

Shell Foundation – Final Case Study Document

Website (OrangeHRM) : <https://opensource-demo.orangehrmlive.com/web/index.php/auth/login>

Objective: To test the concepts of SDLC, Agile, Software Testing, DBMS and CI/CD pipeline.

Task Instructions

The below activity must be performed **individually**.

Follow the below instructions for the OrangeHRM website -

SDLC, Agile and Software Testing

1. Open Azure DevOps.
2. Create an **Azure Virtual Machine (VM)**. You need to perform all the tasks within the VM.
3. Login to the azure devops portal and navigate to the project.
4. Create a New Sprint. Set the Sprint goals and objectives, aligning them with the overall testing strategy for the website.
5. Create **5 User Stories** in the Sprint for the Sprint Backlog for the given application.
6. Each user story should cover different aspects of the Software Development Life Cycle (SDLC) as it relates to the functionalities of the website.
7. Create **25 test cases** for the user stories created for the Sprint.
8. Define the **tasks** and **sub tasks** for each User Story.
9. Execute all the **test cases** manually (functional testing).
10. Create a **Defect Report** for each failed or blocked test case.

Implementing the CI/CD Pipeline using GitHub Actions

11. Create a **new repository** on your GitHub account.
12. Clone the code base of the Java (any preferred language) project into your repository. The project's codebase would be present in the VM.
13. Create a **New Workflow** on **GitHub Actions** for the Java/Maven code.
14. Monitor the created build.
15. Modify the code in your repository to recheck the Workflow and the Build. For example, you could modify a Java class or update the pom.xml file.
16. Commit it and monitor the build result
17. Update the screenshot of successful build and commit it in the repo.
18. In your repository, add the created test cases report and defect report.

Rubrics

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