



User Interface Test Environment Tool

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Abstract: Now a days, Software Development is rapidly growing. Various innovative applications are getting developed and deployed with quality. Before deploying a software, a software is first tested as per SDLC (Software Development Life Cycle). The Testing is in categorized as Automation and Manual. The world is getting autonomous, so Automation Testing will be more focused for testing the application, as it can be result in Accuracy as well as Time Consumption. When an application is in testing, every application must be compared and matched with the expectations defined. So, the same we are trying to develop is called User Interface Test Environment. This UITE Environment, helps in testing the UI of a websites. User Interface is the core part of the website and is the only thing which attracts the user to the application or websites. So, to attract the user with UI, the developed UI must be 99% Accurate as per the Expected UI.

Keywords: Automatic Testing Programming environment, Python, HTML, CSS.

I. INTRODUCTION

Now a days, Software Development is rapidly growing. Various innovative applications are getting developed and deployed with quality. Before deploying a software, a software is first tested as per SDLC (Software Development Life Cycle). The Testing is in categorized as Automation and Manual. The world is getting autonomous, so Automation Testing will be more focused for testing the application, as it can be result in Accuracy as well as Time Consumption. When an application is in testing, every application must be compared and matched with the expectations defined. So, the same we are trying to develop is called User Interface Test Environment.

This UITE Environment, helps in testing the UI of a websites. User Interface is the core part of the website and is the only thing which attracts the user to the application or websites. So, to attract the user with UI, the developed UI must be 99% Accurate as per the Expected UI. The UITE tool will test the UI, by comparing the Expected UI (Golden UI) with the actual UI. The User can write the Test Script to validate the Actual UI with the expected one.

II. GENERAL TERMS

UI are the most important part and can be considered as the attractive part of the application or website. So, to look more attractive the website's UI must be Quality Tested and should be deployed as per Expectations. So, we are developing the UITE tool, which will test and validate the User Interface as per expectations, and of the expectations doesn't meet it will be report top developer.

III. SOFTWARE AND HARDWARE REQUIREMENTS

Hardware:

- Ram- 4 GB
- Core i5 and onwards

Software:

- Operating System-Windows 10 and onwards
- Programming Language- Python

MOTIVATION

Every Application requires to be tested before being deployed. The Testing is in categorized as Automation and Manual. The world is getting autonomous, so Automation Testing will be more focused for testing the application, as it can be



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PROBLEM DEFINITION

UI are the most important part and can be considered as the attractive part of the application or website. So, to look more attractive the website's UI must be Quality Tested and should be deployed as per Expectations. So, we are developing the UITE tool, which will test and validate the User Interface as per expectations, and of the expectations doesn't meet it will be report top developer.

Level-2 Heading: 1. Data Flow Diagram

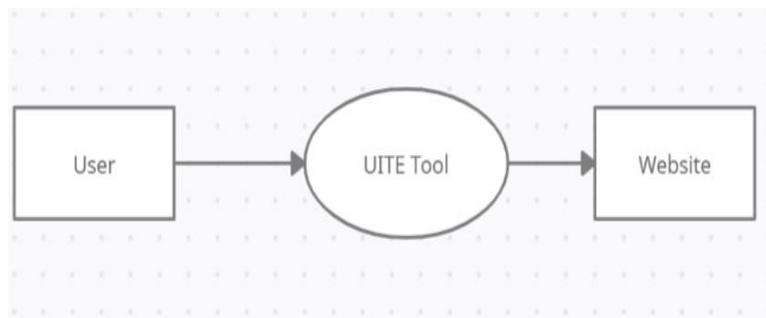


Figure 2.1: Data Flow Diagram Level -0

2. Entity Relationship Diagram

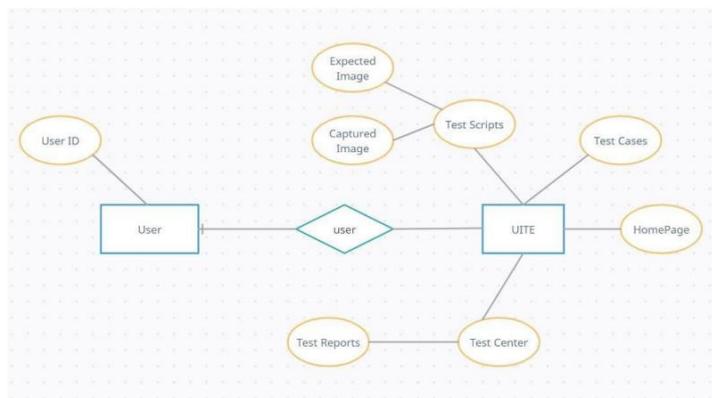


Figure 3: E-R Diagram

IV. PROJECT IMPLEMENTATION

OVERVIEW OF PROJECT MODULES

A module is a collection of source files and build settings that allow you to divide your project into discrete units of functionality. Your project can have one or many modules, and one module may use another module as a dependency. You can independently build, test, and debug each module.

