**Full Stack Test Automation Project with Python**

Short Video – Description (https://youtu.be/-hh9Q2owlxk)

Screenshots – (Located in Screenshots folder)

This project was created to demonstrate my knowledge and skills in Automation Testing.

**About**

This project demonstrates a smart automation infrastructure that allows testing different kinds of applications and is easily maintained! This project can execute tests on:

Browsers (Chrome, Firefox, Ms. EDGE) - using the Selenium web driver

Desktop apps – using Win app driver

Electron apps – using Electron driver

Mobile apps - using Appium Studio as a server

Rest API – to test API server side

Database – to perform data-driven tests

Visual Testing – using applitools

Testing framework – PyTest

HTML Reports – simple HTML report of test execution

Allure Reports – An enhanced HTML reporting system

CI with Jenkins – the project is completely running from the Jenkins server

**Infrastructure project includes the use of:**

* Page Object Design Pattern
* Project Layers (Extensions/Utilities/Workflows/Test Cases)
* Functional Style Programming
* Common Functionality
* Support Different Clients/Browsers
* Failure Mechanism
* External Files Support
* Reporting System (including screenshots and text Logs)
* Visual Testing
* DB Support
* CI Support

**A list of applications used in this project:**

* **Orange HRM –** Open-Source HR Management
* **Reqres –** A Hosted REST-API
* **Settings App –** The mobile app was created by me in Android Studio
* **Temp Calculator –** The electron app was created by me in an atom
* **My WPF App –** Desktop app was created by me in Visual Studio
* **Database –** The database that is located on my site

**Tools & Frameworks used in this project:**

* **PyTest** – Testing Framework
* **EventListeners** – for console reports
* **Jenkins** – for automated execution of the test cases
* **Python requests** – for API testing

**Test Execution:**

Each one of the Test Suites has a few tests for demonstration purposes. These tests can be developed very simply, due to a lot of work done with the infrastructure. [Sanity Tests]

**Known Issues:**

Due to different versions of package requirements that are desired for proper execution test cases on different platforms, you need to comment on other sections in the conftest.py script.