

Web Application Testing Home Assignment

Overview

This assignment evaluates your ability to:

- Create automated tests using Playwright with Python
- Implement Page Object Model design pattern
- Handle file uploads and data validation
- Write clean, maintainable code
- Handle edge cases and error scenarios

Setup Instructions

1. Create a virtual environment:

```
python -m venv venv  
source venv/bin/activate # On Windows: venv\Scripts\activate
```

2. Install dependencies:

```
pip install -r requirements.txt  
playwright install
```

Assignment Tasks

1. Basic Test Implementation

- Create automated tests for a product upload system
- Use Playwright with Python
- Implement Page Object Model
- Handle file uploads and validations

2. Test Scenarios

Your tests should cover:

- a) Valid Data Upload
- b) Invalid Data Handling
- c) Edge Cases

3. Technical Requirements

- Use Python 3.8+
- Implement Page Object Model
- Use pytest for testing
- Generate test reports
- Include proper error handling

- Add logging for test execution

Deliverables

1. Source code in a GitHub repository
2. README with:
 - Setup instructions
 - Test execution instructions
 - Project structure explanation
 - Assumptions and limitations
3. Test execution report