

The pause button is always available

Given the user is currently in-game
Then the 'Pause' button is shown
When the user presses the 'Pause' button
Then the pause menu is shown as expected

Tests:

UR_EASE_OF_USE

Pause Menu displays correct buttons

Given the pause menu is shown
Then the {button} is shown

Examples:

button	
Play	
Restart	
Quit	

Game lasts 5 minutes

Given the user is currently in the Start Menu
Then the timer shows 5 minutes
When the user clicks play
The timer counts down correctly
When the timer is at 0
The End Screen is displayed

Tests:

UR_TIME;SR_TIME

Starting an initial Game

Given the user is currently in the Start Menu
When the user presses the 'Play' button
Then the timer starts
And the scoring is activated

Tests:

UR_EASE_OF_USE

Restarting a Game

Given the user is currently in the Game
When the user presses the 'Pause' button
Then the pause menu is shown as expected
When the user presses the 'Restart' button
Then the clock resets to 5:00

And all buildings and roads are removed
And the score resets to 0

Tests:

UR_TIME;UR_EASE_OF_USE

Starting a new Game

Given the user is at the End Screen
When the user presses the 'Restart' button
Then the pause menu is shown as expected
And the clock resets to 5:00
And all buildings and roads are removed
And the score resets to 0

Tests:

UR_TIME;UR_EASE_OF_USE

A user can place a building on the map.

Given that the user is currently in-game,
When the user selects a {building}
And the user selects a valid area on the map
Then the building is placed
And the building counter is incremented correctly

Examples:

building	
accommodation	
study	
canteen	
recreation	

Tests:

UR_BASIC_BUILDINGS;SR_PLACE_BUILDINGS;UR_BUILDING_COUNTER;
SR_BUILDING_COUNTER

A user cannot place a building in the lake.

Given there exists a lake
When the user tries to place a new building in the lake
Then the tile is blocked
And the building is not placed

Tests:

UR_BUILDING_LIMITS; SR_BUILDING_RESTRICTIONS

A user cannot place a building on a tree.

Given there exists a tree
When the user tries to place a new building on the tree
Then the tile is blocked

And the building is not placed

Tests:

UR_BUILDING_LIMITS; SR_BUILDING_RESTRICTIONS

A user cannot place a building on the map where another building exists.

Given there already exists a building

When the user tries to place a new building on that tile

Then the tile is blocked

And the new building is not placed

Tests:

UR_BUILDING_LIMITS; SR_BUILDING_RESTRICTIONS

A user can place another building of a type there are multiple allowed

Given there already exists a {building}

When the user places another {building}

Then it places correctly

And the building counter is incremented correctly

Examples:

building	
Accommodation	
Study	
Canteen	
Recreation	

Tests:

UR_BUILDING_COUNTER; SR_BUILDING_COUNTER

The pause menu works as expected

Given that the game is running

When the user presses the 'pause' button

Then the pause menu is displayed

And the timer is paused

And the score remains constant

And any building cooldown timer is paused

And the user cannot place any buildings

The user can exit the pause menu

Given the game is paused

When the user presses the 'play' button

Then the 'Game Screen' is displayed

And the timer restarts

And the scoring is activated

Tests:

UR_EASE_OF_USE

A user can exit the game from the Start Menu

Given that the user is currently in the Start Menu

When the user presses the 'Quit' Button

Then the game is closed

Tests:

UR_EASE_OF_USE

A user can exit the game from the Pause Menu

Given that the user is currently in-game

When the user presses the 'pause' button

And the user presses the 'quit' button

Then the game is closed

Tests:

UR_EASE_OF_USE

User doesn't want to save their score

Given the end screen is displayed

When the user enters their name/id into to the text box

And does not click the save score button

Then their score is not saved to the leaderboard

And is not shown on the leaderboard

Tests:

UR_LEADERBOARD

Canteen building distance bonuses

Given there is {buildings} connected by {distance} roads from a canteen

Then the bonus will be {bonus}

Examples:

buildings	distance	bonus	
1 accommodation	4	0.5	
1 accommodation	8	0	
2 accommodation	4	1	
2 accommodation		0	
1 study	8	1	
1 study	12	0	
2 study	8	2	
2 study	12	0	

1 accommodation, 1 study	4	1.5	
1 accommodation, 1 study	8	1	
1 accommodation, 1 study	12	0	

