Test plan for winter project

**1. Test objectives**

* 1. **Functionality verification**: to ensure that all features of the system function as expected according to the design specifications and user requirements.
     + Responsive layout
     + Navigation
     + Bookmarking
     + Search bar
     + Admin controls
     + Sign-up and login
     + Hover states on interactive elements
     + Specified pages exist and function as intended
     + Play button
     + Trending section
     + Pagination
  2. **Visual design compliance**: ensure that the display specifications used throughout the website match the criteria specified in the figma design file.
     + Colors
     + Typography
     + Interactive elements
     + Icons
     + Images

**2. Test scope**

This testing effort will include the following:

* **Testing of functional requirements**: ensuring the website’s functionality works as expected.
* **User interface testing**: ensuring the design elements and interactions are consistent with the figma design.
* **Visual design compliance testing**: ensuring that colors, typography, icons, images, and other visual elements match the figma design specifications.
* **Responsiveness testing**: verifying that the website is responsive across various devices (desktop, tablet, and mobile).

1. **Test strategy**

All testing will be performed manually.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test type** | **Method** | **Tools used** | **Description** |
| Integration testing | Manual validation | Chrome devtools, postman | All interconnected features such as navigation, search bar, and admin controls work seamlessly together. |
| System testing | Black-box testing, manual verification | N/A | The system functions as a whole. |
| Acceptance testing | Scenario-based testing, team feedback | Figma design reference, browsers | Specified pages and interactive elements, like the play button and hover states, function as specified. |
| Usability testing | Observation, feedback gathering, comparison | WAVE | Website ease of use; comparing it to general conventions. |
| Collaborative user story writing | Review sessions, feedback integration | Jira | The team works together to write user stories, according to the requirements made by the client. |
| Unit testing | Component-specific testing | Chrome | Check individual components behavior for correctness. |
| Regression testing | Repetitive manual testing | Test cases documentation | Tests previously validated features to ensure no new issues have been introduced. |
| Security testing | Vulnerability discovery | Chrome | Attempting to change the URL to unauthorized or restricted areas of the application. |
| Error guessing | Ad-hoc testing (e.g. Monkey testing) | N/A | Anticipate and test potential user errors in functionality features. |
| Confirmation testing | Retesting fixes | N/A | Ensures reported issues have been resolved. |
| State transition testing | Manual state change validation | Figma, Chrome devtools | Test transitions, such as search and bookmarking, to ensure correct behavior. |
| Cross-browser and device testing | Manual validation | Chrome devtools, firefox, edge | Testing the site on multiple browsers and devices |

**4. Test schedule**

| **Activity** | **Start date** | **End date** |
| --- | --- | --- |
| Test case, scenario, plan writing and bug fixing | December 5 | December 13 |
| Test execution and bug fixing | December 16 | December 19 |
|  |  |  |

**6. Risk management**

| **Risk** | **Potential impact** | **Likelihood** | **Mitigation strategy** |
| --- | --- | --- | --- |
| Design discrepancies | The website may not match the figma design exactly due to incorrect implementation or ambiguity in the figma file. | Medium | Ensure regular communication with the design team. |
| Not all team members are working | Uneven workload distribution, causing burnout for active members. | Medium | Encourage open communication to address blockers or lack of engagement. |

**7. Entry criteria**

* **Figma designs**: the figma design specifications (including UI, layout, typography, and interactivity details) must be available and finalized.The requirements and design documents have been reviewed and approved.
* **Functional requirements**: clear and complete documentation of functional requirements and user stories should be available, outlining the expected behavior of the website.
* **Test cases**: test cases for the various functionalities (UI elements, navigation, user flows) should be created and reviewed.

**8. Exit criteria**

* All planned test cases have been executed.
* Critical and major defects resolved.
* Requirements and acceptance criteria met.
* A detailed test execution report has been prepared.

**9. Deliverabelese**

* **Test plan**: this document.
* **Test case document:** this document, maintained in an excel file, will contain all the test cases that were executed during the testing phase. It will include the test case ID, description, status (pass/fail). The excel file will be delivered along with the final test report.
* **Bug reports:** a detailed report of all the bugs found during testing will be provided and tracked in jira, and the link to the project's jira board will be provided for easy access and tracking.
* **Test summary report:**  this report, maintained in an excel file, will provide a summary of the testing activities and a set of metrics that give a quantitative measure of the quality of the software and the effectiveness of the testing. This could include metrics like defect density, defect removal efficiency, and test case effectiveness. The excel file will be delivered along with the final test report.