

# Sprint 2 Test Plan

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The following link: <https://fathomless.io/engine/?test> will generate a new special testing environment each time the page is reloaded. This test environment will bypass any login measures to allow for an easier testing experience.

1. Navigate to <https://fathomless.io/engine/?test>. You may right click upon any tile on a computer or press upon any tile for 1 second on a mobile device to bring up the inspection menu. This will display all game objects appearing upon that tile. To close you menu you may either lose focus by left clicking upon any game tile, right clicking upon the selected tile, pressing the “X” button on the top of the menu, or simply moving the character with WASD or the arrow keys.
2. Navigate to <https://fathomless.io>. This will present you with the homepage in which there are three main sections. First at the top there is a fixed header which holds either a “Play Game” button which will be displayed when the player is logged out, prompting them to create a session, and a “Continue Game” and “Logout” buttons when the player is currently within a valid session. The following section features a few images and a blurb about the story of the game. Finally the leaderboard is displayed at the bottom. To check the leaderboard automatic update you may enter a test game at <https://fathomless.io/engine/?test> while also having the homepage open in a separate tab. Navigate through the nearest patch of lava until you reach game over. Once the gameover screen has appeared, switch back to the homepage tab, wait at most 30 seconds for the game entry to populate at the bottom of the list with the username “Test”, score of 10 and the current time.
3. <https://fathomless.io/tests/> The first test within this page attempts a series of SQL injections. There is a control statement which is represented in the first row of the table. The following rows yield unsuccessful connections as the malicious injections are unable to be performed. You may also attempt logging in by navigating to the homepage at <https://fathomless.io>, (if available press the logout button), then press the “Play Game” button to bring up the login prompt. You may enter the login credentials username: “test” and password: “test” within their respective fields, pressing the login button should redirect the page to the last save state for the account. (Let it be noted that the account

with username “test” is different than the sessions at <https://fathomless.io/engine/?test> who has username “Test”)

4. Within a test game at <https://fathomless.io/engine/?test> opening the settings menu can be accomplished by pressing either the escape key or the settings gear in the top right corner. There will be two sliders that appear, one for music and one for sound effects. You may toggle both as you see fit. Music will immediately begin playing at the specified volume while sound effects will now play whenever appropriate during the course of the game. You may now navigate to any ladder to load in the next level. The music will immediately change to reflect the updated level. This will occur for all levels within the game.
5. As mentioned within the previous test, the settings menu can be accessed through any game session at <https://fathomless.io/engine/?test> by either pressing the escape key or clicking on the settings gear in the top right corner of the window.

6, 11. To display both win and loss screens you must first be within the test environment at <https://fathomless.io/engine/?test>. You must then navigate through the nearest patch of lava to reduce your health to 0. You may also engage in combat with other creatures to attain this as well. Once your health diminishes to 0, you will be presented with a game over screen that will display a “Play Again” button and a copy of your game log which includes everything that has occurred within this specific run of the game. To display the win screen, you must navigate to the nearest pit, hole, or black hole looking object. For the purposes of testing this will send the player to the final level. You must then avoid the creatures navigating to the nearest ladder which will descend you into the win screen. This will display the same statistics as before, congratulatory win music will also play as well. Each user’s lifetime statistics are available within their user profile. The profile for the account with username: “test” can be viewed at <https://fathomless.io/profile/?username=test>. Additionally by inspecting the player tile as mentioned in test 1 the max\_hp attribute of the player can be observed to be 100. Each time a new player instance is created it will be created with 100 health points.

7-9. <https://fathomless.io/tests/> This plays through four games and shows the creatures available within each level. All of the potentially spawnable creatures appear at the top row of the table while each trial’s creatures are displayed in the subsequent rows. The levels would not be able to be generated or played at all if there was not a traversable path. The next level can be reached without completing any tasks within the level.

10. Within a game session at <https://fathomless.io/engine/?test> navigate to the nearest ladder which will take the player to level one. This level should have at least one creature within it. Navigate towards the creature to engage its targeting algorithm, it may begin to navigate towards the player. By passing close enough to the creature it should begin to attack the player, this

happens within 1-3 tiles away from the creature within the test environment. Some creatures attack with short range weapons while others have longer ranged spell attacks. When a creature successfully attacks the player there will be a purple hit animation on top of the player and on the top left of the screen the amount of damage taken will appear as well as the amount of health on top of the player will be decreased.

12, 14. By being within an active session at <https://fathomless.io/engine/?test> you may navigate towards a creature, if there are no creatures within the level you may step upon the nearest ladder object to be transported to the next level. Depending on the random weapon of the player your range will either be 1 or 3. You will have to navigate within at most 1 tile of a creature then you may either click on it or simply move upon it to attack it. Before killing the enemy you may inspect the creature's tile as discussed in test case 1 to show that there is a creature within the tile. Next you must attack until the creature's health has diminished to 0. The creature will subsequently be removed and replaced with a corpse. This can be shown by visually seeing the skeleton or by inspecting the tile that once contained the creature.

13. By accessing a fresh session at <https://fathomless.io/engine/?test>, it can be noted by inspecting the player tile as in test case 1 the player has the following default stats, hp:100, max\_hp:100, speed:1, fitness: 1, dodge:0.3, crit\_chance: 0.5, level 2. Upon killing one enemy as demonstrated in the previous test case the player would have leveled up to level 2. The updated statistics of the player may be observed by inspecting the player as before.

15. Open a new save of the game by accessing <https://fathomless.io/engine/?test>. Each door item has some sort of item that spawns within them (some textures may not reflect the actual item). You may inspect the player as shown in the first test case, you may observe that the inventory simply contains a health potion. This potion may be used by pressing the use text below the stats of the item. After clicking this button you must click on the target to heal. This will only heal a creature if they are not at full health. You may damage the player in some way to achieve a lowered health point and proceed to use the healing potion as described. Additionally you may navigate to the nearest door to pick up the item that is found there simply by interacting with the door. You may now inspect the player's tile to see that the item has been picked up and is now within the inventory. The item may also be used upon any target as well.