**Overall Test Plan**

Our testing will primarily focus on functional aspects of the software; however, we hope to expand more into performance once functionality is tested and acceptable. Our methodology is to separate different workflows inside the application and test them independently from one another. This will allow us to focus on each part, ensuring functionality, so that if problems arise between different workflows, we have isolated them to know where to work on within the software. Additionally, we kept the scope of our testing fairly small as we plan to do the same for the software itself. The aim is a quality over quantity program so keeping things small now and expanding later should help with this goal.

**Test Case Descriptions:**

1. **User Registration Test**
   * **Purpose:** Verify the successful registration process for new users, ensuring a seamless onboarding experience.
   * **Description:** Attempt to register a new user account by providing valid details such as name, email, and password. Confirm that the registration is successful, and the user is redirected to the personalized user dashboard, signifying a smooth entry into the platform.
   * **Inputs:** Valid user details (name, email, password).
   * **Expected Outputs:** Successful registration, redirection to the user dashboard.
   * **Normal**
   * **Blackbox**
   * **Functional**
   * **Unit**
2. **Search Functionality Test**
   * **Purpose:** Validate the effectiveness of the search functionality, ensuring users can easily locate desired places.
   * **Description:** Enter a specific location in the search bar and assess whether the displayed results match the entered location. Confirm that relevant places are shown, demonstrating an intuitive and accurate search mechanism.
   * **Inputs:** Location name.
   * **Expected Outputs:** Display of relevant places based on the entered location.
   * **Normal**
   * **Blackbox**
   * **Functional**
   * **Unit**
3. **Review Submission Test**
   * **Purpose:** Check the review submission process, guaranteeing users can effortlessly share their feedback.
   * **Description:** Submit a review for a listed place, providing a rating, comments, and optional details. Verify the successful submission of the review, ensuring user-generated content is seamlessly integrated into the platform.
   * **Inputs:** Rating, comments, and optional details.
   * **Expected Outputs:** Successful submission of the review.
   * **Normal**
   * **Blackbox**
   * **Functional**
   * **Unit**
4. **Responsive Design Test**
   * **Purpose:** Assess the responsiveness of the website across various devices and screen sizes, aiming for a consistent user experience.
   * **Description:** Access the website from different devices (e.g., desktop, tablet, mobile) and varied screen resolutions. Confirm that the user interface remains consistent, providing an optimal viewing and interaction experience.
   * **Inputs:** Varying device types and screen resolutions.
   * **Expected Outputs:** Consistent user interface and functionality.
   * **Normal**
   * **Blackbox**
   * **Performance**
   * **Unit**
5. **Sorting Feature Test**
   * **Purpose:** Test the sorting feature for reviews, ensuring users can easily organize and find relevant information.
   * **Description:** Sort reviews based on different criteria such as date or rating. Confirm that the displayed reviews align with the selected sorting criteria, enhancing the user's ability to access information efficiently.
   * **Inputs:** Select sorting criteria.
   * **Expected Outputs:** Display of reviews in the selected order.
   * **Normal**
   * **Blackbox**
   * **Functional**
   * **Unit**
6. **User Login Test**
   * **Purpose:** Evaluate the functionality of the login process, guaranteeing secure access for registered users.
   * **Description:** Attempt to log in with valid user credentials. Confirm successful login and redirection to the user dashboard, ensuring a secure and user-friendly authentication process.
   * **Inputs:** User login details.
   * **Expected Outputs:** Successful login, redirection to the user dashboard.
   * **Normal**
   * **Blackbox**
   * **Functional**
   * **Unit**
7. **Handling of Invalid Inputs Test**
   * **Purpose:** Test the website's robustness in handling invalid inputs, preventing unexpected errors.
   * **Description:** Enter incorrect information during various interactions, such as invalid user details or non-existent locations. Confirm that the system responds with appropriate error messages and prevents the execution of invalid actions, maintaining a stable user experience.
   * **Inputs:** Invalid user details, non-existent locations, etc.
   * **Expected Outputs:** Appropriate error messages, prevention of invalid actions.
   * **Abnormal**
   * **Blackbox**
   * **Functional**
   * **Unit**
8. **Map Integration Test**
   * **Purpose:** Check the functionality of the map integration, enhancing user navigation and information visualization.
   * **Description:** Click on the map icon for a location and verify the display of the location on an integrated map. Confirm that the map enhances the user's understanding of the place's geographical context.
   * **Inputs:** Click on the map icon for a location.
   * **Expected Outputs:** Display of the location on an integrated map.
   * **Normal**
   * **Blackbox**
   * **Functional**
   * **Unit**
9. **Concurrent User Access Test**
   * **Purpose:** Test the website's ability to handle a large number of simultaneous users, ensuring stable performance.
   * **Description:** Simulate concurrent user access to the website by having multiple user sessions access different features simultaneously. Confirm stable performance and response times under varying user loads.
   * **Inputs:** Multiple user sessions accessing different features.
   * **Expected Outputs:** Stable performance and response times.
   * **Boundary**
   * **Blackbox**
   * **Performance**
   * **Integration**
10. **User Feedback Form Test**
    * **Purpose:** Verify the effectiveness of the user feedback form, encouraging user engagement and communication.
    * **Description:** Submit feedback through the website's contact form, including user feedback and contact details. Confirm the successful submission of feedback and, if applicable, acknowledgment or response from the platform, promoting a positive user-community interaction.
    * **Inputs:** User feedback and contact details.
    * **Expected Outputs:** Successful submission of feedback, acknowledgment or response.
    * **Normal**
    * **Blackbox**
    * **Functional**
    * **Unit**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Case Indication | Blackbox/Whitebox | Functional/Performance | Unit/Integration |
| REG | Normal | Blackbox | Functional | Unit |
| SEARCH | Normal | Blackbox | Functional | Unit |
| REVIEW | Normal | Blackbox | Functional | Unit |
| DESIGN | Normal | Blackbox | Performance | Unit |
| SORT | Normal | Blackbox | Functional | Unit |
| LOGIN | Normal | Blackbox | Functional | Unit |
| INV | Abnormal | Blackbox | Functional | Unit |
| MAP | Normal | Blackbox | Functional | Unit |
| CONC | Boundary | Blackbox | Performance | Integration |
| FEED | Normal | Blackbox | Functional | Unit |

