BLUESTONE SOFTWARE AUTOMATION TESTING

# 1. INTRODUCTION

## 1.1 Overview

DESCRIPTION OF BLUESTONE

Bluestone is an user-friendly web-based software application that revolutize high quality fine jewellery with Strinklingly exquisite designs with lifestyle segment in India and abroad.

It was established in 2011. all these designs are crafted to perfection with utmost care giving the flexibility to cutomize the products gold purity and color & diamond Clarity to suit our needs.

⇒ A BRIEF DESCRIPTION FOR USE OF THIS PROJECT. WHAT CAN BE ACHIEVED USING THIS PROJECT.

Actually this project is based on software automation testing by which we can test any web-page or any software application.
i.e the verification and validation of the software's developed is done in the PROJECT.

⇒ We validate the appearance of software developed is according to the desired outcome or not.

⇒ All the options and modules used in software are navigating properly or not, we verify them

⇒ The functionality of software application of webpage is validate in this project by using software Automation Testing.

## ⟹ INTRO OF BLUESTONE PROJECT

The BLUESTONE project is a python automation project that utilizes the Selenium framework for automating web instructions. This documentation provides an overview of project with installation and configuration.

## ⟹ PROJECT OVERVIEW

The BLUESTONE project aims to automate various tasks on the bluestone website. It leverages SELENIUM, a powerful web automation tool, to interact with web elements and perform actions such as clicking buttons, filling forms and extracting data.

## 1.2 PURPOSE

⇒ A BRIEF DESCRIPTION ON- WHAT THE PROJECT IS BASED ON

Bluestone is web-based e-commerce application and it deals with all type of jewellery items and it has both the mobile application support for customers to track orders and easy access.

⇒ Users can search the desired product from global search.

⇒ Users can get updates on need basis.

⇒ Users can register once and continue shopping and track items while delivery.

⇒ Users can also continue shopping using mobile application software.

## ⇒ TESTING AND QUALITY ASSURANCE

### AUTOMATED TESTING

Unit testing was performed on each module along with integration testing to the functionality and integration of different modules or units of BLUESTONE project Automated testing was also performed using tools such as Selenium.

### MANUAL TESTING

Manual testing was also performed to test the software under different test cases and Scenarios.

Quality assurance testing involved identifying and reporting the bugs and defects in the system. Ensuring that the software was free from defects was an essential paspect of the project.

## ⇒ PRE REQUISITES FOR BLUESTONE AUTOMATION PROJECT

Before getting Started witho bluestone project, we have to ensure that we have following prerequisities.

⇒ list of Softwares and tools that need to be uinstalled before running the project. They are

Python (3.x)

Selenium (3.x)

Pytest (latest version)

Any other dependencies.

## ⇒ INSTALLATIONS TO BE DONE FOR BLUESTONE PROJECT

We have to install necessary dependencies for bluestone automation project.

## ⇒ INSTALL PYTHON

Visit the python website (https://www.python.org) and then download the latest version of python.

## ⇒ INSTALL GITBASH

Visit the gitbash website (http://git-scm.com/download/win) and download the latest version of the git bash

(i.e 64-bit Git for window Setup)

## 2.1 ⇒ Literature Survey

The BLUESTONE project is a Software application that sales fine jewellery of gold and diamonds for customers. We discuss the project overview, to interact with web elements and perform actions, click buttons, filling forms & extracting data.

## ⇒ DESIGN AND DEVELOPMENT

Web Architecture Design :- In this Software the page is designed in various modules for different types of the jewellery. A multilayered architecture with presenting rings, chains, watches, braclets etc.

## ⇒ PROJECT SETUP FOR BLUESTONE SOFTWARE

To set up project locally.

⇒ Clone the repository from github

⇒ Clone the BLUESTONE project repository from [repository URL]

https://github.com/Viswatesting123/Smart bridge automation project.git

⇒ Install all dependencies using requirements.txt.

## ⇒ AFTER INSTALLATION

Go to the desired location where you want to create the folder, Such as desk-top.

Folder-name like eg (Automation_testing_Project)

Open the folder, right click with in the folder and select open git bash here, You will get pop up and close the repositoy.

```
   @ pytest mark login
def test_homepage Title (Self, Setup):
Self. logger. info ("****Test.001-login****")
Self.logger.info ("**** Started home page title
                   for automation ****")
Self. driver = Setup
Self. logger. info ("**** opening URL ****")
Self.driver. get (Self base URL)
time. Sleep (10)
act. title = Self .driver. title
if act. title = = "online jewellery Shopping Stole
             cindex prey Gold & Diamond jewellery
             with latest designs 2023"
Self logger. info ("**** Home page title test
                        passed ****")
assert True
else
Self. logger erro ("**** Home page title test
                            filed ****")

assert False.
```

⇒ ADVANTAGES

- Handy Integration for a Streamlined navigation of modules.
- Certified & trustworthy and authenticity of Software
- Versatile, long-lasting, price comparisons, discount & notifications.
- Sime convenience, Infinite Choice
- Easy access to consumer reviews.

⇒ DISADVANTAGES

- You can't try thing on
- Must wait for delivery
- Shipping costs
- Privacy and Security

# PROJECT STRUCTURE

⇒ The structure of the project, including directories & files and their purpose.

testcases/: Directory containing test Scripts

pageobjects/: Directory containing page object model.

Utils/: Directory containing functions

reports/: Directory containing test reports.

test Data/: Directory containing test data related to project.

Configuration/: Configuration file for storing settings.

Screenshots/: project testcase screenshots.

logs/: Directory maintain the project logs.

## ⇒ WRITING TEST CASES

Test case using python, selenium and Pytest.

⇒ Test case 1. Home page functionality

⇒ Code for automation testing of homepage

```
import time
import pytest
from pageobjects login page import login page
from utilities. read properties import Read Cofig from utilities. custom logiger import log Gen
Class Test - Login ( )
base URL = Read Config. get Application URL ( )
Username = Read config. get username ( )
Password = Read config. get password ( )
logger = log Gen. logger ( )
```

## ⇒ PROJECT RESULT AND EVALUATION

### BLUESTONE PROJECT SOFTWARE TESTING

Since its launch, the BLUE STONE software application system i.e web-based has been widely recognized as a leading destination for high quality fine jewellery with Strikingly exquisite designs.

⇒ The users have given positive feedback and appreciation for the Software's features, functionality and ease of use.

⇒ Several metrics are used to track the success of the application of bluestone Software testing project.

⇒ The Key performance indicators include user reviews, feedback, the number of register users, ratings, tracking of orders, ratings and reduction of errors.

→ RUNNING TESTS:

for Bluestone project

Explained how to run the test cases using testcases with pytest. Include information about commandline options and flags that can be used to customize test execution.

- Run. bat : Now, you can double-click the run. bat file to execute the python script specified in the command.
- The script will run in a command prompt window.

## ⇒ CONCLUSION

The bluestone automation project provides a frame work for automating various task with this documentation, you Should be able to set up the project, execute tests, and extend / customize it according to our needs.