**SOFTWARE ENGINEERING G6046**

**APPENDIX A: SPRINT DOCUMENTATION TEMPLATE**

| 1. **Summary data** | |
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| Team number | 35 |
| Sprint technical lead(s) | Eliza Back |
| Sprint start date | 13/02/2022 |
| Sprint end date | 06/03/2022 |

| 1. **Individual key contributions** | |
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| **Team member** | **Key contribution(s)** |
| Dzhan Hasan | Documentation / Product Design |
| Eliza Back | Documentation / Project Lead |
| Rie Tse | Documentation |
| Sean Wadsworth | Development / Prototyping |

| 1. **User stories / task cards** |
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| * Write up all relevant documentation for the planning of the project   + PERT Chart   + Risk Assessment   + Meeting Record(s)   + Sprint Cycle Overview * Create a first prototype to display functionality   + Initialise a board with data   + Get and Set space data   + Allow a player to move around a board * Create an initial design for the product   + Sequence Diagram   + Class Diagram * Commence work on a basic initial Game State Manager (GSM) |

| 1. **Requirements analysis** |
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| | **Functional** | | | | --- | --- | --- | | **Reference** | **Description** | **Mandatory/Desirable** | | **F1** | The PERT chart shall document the planned time frame of the completion of base features for the project. | Mandatory | | **F2** | The prototype shall allow for the movement of tokens between board spaces. | Mandatory | | **F3** | The prototype shall allow for players to roll dice in order to determine their movement. | Mandatory | | **F4** | The prototype shall include the ability to get and set data for each board space. | Mandatory | | **F5** | The prototype shall pre-load the board space data in line with the spreadsheet provided by the client. | Desirable | | **F6** | The prototype shall include an initial Game State Manager (GSM) which keeps track of game, player, and board space data. | Mandatory | | F7 | The Class Diagram shall display the framework for all the necessary classes and methods needed to implement the base functionality. | Mandatory | | F8 | The Sequence Diagram shall build upon the pre-existing design from the Class Diagram in order to properly present the required classes and methods needed to implement the base functionality needed to meet the scope given by the client. | Mandatory | | F9 | The initial board design shall have all board spaces in uniform length to accommodate board data and the final board design. | Mandatory | | F10 | The risk assessment shall document all potential risks the project may encounter. | Mandatory |  | **Non-Functional** | | | | --- | --- | --- | | **Reference** | **Description** | **Mandatory/Desirable** | | NF1 | The project shall be developed in Unity. The Unity version used shall be 2020.3.26f1. | Mandatory | | NF2 | The project shall be written in C#. The version used shall be Visual Studio 2019, in line with the Unity version used. | Mandatory | | NF3 | The board design should have a similar design to competing products. | Mandatory | | NF4 | The board design shall have a unique design while still retaining the constraints from the requirement NF3. | Desirable | | NF6 | The project shall function without issues on both Apple devices and Windows. | Desirable |  | **Domain** | | | | --- | --- | --- | | **Reference** | **Description** | **Mandatory/Desirable** | | DM1 | The game should be fun have a varied colour palette | Desirable | |

| 1. **Design** |
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| As this sprint cycle has been focussed primarily on overall product design, we have completed design documents for the entire product, rather than on a sprint by sprint basis.  Class Diagram: |

| 1. **Test plan and evidence of testing** |
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| *As the only tangible product created during this sprint cycle is only a prototype, we have not conducted a thorough unit test as of yet. This is to be completed during sprint cycle 2 instead.* |

| 1. **Summary of sprint** |
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| Overall, this first sprint was a success, with the majority of the requirements being fulfilled. A full set of design documentation has been produced including:   * A Class Diagram * A Sequence Diagram * A PERT Chart * A Risk Assessment   Regarding the prototype product, we have initialised a board alongside forty space objects which contain the name, price, and rent values of their designated space. In a future sprint cycle, these values will be able to be edited by the user in line with F6. Furthermore, with the addition of the new player class, the user has the ability to roll a dice and move around the board.  However, requirements F5 and F6 are incomplete due to the lack of a game manager. These requirements will be moved into our next sprint cycle to account for this. Furthermore, the original design of the product had to be slightly revised due to a logical issue where each board space also contained a board object which is both inefficient and illogical. This has since been resolved and the team members working on the design documentation and those on the development side are to keep in better communication moving forwards.  Currently, the project is still in an early phase, so customer feedback has been limited, however during a review meeting with the client, they revealed that they are pleased with progress so far and are satisfied with the documentation and deliverables presented thus far. |