Results:

1. \*\*User Registration Test\*\*: The registration process for new users was successful. Valid user details were accepted, and users were redirected to the personalized user dashboard as expected.

2. \*\*Search Functionality Test\*\*: The search functionality effectively located desired places based on the entered location. Relevant places were displayed accurately, demonstrating the functionality of the search mechanism.

3. \*\*Review Submission Test\*\*: Reviews were successfully submitted for listed places, including ratings, comments, and optional details. User-generated content was seamlessly integrated into the platform.

4. \*\*Responsive Design Test\*\*: The website exhibited responsiveness across various devices and screen sizes. The user interface remained consistent, providing an optimal viewing and interaction experience.

5. \*\*Sorting Feature Test\*\*: The sorting feature for reviews functioned correctly. Reviews were sorted based on different criteria such as date or rating, enhancing the user's ability to access information efficiently.

6. \*\*User Login Test\*\*: The login process was successful, with valid user credentials granting secure access to registered users. Users were redirected to the user dashboard upon successful login.

7. \*\*Handling of Invalid Inputs Test\*\*: The website effectively handled invalid inputs, preventing unexpected errors. Appropriate error messages were displayed, and invalid actions were prevented, maintaining a stable user experience.

8. \*\*Map Integration Test\*\*: The map integration feature worked as expected. Clicking on the map icon for a location displayed the location on an integrated map, enhancing the user's understanding of the place's geographical context.

9. \*\*Concurrent User Access Test\*\*: The website demonstrated the ability to handle a large number of simultaneous users, maintaining stable performance and response times under varying user loads.