IIHT

Apache Jmeter (PL2) – Cloud Computing (PL1) - Software Engg. Basics for NFT (PL1) v0.1

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# Problem Statement

Create a list of HTML pages like Simple Form, iFrame, Login Form, Tables and File upload and perform the load testing using Apache Jmeter

Tool Chain

|  |  |  |
| --- | --- | --- |
| Competency | Skill | Skill Detail |
| Presentation | HTML /CSS / Javascript |  |
| Performance Tool | Apache Jmeter |  |
|  |  |  |
|  |  |  |

# NFT Skill set coverage

|  |
| --- |
| 50 NFT MC1 - Software Engg. Basics for NFT (PL2) - Selenium (PL2) - Python (PL2) |

# Business-Requirement:

Develop the front end and do testing of the application with below guidelines:

|  |  |  |
| --- | --- | --- |
| User  Story # | User Story Name | User Story |
| US\_01 | Create a simple form | As a user create a simple form using HTML with the following fields   1. First Name 2. Last Name 3. Email 4. Contact Number 5. Message |
| US\_02 | Create a iFrame | As a user create multiple iframes in a page and perform load test |
| US\_03 | Login Page | As a user create a login page with the following fields and perform load test for the same   1. Username 2. Password 3. Submit Button |
| US\_04 | Tables | As a user create a page with Table elements and perform load testing for the same |
| US\_05 | File Upload | As a user create a page with File upload elements using HTML and perform load testing for the same |
| **End of use case** | | |

# Rubrics/Expected Deliverables

## Middleware

1. Use Python based scripts to develop the above given user stories.
2. Use necessary configurations in requirements.txt file
3. Use virtualenv for better coding and best practice
4. Package Structure for Project should is with proper naming conventions for package and beans.
5. Follow proper Naming Conventions

## Database (Products & Frameworks -> Database & Storage):

1. As an application developer:
   1. Add the registration users to the database and fetch the details whenever needed
   2. One can use local DB – Oracle or MySQL with JDBC driver

## Testing – Automation Test

* + - 1. Create a Test Plan in Jmeter
      2. Add config elements like HTTP Request Defaults and other listeners
      3. Add each page to the HTTP Request defaults and implement thread group with varied no. of users like 5, 10, 50 and 100
      4. Add Graph to a plan and observe the response time
      5. Perform assertion using Apache Jmeter
      6. Perform using cloud either Azure/AWS/GCP

# Frontend

* + - 1. Develop the front end for all user stories.
      2. Implement using HTML, CSS, JS
      3. Implement all the Front-End validation rules
      4. Proper naming conventions and folder structures