

## COSC 205 Lab 5

In the last few classes, we have discussed SDLC, classic project management, and Scrum / Agile method. In this lab exercise you will be reviewing some of these concepts. This is an OPEN BOOK exercise hence you can consult the lecture slides, text, and Google, but do not plagiarize! That means do not blindly copy and paste text, instead paraphrase, or redefine in your own words. This lab exercise is for a total of 20 marks and carries a weight of 4% of your overall course assessment.

1. In SDLC, how does “Testing” differ from “Maintenance” [2 marks]

Testing occurs before release and focuses on finding problems and issues, then fixing them before the software is released. Maintenance on the other hand focuses on keeping the software operational and up to date, fixing bugs and issues that are discovered after the release.

2. Briefly describe the Waterfall methodology of Software development, listing some of its advantages (strength) and disadvantages (weakness). [3 marks]

The waterfall methodology is a sequential approach to software development that follows a linear process. Some of its strengths are that it is easy to manage, it has clear and well defined phases, and it has a predictable timeline. The disadvantages of this methodology is that it is very rigid against changes in plan and schedule, it does not involve the customer in development until testing, and it does not have any iteration of the software.

3. How would you define a project [1 mark] and how does a project differ from a program [1 mark]?

A project is something that has a start and an end, with specific goals and targets that much be achieved within the timeline. A program is a group of projects that are managed together to form a cohesive approach to achieving specific strategic targets and objectives.

4. JIRA, MS Project / Zoho Project / Monday.com are some examples of software tools for Project Management. Briefly describe 3 unique features of JIRA and any PM software of your choice, i.e., JIRA vs MS Project or JIRA vs Zoho or JIRA vs Monday.com or JIRA vs XYZ [6 marks].

Jira has great support for agile development because it has native support for different agile methodologies such as scrum and kanban. It also allows users to track issues during sprints. Lastly, Jira can be linked to dev tools such as GitHub to make it easy to manage work and iterations

Monday.com on the other hand has a very simple and intuitive user interface. It also allows for custom views based on the project needs such as gantt charts, project timelines and others. Lastly, Monday.com has great workflow automation which allows specific actions to be triggered based on other actions or dependencies.

5. Assume you were involved in a recently completed project. What criteria or factors would you use to determine if the project was successful or not? [3 marks]

The main criteria would be whether or not the deliverables on the project charter were completed or not. Another criteria is if it was completed within the specified timeframe.

6. Briefly differentiate between these 3 Scrum meetings - daily scrum, sprint review and sprint retrospective [3 marks]

A daily scrum is a daily meeting between the team members to discuss what each member is focusing on in that day. A sprint review is a meeting held at the end of the sprint where the team presents their completed work to the stakeholders. The main focus of this is to get feedback from the stakeholders. A sprint retrospective is a meeting after the sprint by team members only and focuses on recapping the sprint in terms of what went well vs what went poorly and what can be changed to improve the next sprint.

7. In Project Management, what is the difference between SCRUM and AGILE [1 mark]

Agile is a project management methodology while Scrum is a specific methodology of agile.