**Test Plan**

Team 12

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1. **Identification and Classification**

**Test Case 1001**

**System: Boilergod**

**Verify progress save state for user Severity: 2**

1. **Instructions**
2. Start new game with new user information
3. Create a new element
4. Exit browser
5. Reload game and enter the same user information
6. Select continue game
7. **Expected Result**
8. The combination board will remain as you left it
9. All previously created elements will still be available in the “Available Elements” section.
10. **Identification and Classification**

**Test Case 1002**

**System: Boilergod**

**Verify gameboard default components load Severity: 1**

1. **Instructions**
2. Start new game with new user information
3. **Expected Result**
4. The screen should load clear sections indicating an available element section with the default elements.
5. The combination board should load.
6. The timer should begin counting the seconds that the user has been playing the game.
7. An interactive “Pause” button and “Send Feedback” button should be available.
8. **Identification and Classification**

**Test Case 1003**

**System: Boilergod**

**Test “Available Elements” section offers unlimited elements Severity: 2**

1. **Instructions**
2. Enter an old or existing game
3. Drag an item onto the game board
4. Drag the same item onto the gameboard a second time
5. **Expected Result**
6. The elements should both exist on the board while a stock image still remains for further interaction with the “Available Elements” section.
7. **Identification and Classification**

**Test Case 1004**

**System: Boilergod**

**Client loads instruction page Severity: 3**

1. **Instructions**
2. Access website
3. Select the “Instructions” button
4. **Expected Result**
5. A page loads that gives a detailed explanation on how to play *Boilergod.*
6. **Identification and Classification**

**Test Case 1005**

**System: Boilergod**

**Verify successful combination Severity: 2**

1. **Instructions**
2. Start new game with new user information
3. Create one of the first available combinations
4. **Expected Result**
5. The successful combination animation should take place.
6. The application should save the user’s progress.
7. The newly created element will take the place of the combined elements.
8. The newly created element will be found in the “Available Element” section.
9. **Identification and Classification**

**Test Case 1006**

**System: Boilergod**

**Verify failed combination Severity: 2**

1. **Instructions**
2. Start a new game
3. Try an incorrect element combination
4. **Expected Result**
5. The failed combination animation should take place.
6. No new element will be found in the “Available Elements” section.
7. **Identification and Classification**

**Test Case 1007**

**System: Boilergod**

**Verify element combination range Severity: 3**

1. **Instructions**
2. Try a known combination by placing the elements on opposite sides of the board
3. Try the same combination by placing those same two elements on top of each

other

1. **Expected Result**
2. After step 1,
   1. The two elements should be created and stay at rest on their respective side of the board.
   2. There should not be a new element in the “Available Elements” section.
3. After step 2,
   1. The successful combination animation should take place.
   2. The application should save the user’s progress.
   3. The newly created element will take the place of the combined elements.
   4. The newly created element will be found in the “Available Element” section.
4. **Identification and Classification**

**Test Case 1008**

**System: Boilergod**

**Test recreation of old combinations Severity: 3**

1. **Instructions**
2. Create an element from a known combination
3. Recreate the same element from the same combination
4. **Expected Result**
5. The combination will have succeeded both times resulting in only two of the newly created element on the board.
6. The “Available Elements” section will still only unlock a single stock image of the element that was newly created.
7. **Identification and Classification   
   Test Case 1009  
   System: Boilergod  
   Test combination of same elements Severity: 2**
8. **Instructions**
9. Start a new game
10. Combine two of the same elements
11. **Expected Result**
12. The failed combination animation should take place.
13. No new element will be found in the “Available Elements” section.
14. **Identification and Classification**

**Test Case 1010**

**System: Boilergod**

**Test game restart Severity: 2**

**B. Instructions**

1. Select option to restart the game
2. Confirm to restart the game

**C. Expected Result**

1. There are zero elements on the board
2. There are zero discovered elements
3. **Identification and Classification**

**Test Case 1011**

**System: Boilergod**

**Test remove element Severity: 1**

**B. Instructions**

1. Select an element on the board
2. Select the option to remove element

**C. Expected Result**

1. The element is removed from the board
2. The element still exists in the “Available Elements” section.
3. **Identification and Classification**

**Test Case 1012**

**System: Boilergod**

**Test browser compatibility Severity: 3**

**B. Instructions**

1. Open Boilergod in different browsers

**C. Expected Result**

1. The application will run as expected in each browser