**Use Case:** Make a new Game Map

**Successful Outcomes:** The Player makes a new Game Map.

**Use Case Properties:**

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| --- | --- |
| **Use Case Package** | Tower Defense |
| **ID** | UC-TD-Map |
| **Use Case Goal** | The Player makes a Game Map, to play the Game on. |
| **Actor(s)** | Primary Actor: Player |
| **Level** | User-level goal |
| **Precondition** | The Player is on the Main Screen and selects to make a new Game Map |
| **Domain Entities** | Game Map, Map Editor, Grid Size, Critter Path |

**Main Success Scenario:**

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| **Step** | **Action** | **Notes** |
| **1** | Player selects to make a new Build Map. |  |
| **2** | System takes Player to Edit Map Mode. |  |
| **3** | System displays various Game Map Backgrounds to choose from, and prompts the Player to choose one Game Map Background. |  |
| **4** | Player selects a Game Map Background. |  |
| **5** | System prompts Player to select a Grid Size. |  |
| **6** | Player specifies a Grid Size. | **According to GL-Map** |
| **7** | System displays the Map Editor with the selected Game Map Background, with the appropriate Grid Size. |  |
| **8** | Player makes a Critter Path and selects to save the Game Map. |  |
| **9** | System validates the Critter Path and saves it to a new Game Map. | **According to GL-Map** |
| **10** | System prompts user to save the Game Map. |  |
| **11** | Player selects to save Game Map. |  |
| **12** | System saves Game Map and returns Player to Main Screen. |  |
| **13** | Use case ends successfully. |  |

**Alternative Flows:**

**6a Player selects an Invalid Grid Size**

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| **Step** | **Action** | **Notes** |
| **6a1** | Systems displays a message that the selected Grid Size is invalid. |  |
| **6a2** | Player dismisses the message. |  |
| **6a3** | System returns Player to specifying the Grid Size. |  |
| **6a4** | Return to Main Success Scenario Step 5. |  |

**9a Player Builds a Non Valid Critter Path**

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| **Step** | **Action** | **Notes** |
| **9a1** | Systems displays a message that the Critter Path is invalid and discards the Critter Path. |  |
| **9a2** | Player dismisses the message. |  |
| **9a3** | System returns Player to the Map Editor. |  |
| **9a4** | Return to Main Success Scenario Step 7. |  |

**\*a Player discards the new Game Map**

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| **Step** | **Action** | **Notes** |
| **\*a1** | Player selects to discard the current Game Map. |  |
| **\*a.2** | System deletes the Game Map and returns the Player to the Main Menu. |  |
| **\*a.3** | Use Case ends unsuccessfully. |  |