Test Approach Document

Introduction: The purpose of this document is to outline the test approach for the "Page Registration" feature. The feature allows visitors to register on the website ([Buggy Cars Rating (justtestit.org)](justtestit.org)) to vote for a sports car. This document will cover the test objectives, scope, test techniques, and automation approach for the feature.

Test Objectives:
- Verify that visitors can successfully register on the website.
- Validate the password requirements for registration.
- Ensure that a success message is displayed upon successful registration.
- Validate that a visitor can only register once.
- Identify critical bugs and issues in the registration process.

Test Scope:
- Functional testing of the registration process.
- Validation of password requirements.
- Confirmation of success message display.
- Verification of the restriction on multiple registrations.

Test Techniques:
- Behavior-Driven Development (BDD) scenarios will be used to define test cases based on user stories and acceptance criteria.
- Exploratory testing will be performed to identify any additional issues or usability problems.
- Automation will be utilized for selected BDD scenarios using Selenium and TestNG and an API test using Rest Assured.

Test Environment:
- Website ([Buggy Cars Rating (justtestit.org)](justtestit.org) environment should be set up with the feature implemented.
- Test environment should mirror the production environment as closely as possible.
- Test data, including valid and invalid registration details, will be prepared.

Test Execution:
- BDD Scenarios: BDD scenarios will be written based on the user story and acceptance criteria. These scenarios will be executed manually.

- Exploratory Testing: Testers will explore the website in general to identify any critical bugs and issues. A Bug report will be created highlighting the critical bugs found during exploratory testing.

- Automated Testing: Three BDD scenarios will be automated using a risk-based approach. Selenium will be used for automation. An API test will also be automated using a RestAssured tool.

Bug Report:
A Bug report will be created along with relevant details, observations, and steps to reproduce the bug, found during manual testing.

Test Deliverables:
- BDD Scenarios document.
- Bug Report.
- Automation scripts for selected BDD scenarios and API tests.