Testing Documentation

Plan

The tests will be performed manually and cover the following categories:

1. Navigation – do the navigation buttons always work?

2. Quiz Functionality – does the quiz actually work?

3. Quiz Retake – does the quiz work if taken again without reloading the page?

4. Results Evaluation – do the results of the quiz vary and make sense based on user input?

5. Google Data – does the results page always display the appropriate data?

6. Appearance and Effects – how do things appear and do the effects work?

7. Input validation – is it possible to not answer a question?

8. Browser differences – are there any specific browser issues?

Navigation

Note: the site is always displayed on a single page and the browser's back and forward buttons are never used. Refreshing or reloading the page always resets the progress of the page. So all navigation will use the site's built-in navigation buttons.

Next Button

1. The page loads and the start page is presented. The "Help Me Decide" button fades into view.
2. The button is clicked and Question 1 is shown, with a next button.
3. An answer is selected and the next button clicked.
4. Question 2 appears. If the answer selected for Question 1 was Yes, Question 2 is about pizza. If the answer selected for Question 1 was No, Question 2 is about dancing. The previous button also appears.
5. Either answer is selected for Question 2. The next button is clicked.
6. Question 3 appears.
7. Any of the answers for Question 3 are selected. The next button is clicked.
8. Question 4 appears.
9. Any of the answers for Question 4 are selected. The next button is clicked.

10. Question 5 appears.
11. Any of the answers for Question 5 are selected. The next button is clicked.
12. Question 6 appears.
13. Any of the answers for Question 6 are selected. The next button is clicked.
14. Question 8 appears.
15. Any of the answers for Question 8 are selected. The next button is clicked.
16. Question 9 appears.
17. Either of the answers for Question 9 are selected. The next button is clicked.
18. Question 10 appears.
19. Any of the answers for Question 10 are selected. The next button is clicked.
20. Question 11 appears.
21. Either of the answers for Question 11 are selected. The next button is clicked.
22. Question 12 appears and the next button is replaced by the Submit Results button.

Previous Button

1. From Question 12, any of the answers are selected and the previous button is clicked.
2. Question 11 appears.
3. Either of the answers for Question 11 are selected. The previous button is clicked.
4. Question 10 appears.
5. Any of the answers for Question 10 are selected. The previous button is clicked.
6. Question 9 appears.
7. Any of the answers for Question 9 are selected. The previous button is clicked.
8. Question 8 appears.
9. Any of the answers for Question 8 are selected. The previous button is clicked.
10. Question 7 appears.
11. Any of the answers for Question 7 are selected. The previous button is clicked.
12. Question 6 appears.
13. Any of the answers for Question 6 are selected. The previous button is clicked.
14. Question 5 appears.
15. Any of the answers for Question 5 are selected. The previous button is clicked.
16. Question 4 appears.
17. Any of the answers for Question 4 are selected. The previous button is clicked.
18. Question 3 appears.
19. Any of the answers for Question 3 are selected. The previous button is clicked.
20. If the answer for Question 1 was set to Yes, the Question 2 about pizza appears. If the answer for Question 1 was set to No, the Question 2 about dancing appears.
21. Either of the answers for either the Dancing Question 2 and the Pizza Question 2 are selected.
22. Question 1 appears. The previous button disappears.

Submit Button

1. After navigating back to Question 12, the Submit Button is clicked. Question 12 disappears and the results screen appears.
2. The page is reloaded and the quiz taken again with different answers selected.
3. Question 12 appears as the final question, with a different answer selected.
4. The Submit Button is clicked.
5. The results screen appears.

Back to Start? Button

1. From the results screen, the page is scrolled down. The "Back to Start?" button is revealed.
2. The button is clicked.
3. The results page disappears and the start screen appears.
4. The page is reloaded and the quiz taken again with different answers.
5. The results page appears, and is scrolled down.
6. The "Back to Start?" button appears and is clicked.
7. The results page disappears and start screen appears.

Summary: No scenario found in which the navigation buttons do not behave as intended.

Quiz Functionality

I have been unable to find a configuration of answers that result in the Submit Results button not displaying the results correctly. Based on the number of API calls recorded in my Google API dashboard, I estimate I have taken the quiz at least 170 times in its current state and not once have the results failed to show.

