**Project Write-Up: Automated Web Interaction and File Uploading**

**Overview**

The Web Automation Project is a Java-based automation project designed to create an online travel booking website. This project leverages Selenium WebDriver for web automation, AutoIt for handling file uploads, and a SQL database for storing product data. The objective is to demonstrate end-to-end web automation capabilities, including interacting with web elements, uploading files, and managing a database.

**Project Components**

**1. Selenium WebDriver Integration**

Utilizes Selenium WebDriver to automate web interactions.

Opens a web browser and navigates to a travel booking website (e.g., MakeMyTrip).

Implements the Page Object Design Pattern to organize web elements.

**2. AutoIt Script for File Uploads**

Uses AutoIt, a scripting language for automating the Windows GUI, to handle file uploads.

The script opens a file dialog, selects a file from the desktop, and confirms the selection.

AutoIt script is compiled into an executable (.exe) file.

**3. Database Integration**

Sets up a SQL database (e.g., MySQL) for storing product data.

Creates a table named "products" with columns for product information (e.g., name, price, description).

Establishes a JDBC connection to the database for performing database operations.

**4. Screenshot Capture**

Captures screenshots of webpages using Selenium WebDriver.

Saves screenshots within a "Screenshots" folder for reference.

**Project Workflow**

**Web Automation:**

Selenium WebDriver opens a web browser, navigates to the travel booking website, and interacts with web elements (e.g., entering origin, selecting dates).

**File Upload:**

The Java program calls the compiled AutoIt script to handle file uploads, allowing users to upload files seamlessly.

**Database Operations:**

Establishes a JDBC connection to the SQL database.

Performs database operations, including inserting product data into the "products" table.

**Screenshot Capture:**

Captures screenshots of webpages at relevant points in the automation process.Saves screenshots in the "Screenshots" folder for documentation and debugging purposes.