1 accommodation, 2 study	4	2.5	
1 accommodation, 2 study	8	2	
1 accommodation, 2 study	12	0	

2 accommodation, 1 study	4	2	
2 accommodation, 1 study	8	1	
2 accommodation, 1 study	12	0	

2 accommodation, 2 study	4	3	
2 accommodation, 2 study	8	2	
2 accommodation, 2 study	12	0	

Tests:

SR_SATISFACTION; SR_BUILDING_EFFECTS

End screen displays correctly

Given the 5 minute timer is up

Then the end screen is displayed correctly

And the leaderboard is shown

Tests:

UR_LEADERBOARD; SR_LEADERBOARD

User wants to save their score

Given the end screen is displayed

When the user enters their name/id into to the text box

And clicks the save score button

Then their score is saved to the leaderboard

And is shown on the leaderboard

Tests:

UR_LEADERBOARD

Accommodation building distance bonuses

Given there is {buildings} connected by {distance} roads from an accommodation

Then the bonus will be {bonus}

Examples:

buildings	distance	bonus	
1 recreation	4	0.5	
1 recreation	8	0	
2 recreation	4	1	
2 recreation	8	0	

1 study	8	1	
1 study	12	0	
2 study	8	2	
2 study	12	0	

1 recreation, 1 study 4	1.5	
1 recreation, 1 study 8	1	
1 recreation, 1 study 12	0	

1 recreation, 2 study 4	2.5	
1 recreation, 2 study 8	2	
1 recreation, 2 study 12	0	

2 recreation, 1 study 4	2	
2 recreation, 1 study 8	1	
2 recreation, 1 study 12	0	

2 recreation, 2 study 4	3	
2 recreation, 2 study 8	2	
2 recreation, 2 study 12	0	

Tests:

SR_SATISFACTION; SR_BUILDING_EFFECTS

Canteen overcrowding

Given there is {building setup}
 And there is no event active
 Then there is {bonus} in the score

Examples:

building setup	bonus	
1 accommodation, 1 canteen, 2 study	no change	
1 accommodation, 0 canteen, 2 study	a decrease	
2 accommodation, 0 canteen, 2 study	no change	
2 accommodation, 1 canteen, 2 study	no change	
3 accommodation, 1 canteen, 2 study	no change	
4 accommodation, 1 canteen, 2 study	no change	
5 accommodation, 1 canteen, 1 study	a decrease	
5 accommodation, 2 canteen, 1 study	no change	

Tests:

SR_SATISFACTION

Study overcrowding

Given there is {building setup}
 And there is no event active
 Then there is {bonus} in the score

Examples:

building setup	bonus	
1 accommodation, 2 canteen, 1 study	no change	
1 accommodation, 2 canteen, 0 study	a decrease	
2 accommodation, 2 canteen, 1 study	no change	
2 accommodation, 2 canteen, 1 study	no change	
3 accommodation, 2 canteen, 1 study	no change	
4 accommodation, 2 canteen, 1 study	a decrease	
4 accommodation, 2 canteen, 2 study	no change	

Tests:

SR_SATISFACTION

Score is displayed during Gameplay

Given the user is in-game

Then the user can clearly see their score

Tests:

UR_SCORE; SR_METRICS

Score is displayed at end of game

Given the end game screen is displayed

Then the user will have their score displayed to them

Tests:

UR_SCORE, SR_METRICS

Events happen randomly and at appropriate frequency

Given the user plays 5 minutes of the game

Then at least 3 events will occur

And they will be randomised

Tests:

UR_EVENTS; SR_EVENTS; SR_SATISFACTION

Building Achievements

Given the user is playing the game

When the user places {buildings}

Then the {achievement} achievement is unlocked

Examples:

buildings	achievement	
5 accommodations	House Party!	
one of each building	Diverse	
5 study	Knowledge	
any building	Getting Started!	
5 recreation	Fun!	

Tests:

UR_ACHIEVEMENTS; SR_ACHIEVEMENTS

Score Achievement

Given the user is playing the game
 When the score hits 10000
 Then the 'Happy!' achievement is unlocked

Tests:

UR_ACHIEVEMENTS; SR_ACHIEVEMENTS

Fresher Achievement

Given the user is playing the game
 When the first minute has passed
 Then the 'Fresher' achievement is unlocked

Tests:

UR_ACHIEVEMENTS; SR_ACHIEVEMENTS