start** | **Finish** | | **1** | Requirements Refinement and Prototype | 2 Weeks | Jan 17 | Jan 30 | | **2** | Analysis and Design | 1 Week | Jan 31 | Feb 6 | | **3** | Implementation | 3 Weeks | Feb 7 | Feb 27 | |  | *------------------------ Spring Break ------------------------* | 1 Week | Feb 28 | Mar 6 | | **4** | User Acceptance Testing (UAT) | 1 Week | Mar 7 | Mar 13 | | **5** | Training and support | 1 Week | Mar 14 | Mar 20 | | **6** | Documentation | 1 Week | Mar 14 | Mar 20 |   \* This is a high-level plan. The detailed project plan will be available after approving the Requirement Specification Document. |

| 1. Financial Reference |
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| |  |  |  | | --- | --- | --- | | **Budget:** Free of charge, part of CEG4120/6120 Course | **Work Order:** NA | **Cost Center:** NA | |

| 1. Stakeholders |
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| |  |  |  |  | | --- | --- | --- | --- | | **1** | **Name:** Dr. John Reisner | **Department**: CSE | **Responsibility**: Sponsor | | **2** | **Name:** Mr. Michael Seal | **Department**: AFIT | **Responsibility**: Customer | | **3** | **Name**: Abdulrahman Albaiz | **Department**: CSE | **Responsibility**: Project Manager | | **4** | **Name**: Robert Linger | **Department**: CSE | **Responsibility**: Lead Analyst | | **5** | **Name**: Christopher Kemplin | **Department**: CSE | **Responsibility**: Lead Developer | | **6** | **Name**: Ahmed Alsaedi | **Department**: CSE | **Responsibility**: Comms Manager | | **7** | **Name**: Daniel Curto | **Department**: CSE | **Responsibility**: Lead Tester | |

| 1. Governance |
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| * **Meeting Frequency (weekly, biweekly, monthly, etc.):**   Weekly   * **Project Progress Status Report (weekly, biweekly, monthly, etc.)**   Biweekly |

| 1. Approvals | | | |
| --- | --- | --- | --- |
| Title | Name | Signature | Date |
| **Project Sponsor** | Dr. John Reisner |  |  |
| **Customer** | Mr. Michael Seal |  |  |
| **Project Manager** | Abdulrahman Albaiz |  |  |
| **Lead Analyst** | Robert Linger |  |  |
| **Lead Developer** | Christopher Kemplin |  |  |
| **Comms Manager** | Ahmed Alsaedi |  |  |
| **Lead Tester** | Daniel Curto |  |  |