STP

Powerful Women

First web application

Hadeel Hassan

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**Software Test Plan -Powerful Women in Tech:**

**(STP)**

1. **Introduction:**

The purpose of this document is to define the test plan for the Women in Tech Flask web application. The application is designed to allow users to view, add, and review profiles of women in tech. This STP outlines the various types of testing that will be performed on the application, including unit testing, integration testing, system testing, and user acceptance testing.

1. **Test Objectives:**

The objectives of this test plan are:

* To ensure that the application meets the requirements outlined in the README.md file.
* To ensure that the application is functional and free of defects.
* To verify that all features of the application are working as intended.
* To ensure that the application is user-friendly and easy to use.
* To verify that the application is secure and that user data is protected.

1. **Test Environment:**

The testing environment will consist of the following:

* Operating System: Windows 10
* Python
* Flask
* SQLAlchemy
* Browser: Chrome, Edge

1. **Testing Types:**

The following types of testing will be performed on the application:

* Unit Testing: To verify the individual components of the application are functioning correctly.
* Integration Testing: To verify that different modules of the application are working together correctly.
* System Testing: To verify the overall functionality of the application and ensure that it meets the requirements outlined in the README.md file.
* User Acceptance Testing: To verify that the application meets the needs of the end-users and is easy to use.

1. **Test Cases:**

The following test cases will be executed during testing:

* Unit Testing:
  + Test the allowed\_file function to ensure it returns True for valid file extensions.
  + Test the Women and Reviews classes to ensure they are functioning correctly.
* Integration Testing:
  + Test the interaction between the database and the application to ensure that data is being stored and retrieved correctly.
  + Test the file upload functionality to ensure that uploaded files are being stored correctly.
* System Testing:
  + Test the homepage to ensure that it displays information about all women stored in the database.
  + Test the add profile form to ensure that it adds a new woman to the database correctly.
  + Test the delete function to ensure that it removes a woman from the database correctly.
  + Test the display\_image function to ensure that it redirects to the correct location of the image file.
  + Test the woman\_identify function to ensure that it displays the correct woman and her reviews.
* User Acceptance Testing:
  + Test the user interface to ensure that it is user-friendly and easy to use.
  + Test the website's performance to ensure that it loads quickly and is responsive.
  + Test the website's security to ensure that user data is protected.

1. **Test Deliverables:**

The following deliverables will be provided after testing is completed:

* Test plan document.
* Test cases document.
* Test results document.
* Bug reports for any defects found during testing.

1. **Test Schedule:**

The following schedule will be followed for testing:

* Unit testing: 1 day
* Integration testing: 1 day
* System testing: 2 days
* User Acceptance Testing: 2 days

1. **Test Responsibilities:**

The following responsibilities will be assigned for testing:

* Developers: Responsible for unit testing and integration testing.
* QA team: Responsible for system testing and user acceptance testing.
* Project Manager: Responsible for overseeing testing activities and ensuring that testing is completed on time.

1. **Risks and Mit**

Identifying and mitigating risks is an important part of project management, as it helps to ensure that the project stays on track and achieves its goals.

**10.Priority and Severity**

| **Severity** | **Priority** | **Description** |
| --- | --- | --- |
| Critical | High | The bug causes a critical failure in the application, making it unusable. |
| High | High | The bug causes a major functionality failure, making a significant portion of the application unusable. |
| Medium | Medium | The bug causes a moderate functionality failure, impacting a specific area of the application. |
| Low | Low | The bug causes a minor functionality failure, impacting a small area of the application. |
| Cosmetic | Low | The bug does not impact functionality but affects the visual appearance or layout of the application. |

**11. StoneMiles table:**

| **Test Category** | **Test Name** | **Test Description** | **Start Milestone** | **End Milestone** |
| --- | --- | --- | --- | --- |
| Unit Testing | allowed\_file function | Verify that the allowed\_file function returns True for valid file extensions. | 14/02 | 25/02 |
|  | Women and Reviews classes | Verify that the Women and Reviews classes are functioning correctly. | 14/02 | 25/02 |
| System Testing | Homepage | Verify that the homepage displays information about all women stored in the database. | 14/02 | 25/02 |
|  | Add profile form | Verify that the application adds a new woman to the database correctly when the form is submitted. | 26/02 | 06/03 |
|  | Delete function | Verify that the application removes a woman from the database correctly when the delete function is used. | 26/02 | 06/03 |
| User Acceptance Testing | User interface | Verify that the website is user-friendly and easy to use. | 26/02 | 06/03 |
|  | Website security | Verify that user data is protected by the application. | 26/02 | 06/03 |