**Test Plan for AB Testing Website App.vwo.com**

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**1. Objective**

This document outlines the test plan for the AB Testing website application, **App.vwo.com**. The objective is to ensure that all key features and functionalities work as expected for the target audience, including marketing professionals, UX designers, and website owners looking to optimize website performance using A/B testing.

**2. Scope**

The scope of this test plan includes:

* **Features to be tested:**
  + **Login Page:** Ensures proper login functionality, including password recovery, and authentication processes.
  + **Dashboard Page:** Confirms the accuracy and usability of data visualizations, the ease of navigation, and the ability to manage A/B tests.
  + **A/B Test Creation Page:** Verifies the process of creating, managing, and analyzing A/B tests for websites and mobile websites.
  + **Test Results and Reporting:** Confirms the functionality of displaying results of A/B tests and the correctness of generated reports.
  + **Account Management:** Ensures that user profile management, subscription settings, and account security features function properly.
  + **Notifications and Alerts:** Verifies the notification system to alert users about test results, failures, and other important updates.
* **Types of testing:**
  + Manual testing
  + Automated testing
  + Performance testing
  + Accessibility testing
* **Environments:**
  + Browsers: Google Chrome, Mozilla Firefox, Safari, Microsoft Edge
  + Operating Systems: Windows, macOS, Linux
  + Devices: Desktop computers, laptops, tablets, smartphones
  + Mobile devices: iOS, Android
* **Evaluation criteria:**
  + Number of defects found
  + Time taken to complete testing
  + User satisfaction ratings
* **Team roles and responsibilities:**
  + Test Lead: Responsible for overseeing the test process and managing the team.
  + Testers: Responsible for executing the tests and documenting the results.
  + Developers: Responsible for fixing defects.
  + Product Managers: Ensure that product requirements are met.

**3. Inclusions**

* **Introduction:** Overview of the test plan, including purpose, scope, and goals.
* **Test Objectives:** Specific objectives such as identifying defects, improving user experience, and achieving high performance and accessibility standards.

**4. Exclusions**

* Testing of third-party integrations or external APIs unless directly related to the core functionality of the AB testing.
* Legacy features of the website that are being phased out.

**5. Test Environments**

* **Operating Systems:** Windows 10, macOS, Linux
* **Browsers:** Google Chrome, Mozilla Firefox, Microsoft Edge, Safari
* **Devices:** Desktop computers, laptops, tablets, smartphones
* **Network Connectivity:** Wi-Fi, cellular, wired connections
* **Hardware/Software Requirements:** Modern web browsers with minimal requirements for testing
* **Security Protocols:** Passwords, tokens, certificates, 2FA (two-factor authentication)
* **Access Permissions:** Roles for team members such as testers, developers, and stakeholders with access levels determined by the testing phase.

**6. Defect Reporting Procedure**

* **Criteria for identifying defects:**
  + Deviation from the requirements
  + UI/UX issues (broken layouts, unresponsive design)
  + Functional errors (incorrect A/B test results, broken links)
  + Performance bottlenecks
* **Steps for reporting defects:**
  + Use a defect tracking template
  + Provide detailed reproduction steps and attach relevant screenshots or logs
  + Include steps to reproduce and expected vs. actual results
* **Triage and prioritization:**
  + Classify defects into categories (Critical, Major, Minor)
  + Assign severity and priority levels, and direct them to the appropriate team members.
* **Tracking tools:** JIRA or any equivalent bug tracking tool
* **Roles and responsibilities:**
  + Testers: Identify and report defects
  + Developers: Fix defects
  + Test Lead: Prioritize defects and manage progress
* **Metrics:**
  + Number of defects found
  + Time taken to resolve defects
  + Percentage of defects fixed

**7. Test Strategy**

**Step 1: Test Scenarios and Test Cases Creation**

* **Techniques:**
  + Equivalence Class Partition
  + Boundary Value Analysis
  + Use Case Testing
  + Decision Table Testing
  + State Transition Testing
  + Error Guessing
* **Additional methods:** Exploratory Testing

**Step 2: Testing Procedure**

* **Smoke Testing:** Ensure core functionalities such as login and dashboard load correctly.
* **In-depth Testing:** Perform comprehensive testing after a stable build passes smoke testing.
* **Multiple environments:** Test the application across different environments (browsers, OS, devices).
* **Defect Reporting:** Logging bugs in JIRA, with daily status updates on the testing progress.
* **Types of Testing:**
  + Smoke Testing
  + Sanity Testing
  + Regression Testing
  + Retesting
  + Usability Testing
  + Functionality & UI Testing

**Step 3: Best Practices**

* **Context Driven Testing:** Tailoring testing approaches based on the application's functionality.
* **Shift Left Testing:** Start testing as early as possible in the development phase.
* **Exploratory Testing:** Engage in unscripted testing to uncover unexpected defects.
* **End-to-End Flow Testing:** Simulate end-user interactions from login to test results.

**8. Test Schedule**

* **Tasks and Time Duration:**
  + Test Plan Creation: 1 week
  + Test Case Creation: 2 weeks
  + Test Execution: 4 weeks
  + Final Reporting: 1 week
* **Dates:**
  + Specify the timeline for each task based on the development and release cycle.

**9. Test Deliverables**

* **Entry and Exit Criteria:** For each phase of the Software Testing Life Cycle (STLC).
  + **Test Planning:** All necessary requirements and specifications must be gathered.
  + **Test Execution:** Complete execution of all planned test cases with corresponding defect reports.
  + **Test Closure:** Final reports on the test results, including test case execution and defect resolution status.

**10. Entry and Exit Criteria**

* **Requirement Analysis:**
  + **Entry:** Receiving Requirements Documents.
  + **Exit:** Clear understanding and clarification of requirements.
* **Test Execution:**
  + **Entry:** Test cases are ready, and the build is stable for testing.
  + **Exit:** Completion of test cases with documented defects.
* **Test Closure:**
  + **Entry:** All test case results and defect reports are ready.
  + **Exit:** Test Summary Report is finalized, and the testing phase is closed.

**11. Tools**

* **List of Tools:**
  + JIRA (for bug tracking)
  + Postman (for API testing, if applicable)
  + Browser DevTools (for debugging)
  + Mind map Tool (for test case design)
  + Snipping Tool (for capturing UI issues)
  + Word and Excel (for documenting test cases and reports)

**12. Risks and Mitigations**

* **Possible Risks:**
  + Non-availability of required resources.
  + Build URL may be temporarily unavailable.
  + Limited time for testing before release deadlines.
* **Mitigations:**
  + Backup resources for key testers.
  + Regular communication with development teams to ensure build URLs are working.
  + Prioritize critical tests and perform parallel testing in different environments.

**13. Approvals**

* **Documents for Client Approval:**
  + Test Plan
  + Test Scenarios
  + Test Cases
  + Reports

This test plan ensures comprehensive validation of **App.vwo.com**, covering critical areas such as user login, the AB testing process, and results analysis to provide a robust, error-free user experience for all visitors.