Quiz Retake

The Back to Start? button has to been tested and works, sending the user to the start screen. When the quiz is started again, the navigation works as normal. The user's previous results are still selected, so they can keep these the same or change them. I have been unable to cause the submit results button to fail after using the back to start button. Checking the console shows that the scores awarded for the previous submission are still in place:

Score after clicking back to start.   After changing answers and re-submitting

```
name: "The Knights Templar"
food: true
pizza: false
dancing: false
drinks: "normal"
outside: "medium"
games: null
wait: "low"
crowd: "medium"
traditional: false
dive: false
livemusic: false
spoons: true
noise: "medium"
score: 47.7
placeid: "ChIJO9evu2SOcUgRm3Gz4vrc3QM"
```

```
name: "The Knights Templar"
food: true
pizza: false
dancing: false
drinks: "normal"
outside: "medium"
games: null
wait: "low"
crowd: "medium"
traditional: false
dive: false
livemusic: false
spoons: true
noise: "medium"
score: 15.88
placeid: "ChIJO9evu2SOcUgRm3Gz4vrc3QM"
```

However, the scores are reset and re-awarded when the results are submitted, so this has no impact on the results. If the answers are kept the same and re-submitted, it is possible that the results will change. This is due to the random number awarded for tiebreakers.

Results Evaluation

So it has been established that the quiz works consistently. But do the results make sense based on the answers selected? One way to test this is to compare the userResults object to the venue object.

Here is the userResults for this particular taking of the quiz:

```
food: true
pizza: true
dancing: null
drinks: "ipa"
outside: "low"
games: null
wait: "medium"
crowd: "medium"
traditional: "middle"
dive: false
livemusic: false
spoons: "no"
noise: "medium"
```

```
name: "The Beer Emporium"
food: true
pizza: true
dancing: false
drinks: "ipa"
outside: null
games: null
wait: "medium"
crowd: "medium"
traditional: false
dive: false
livemusic: false
spoons: false
noise: "medium"
score: 86
```

```
name: "BrewDog"
food: true
pizza: true
dancing: false
drinks: "ipa"
outside: "low"
games: "board"
wait: "low"
crowd: "medium"
traditional: false
dive: false
livemusic: false
spoons: false
noise: "medium"
score: 85.84
```

When compared to the venues shown above that scored highly, it is clear why, as their attributes match that of the user's answers. While this may highlight that the scoring system needs tweaking, it does not demonstrate that it doesn't work.

Bug identified: While examining the userResults after retaking the quiz (without a reload), I identified and fixed a bug with how the pizza and dancing results are added to the userResults. After a retake both the pizza and dance results would be submitted if the user had previously selected one and then changed their answer to Question 1. What was required was an if statement for both that checked the result of Question 1 first, updating the result as necessary.

Google Data

The google data has never failed to load, but it usually takes a brief moment for it to load. Very occasionally it will take over a second to appear. The data for each venue has been checked and the external links tested. Unfortunately, the Mother's Ruin venue does not have a website listed on Google, so a 404 is received for that particular link.

Appearance and Effects

Hover effects of buttons, answers labels and links
Pages tested: Start screen, Question 1, 2a, 2b, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,   Results
All effects working

Initial fade in: Works, but is perhaps a bit slow.

Bug: After clearing your browser cache, the fade in works out of order, fading in the first sentence and image last.

Images:
 Start Screen images load quickly and fade in.
 For the question slides, images sometimes time a brief moment to appear.
Background changing:
 Question 3, all images load when appropriate answer is clicked
 Question 5, all images load when appropriate answer is clicked
 Question 6, both images load when appropriate answer is clicked
The first time an answer is clicked, the image takes a brief second to load and may appear jumpy. Once the image has loaded, the transition is smooth.

Input Validation

Input validation checks that an answer as been provided to a question before allowing the using to proceed to the next question. This is to prevent the user submitting results when a question has been skipped.

All Questions have been tested by clicking the next button without an answer selected. Each time the following message appears:

Please select an option!

When an answer is selected, the message disappears. If you get the message, then click previous, the message is not there. But clicking next will reveal it again as that question has yet to receive an answer.

Browser Differences

Browsers tested:
New Microsoft Edge: significant tests completed, no issues

Google Chrome: basic tests completed, no issues

Mozilla Firefox: primary tests completed, quiz functions without issue, but question background images load slowly and the transition effect is not working

Safari: basic tests completed, no issues

Opera Touch: basic tests completed, no issues

Internet Explorer 11: browser did not load my scripts.js file, so did not function