**TEST PLAN**

**Project Name:**

**DroneShield**

**Table of Content**

1. Introduction……………………………..…………………………………………………………….3
2. Test Items…………………….……………………………………………………………………..….3
3. Features to be tested…………………………….………………………………………………..2
4. Features not to be tested………………………..………………………………………………2
5. Approach………………….…………………………………………………………………………….4
   1. Testing levels…………………..………………………………………………………………4
   2. Meetings……………….………………………………………………………………………..5
6. Items Pass / Fail Criteria……………………….………………………………………………...5
7. Suspension Criteria and Resumption Requirements…………………………….….5
8. Test Deliverable…………………………………….………………………………………………..5
9. Environmental Needs…………………………………………….……………………………….5
10. Responsibilities………………………………...……………………………………………………6
11. Schedule………………………………………………………………………………………………..6
12. Approvals………………………………………….……………………………………………….....6

1. **INTRODUCTION:**

The product is about providing different services for our clients to prevent them from drone attacks. We will deploy a web app in production for clients to monitor and alert client operations team.

The project will have multiple levels of testing and they are Functional, Responsive, Back-end and Cross Browser Compatibility, and User Acceptance Testing. The detail of each level will be described in the approach section and will be further defined in the level of specification section.

The estimated timeline for this project is X days (that starts from March 26 till April 10) in a very aggressive manner, as such; any delay in the development process and third-party installation and verification could have a significant impact on it.

1. **TEST ITEMS:**

The following is the list of items to be tested:

* Test that the functionality of the website is working as expected
  + Login
  + search for products
  + filtering
  + product listing page
  + product details page
  + Add products to cart
  + Checkout products
* UI/UX issues
  + All the buttons are the same.
  + Website contents should be correctly spelled.
  + Every page follows the same theme.
  + All social media icons are as expected.
  + Images are clear and appropriate according to the content.
  + No wide spaces are available.
  + The text must be aligned properly etc.
* Cross-Browser compatibility covers the latest version of Chrome, Firefox, Internet Explorer and Edge.
* Responsive will be tested on the real mobile device which covers 2 mobile browsers.
* Back-end Testing covers the Blog posts (delete, edit, or inserted).
* All internal and external links and broken links.

1. **FEATURES TO BE TESTED:**

Following is the list of areas to be tested during the testing phase.

* Landing Page
* All menu items
* Blog Posts
* Search Functionality
* All Interfaces
* Internal and external links
* UI/UX issues
* Footer

1. **FEATURES NOT TO BE TESTED:**

Following is the list of areas that are not to be tested during the testing phase.

* Security in terms of roles and responsibility.
* Database
* Pricing details

1. **APPROACH:**

**8.1- Testing Levels:**

The testing of the friendly tree consists of Functional, Responsive, Back-end, Cross Browser Compatibility, and User Acceptance Testing. It will make sure that proper time and dedication will be given to each level and one expert will play a lead role in every level to monitor all the activities.

**Exploratory Testing** will be done by the Test team lead and testing team to explore the flow and other details of the website and get familiar with it.

**Functional Testing** will be done under the project manager's supervision by all the testing teams to cover all the functionalities mentioned in the project requirement document. All broken links will also be tested in the Functionality test level.

**Responsive Testing** will be done by Senior Tester on real android devices and will cover two mobile browsers.

**Back-end Testing** will be done by the Test Manager and it will cover the Blog post functionality as it is discussed with the client. All the features of blogs including posting a new blog, editing an old blog, and deleting available blogs are covered in it.

**Cross-Browser Compatibility** will be done by all testing teams and different browsers will be allotted to each team member to cover the 4 browsers they are (Internet Explorer, Chrome, Firefox, and Edge).

**User Acceptance Testing** will be performed by all the Testing team and everything will be observed from an end-user viewpoint. This testing can be done after the completion of all other testing’s. In this testing, testers will be observing the user comfort as well and also provide suggestions to improve the user experience of the website.

All the testing is done manually. As the result of testing a Bug report will be provided with the list of steps to reproduce the bug, related screen short / video clip, complete information of defect, the suggestion by the tester, browser detail, bug priority, and severity impact. All information will be provided to the Project Manager and Testing Team lead.

**8.2- Meetings:**

The testing team will meet every alternate day to evaluate the progress to date and identify error trends and problems as early as possible. The test team leader will also meet the development and project manager twice a week. These two meetings are scheduled and per-planned other meetings will also be called if required for emergencies.

1. **ITEM PASS/FAIL CRITERIA:**

The test process will be completed once all the levels of testing will be performed.

* When acceptance testing is completed and satisfied the user's viewpoint.
* All functional test cases have been performed.
* All codes will be covered by the testers.
* A specified number of plans will be completed with a lower percentage of minor bugs.

1. **SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS:**

* When all the functionalities are working properly and no major functionality defect is available in the build.
* When all the UI Elements are consistent.
* The build should be 95% bug-free.
* If any earlier defect causes any other defect, it needs the resumption of the testing.

1. **TEST DELIVERABLE:**

* Test case scenarios
* Test plan document
* Bug Reports with all necessary details
* Bug log
* Suggestions for bugs solving
* Suggestions for improvement
* List of all broken links

1. **ENVIRONMENTAL NEEDS:**

Following elements are required to complete the testing process on all levels of testing.

* Access to both
  + <https://www.saucedemo.com/>
  + <https://petstore.swagger.io/>

1. **RESPONSIBILITIES:**

|  |  |  |
| --- | --- | --- |
|  | QA Tester 1 | QA Tester2 |
| Exploratory Testing |  |  |
| Functionality Testing |  |  |
| Back-End Testing |  |  |
| Cross Browser Testing |  |  |
| Responsive Testing |  |  |
| User Acceptance Testing |  |  |
| Test Plan Documentation |  |  |
| Test Scenarios Documentation |  |  |
| Bug Finding |  |  |
| Bug Reporting |  |  |

The Project manager is responsible for accepting all test documentation.

The Test Manager is responsible for writing the test plan and supervising all testing levels and all testing-related activities.

The entire team will participate in all testing levels and provide suggestions for improvisation. The end-users are involved in acceptance testing and work under the supervision of the testing team.

1. **SCHEDULE:**

The overall time allocated for the testing process is 15 days starting from March 26 and it will be delivered on April 10 and the divisions of these days are as follows:

|  |  |
| --- | --- |
| **Task** | **Allocated Time** |
| Functionality Testing | March 26 – March 29 |
| Back-End Testing | March 30 – March 31 |
| Cross Browser Testing | April 1 – April 2 |
| Responsive Testing | April 3 |
| User Acceptance Testing | April 4 – April 6 |
| Revision if require Or Regression Testing | April 7 - April 10 |

1. **APPROVALS:**

|  |  |
| --- | --- |
| Project Manager (XYZ) |  |
| Test Manager/Lead |  |
| Tech Lead |  |