1: Test add gizmo

Inputs:

In build mode

Select a gizmo from the add gizmos dropdown menu

Click a square to place the gizmo

Repeat with all gizmos

Outputs:

Gizmos added to the board on the tile clicked

2: Test Move gizmo

Input:

In build mode

Click the move gizmo button

Click a gizmo to move

Click an empty tile to move the gizmo to

Output:

Gizmo selected moved to clicked tile

3: Test Rotate gizmo

Input:

In build mode

Click the rotate gizmo button

Click a gizmo to rotate

Output:

Gizmo selected is rotated 90 degrees clockwise

4: Test delete gizmo

Input:

In build mode

Click the delete gizmo button

Click a gizmo to delete

Output:

Gizmo selected is removed from the game board

5: Test Connect Gizmos

Input:

In build mode

Click connect button

Click gizmo to connect

Click gizmo to connect to

Output:

Gizmos are connected

Ball hitting first gizmo triggers seconds gizmo action

6: Test connect multiple gizmos to single gizmo

Input:

Connect two different gizmos to the same gizmo

Output:

Ball hitting either of the triggering gizmos triggers the action connected gizmo

7: Test connect single gizmo to multiple gizmos

Input:

Connect one gizmo to two different gizmos

Output:

Ball hitting the triggering gizmo triggers the action of both the connected gizmos

8: Test Connect Key Press Down to gizmo

Input:

In build mode

Click connect button

Press Key to connect

Select from prompt key press down

Click gizmo to connect to

Output:

Pressing chosen key should trigger the selected gizmo

9: Test Connect Key Press up to gizmo

Input:

In build mode

Click connect button

Press Key to connect

Select from prompt key press up

Click gizmo to connect to

Output:

Releasing chosen key should trigger the selected gizmo

10: Test connect multiple key press to single gizmo

Input:

connect key press to a gizmos

repeat this with another key press

Output

Both key presses should trigger gizmo

11: Test connect key press to multiple gizmo

Input:

connect key press to a gizmos

repeat this with a different gizmo

Output

The key press should trigger both gizmos

12: Test Disconnect gizmos

Input:

In build mode

Connect two gizmos

Click disconnect button

Click gizmo to remove connections from

Output:

Clicked gizmo should no longer trigger any other gizmos

13: Test changing friction and gravity

Input:

In build mode

Slide gravity slider

Click run game

Repeat with different values, and with friction slider

Output:

Physics properties of game are changed

14: Test Save and Load

Input:

Add gizmos to board

Click the save button

Restart application

Click load button

Output:

The board saved before restarting is loaded to the game board

15: Test Run Game

Input:

In game mode

Click start button

Output:

Game begins running

16: Test Stop Game

Input:

In Game mode

Run game

Click stop game button

Output:

Game stops running

17: Test Next Tick

Input:

In game mode

Stop game

Click next tick button

Output:

Game board advances one game tick

18: Test Quit

Input:

Click Quit button

Output:

System is closed

19: Test add gizmo error

Inputs:

In build mode

Select a gizmo from the add gizmos dropdown menu

Click an occupied square to place the gizmo

Outputs:

User prompted about error in tile selection

Gizmo not added to the board on the tile clicked