1. User Interface: The user interacts with the system via Graphical User Interface.
2. Test Case: Test Case is the Standard Process used for Software Testing.
3. Test Script: Test Scripts are the Scripts written in Programming Language used to Automate the Test Case and can be executed for test results
4. Test Centre: Test Centre is the Main Feature of Tool where user can execute Test Scripts and Validate the test results
5. Test Reports: Test Reports are the reports generated by Test Centre after executing the Test Scripts.
6. Test Results: The Test Results are displayed Execution too and can be saved by generating the test reports as well



V. ADVANTAGES

Acquisition of new customers. A successful UI design contributes to a positive user experience, which is a competitive advantage. It is easier to incorporate changes discovered through user testing.

There can be multiple user interfaces for the same application. interface since the tool will be used with many different applications. Created using the same user interface tool.

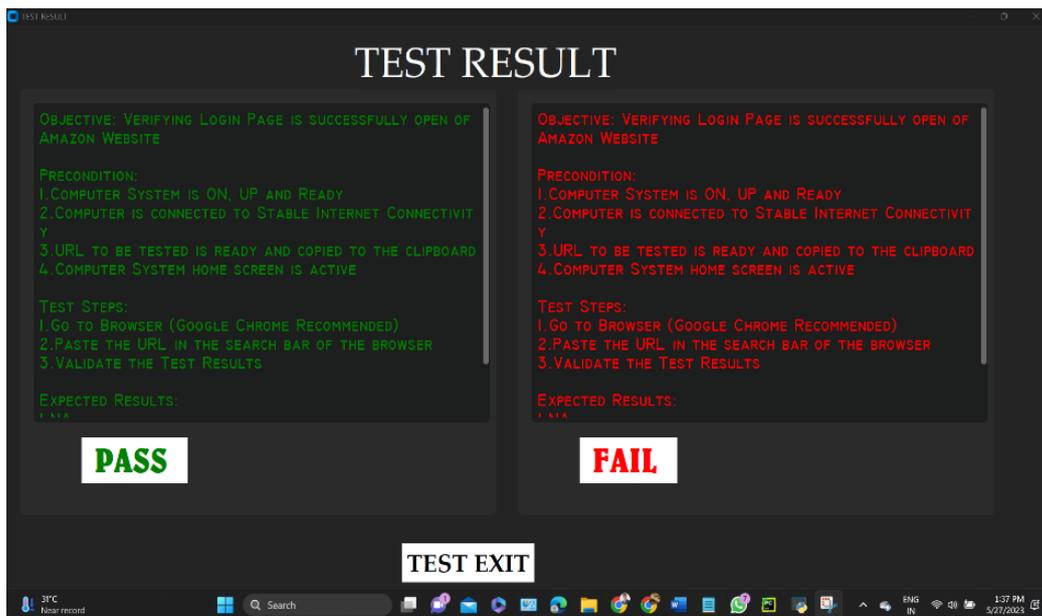
VI. APPLICATIONS

- Automating web application testing.
- It enables QAs to verify the cross browser compatibility of web application using web driver.

SOFTWARE QUALITY ATTRIBUTES

- Adaptability – This software is adaptable by all users.
- Availability – This software is freely available to all users. The availability of this software is easy for everyone.
- Integrity- Integrity refers to the extent to which access to software or data by unauthorized persons can be controlled.
- Security – Users are authenticated using many security phases so reliable security is provided.

VII. RESULT



VIII. CONCLUSION

User Interface is the most important part of a software. A software can be more attractive if the UI of same is attractive.

User Experience turns positive due to UI too, for the same UI Development should be done properly and to deliver it with Quality it must be Quality Tested. Hence, In this project we are testing the UI with Automation Testing Algorithm.

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