

1. Use Selenium web driver for functional web testing.
- 1a. Use Selenium IDE for functional web testing .
2. Jira for Agile Practices/Methodology.
3. Study and use UiPath Test Suite Tool for your project chosen in assignment 1.
4. Study and hands on sonar cloud (sonarqube tools) for project quality.
5. Enlist Agile tools available in FOSS and proprietary domains. compare the features of both lists in general.
6. Use cypress tool for QA/ automation testing, compare cypress tool with selenium tool.
7. What is scrum? What are the roles of scrum master? List of all the key ceremonies of a scrum team.
8. What is kanban? What are agile/devops frameworks? compare scrum vs kanban.
9. What Is DevOps? Give Top 8 Best Practices for Implementing DevOps. Give the list DevOps tools as per lifecycle.
10. Debug the a code using IDE: eclipse Tool (Java or python).
11. Use tools Jenkin tool (trail) version (online(cloud)/offline) for demonstration of CI/CD of project/mini project/code.
12. Use Tool Gitlab for Agile practice OR check and demonstrate the feature of Gitlab for CI/CD on sample codes.
13. Use tool Maven for learning and demonstrating the (dependencies) SDLC (software- dev-life cycle) for java codes/projects.
14. Use the dockers containers and kubernetes (Tools) for demonstration CI/CD.
15. Use the tool confluence for project documentation. Use it for collaboration.(Prepare assg no1 write-up using this tool)
16. Upload minimum 5 MCQ on agile tools and practices in doc format file.

Cypress :

- npm init
- npm install cypress --save-dev
- npx cypress open
- E2E testing
- Chrome
- Create specs

Web driver:

- Create package under Main as automation Package and

- Then create a Java class.

And then code in it.

Gitlab:

Fork -> Build Run pipeline -> Run pipeline

Docker Kubernetes:

Docker image : mayursdocker10/asptl_img

Commands to run in CMD:

1. Create a folder and put the following in it:

a. Git pull

<https://github.com/shedmekhe/Dockerised-Kubernetes-deployed-Website>

b. docker build -t your_docker_username/image_name .

c. docker login

d. docker push your_docker_username/image_name

e. minikube start

f. kubectl apply -f deployment.yaml

g. kubectl apply -f service.yaml

At last run this command on CMD

h. port-forward service/static-webpage-service 3000:80

And site gets access on localhost:3000