"Placing a building on the map"

Primary actor: User

Precondition: the has selected a building to place from the UI

Trigger: the User drags the building onto the map and confirms its placement

Main Success Scenario:

1. A green grid below the building indicates the placement is in a valid location

2. The user confirms the placement with a left mouse click (or alternative input)

Secondary Scenarios:

- 1. The user tries a building in an invalid location
 - The grid turns red and contains x's
 - A message is displayed to the user informing them of invalid placement

Success postcondition:

1. The building is bound to the map at the specified location and the game continues running until time runs out.

Minimum postcondition:

1. The building is not placed, however the user can select a new building and retry and the game continues running.

| UserInterface | | |
|---|--------------------|--|
| Provides a method to select a method to select a building type and place it on the map. Displays key information such as the in game statistics and times. Gives the user an option to pause the game. Provide feedback to the user based on input e.g. incorrect building placement. | Timer Building Map | |

| GameOverScreen | | | |
|--|---------|--|--|
| Display to the user a game over message. Contain a button that resets the game and allows the user to try again. | • Timer | | |

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|--|------------------------|--|
| - Allow the placement of buildings only in valid sections of the map Contain environmental elements that prevent the user from building Allow user to move around the map using mouse and keyboard input | Building UserInterface | |

| Timer | |
|--|---------------|
| Display the in-game time using a Semester:Month:Year format to comply with the user requirments. Work in accordance with the pause functionality in the user interface. Trigger the game end screen when game is over. | UserInterface |

| Building | | |
|---|-------------------|--|
| Graphically represent one of four building choices in-game. Display the validity of a potential placement e.g. a green grid denotes a valid placement whereas a red grid Indicates and invalid placement. | UserInterface Map | |