

Test cases

Test case 1.1 Navigate to Page

Input:

- Clear existing cookies
- Navigate to site

Output:

- A maze is shown, with the character being visible together with all in-line-of-sight maze tiles
- "Score: 0" is shown
- "Steps left: 500" is shown
- Information on how to play the game is shown.

Test case 1.2 Move character

Input:

- Test case 1.1
- Press one of the enabled navigation buttons in the controls

Output:

- Test case 1.1
- The character has moved in the direction the button pressed shows.
- Maze tile visibility is updated
- Steps left is decreased by one, and the decreased amount is shown next to the total steps left

Test case 1.3 Move character over Hazard

Input:

- Test case 1.1
- Press one of the enabled navigation buttons in the controls

Output:

- Test case 1.1
- The character has moved in the direction the button pressed shows.
- Maze tile visibility is updated
- Steps left is decreased by one + the number of steps the hazard removes. The decreased amount is shown next to the total steps left

Test case 1.4 Move character fail

Input:

- Test case 1.1
- Send a POST with a directional button currently not enabled pressed

Output:

- Test case 1.1
- The character has not moved
- Steps left has not decreased
- A message is shown explaining what went wrong

Test case 1.5 Next Maze

Input:

- Test case 1.1
- Move the character to the "Q" on the map
- Press the "Next Maze" button

Output:

- Test case 1.1 with a new map
- Score is updated with a higher value depending on how many steps the user took to reach the exit. The increased amount is shown next to the total score.

Test case 1.6 Next Maze fail

Input:

- Test case 1.1
- Send a POST with the next maze button pressed, without the character standing on the exit tile

Output:

- Test case 1.1
- The maze has not changed
- A message is shown explaining what went wrong

Test case 1.7 Reset game

Input:

- Test case 1.1
- Press the "Restart Maze" button

Output:

- Test case 1.1
- A new maze is shown. Steps and score is reset to their default values.

Test case 1.8 Identification cookie value changes every game reset

Input:

- Test case 1.1
- Press the "Restart Game" button twice. Note the identification cookies value both times

Output:

- The value of the cookie is different both times.

Test case 1.9 Game end

Input:

- Test case 1.1
- Move the character until the steps left counter reaches 0 or below

Output:

- Test case 1.1
- All buttons but the "Restart Game" button is disabled
- A message saying the game is over is shown. The message also shows the players final score.

Test case 2.0 Game still exists after reload

Input:

- Test case 1.1
- Reload the page

Output:

- Test case 1.1
- Information is shown exactly the same as before
- If POST data was sent with the reload (for example: character movement), that action still happens.

Test case 2.1 Game still exists after re-navigation

Input:

- Test case 1.1
- Close the browser, open it again and navigate to the webpage

Output:

- Test case 1.1
- Information is shown exactly the same as before

Test case 2.2 Cookie Hijacking is prevented between different browsers

Input:

- Open the the webpage in two different browsers, confirm two different mazes are shown
- In browser one, copy the identification cookies value, paste it as browser twos value.
- Re-navigate to browser twos webpage

Output:

- Browser two is presented with a new maze
- A message is shown, telling browser two that its cookie is containing invalid information
- Browser one is unaffected by the changes and can continue playing as normal