

# Unit tests

Ref	Requirement	Tests	Tester
1	<b>SR_PLACE_BUILDINGS</b>	<ol style="list-style-type: none"> <li>1. Place accom building</li> <li>2. Place eat building</li> <li>3. Place rec 1 building</li> <li>4. Place rec 2 building</li> <li>5. Place learn building</li> </ol>	Nathan
2	<b>SR_TIME</b>	<ol style="list-style-type: none"> <li>1. Time ticks down during the course of the game</li> <li>2. Time starts off at 5 minutes</li> <li>3. Game ends after 5 minutes</li> <li>4. Time stops when game is paused</li> </ol>	Archie
3	<b>SR_PAUSING</b>	<ol style="list-style-type: none"> <li>1. Game starts paused</li> <li>2. Pause game and game becomes paused</li> <li>3. Resume game and game stops being paused</li> <li>4. Cannot place building when paused</li> <li>5. Satisfaction does not change while game paused</li> </ol>	Archie
4	<b>SR_BUILDING_COUNTER</b>	<ol style="list-style-type: none"> <li>1. All counters start at 0</li> <li>2. Place building of type x, counter x should go up by 1</li> <li>3. Place building of type x, counter y should not change</li> <li>4. Place multiple buildings of a type, and check counter goes up by corresponding amount</li> </ol>	Ryan
5	<b>SR_EVENTS</b>	<ol style="list-style-type: none"> <li>1. Trigger an event, and make sure it has desired effect</li> <li>2. Check events happen during the game</li> </ol>	Ryan
6	<b>SR_BUILDING_RESTRICTIONS</b>	<ol style="list-style-type: none"> <li>1. Place building on top of another building</li> <li>2. Place building outside of map</li> <li>3. Place building on a terrain feature</li> <li>4. Place a building on a path</li> </ol>	Nathan
7	<b>SR_METRICS</b>	<ol style="list-style-type: none"> <li>1. Manual gui test</li> </ol>	
8	<b>SR_SATISFACTION</b>	<ol style="list-style-type: none"> <li>1. Check starts off at 0</li> <li>2. Check sat decays over time</li> <li>3. Check their complexities of satisfaction</li> <li>4. Manual test to check it is displayed at the end of the game</li> <li>5. If user places no buildings, sat should be 0 at end of game</li> </ol>	Ryan
9	<b>SR_BUILDING_EFFECTS</b>	<ol style="list-style-type: none"> <li>1. Place each type of building, check value increased</li> </ol>	Ryan
10	<b>SR_TIPS</b>	<ol style="list-style-type: none"> <li>1. Again, probs have to be done by manual test</li> </ol>	

11	<b>SR_LEADERBOARD</b>	1. Create a new high score, check game asks for name 2. Create not a new high score, check game does not ask for name 3. Check that a saved score is in the file	Ryan
12	<b>SR_DISPLAY_LEADERBOARD</b>	1. Check that the leaderboard is read at the end of the game 2. Check that the leaderboard displayed at end of game 3. Probs also need a manual test here	Ryan
13	<b>SR_ACHIVEMENTS</b>	1. Do the thing to get each achievement + check the game gives the player the achievement 2. Probs want a manual test to check they are displayed on the screen	Archie
14	<b>Other Tests</b>	1. Games starts when started + Creates everything needed 2. Map is created when game starts 3. Check that all the assets are okay	Archie

## Manual

1. Game displays building, map, achievements(E2E)
2. Check tips are displayed (E2E)
3. User starts the game, and tries to place one of each type of building (I)
4. Check the gui is in the correct place and correct info (I)
5. Play a game where user gets a high score (E2E)
6. Play a game where the user does not get a high score (E2E)
7. Play a game where the user gets all achievements (can probs be merged in with one of the ones above) (E2E)

## Classes

**BuildingPlacementTest** (1) - Nathan

**TimeTest** (2) - Archie

**GamePauseTest** (3) - Archie

**BuildingCounterTest** (4) - Ryan

**EventsTest** (5) - Ryan

**BuildingRestrictionsTest** (6) - Nathan

**SatisfactionTest** (8,9) - Ryan

**LeaderboardTest** (11,12) - Ryan

**AchievementTest** (13) - Archie

**AssetTest** (14) - Archie

**StartGameTest** (14) - Archie