#### **DAILY CHALLENGE**

#### Question 1.

Explain the following agile methodologies Scrum, Kanban, Extreme Programming.

## SCRUM;

A prioritized wish list called a product backlog is created. A placeholder for all the future development stories. During the planning phase, the team selects a small chunk from the top of that wish list and create what is called a sprint backlog, and decides how to implement those pieces. The team is given a certain amount of time, called a sprint, to complete its work. The team meet each day on a stand-up meeting to assess the progress. At the end of the sprint—usually two to four weeks—the work should be ready to hand to a customer. The sprint ends with a sprint review and a retrospective. The next sprint then begins.

## KANBAN:

This can be done by using a card wall, or a Kanban Board, with the columns on the board representing the states or steps in the workflow and the cards representing the work items. The whole point of implementing a Kanban system is to create positive change. Before you can create that change you have to know what to change. To truly leverage Kanban, teams must collaborate.

## EXTREME PROGRAMMING;

It is an agile software development framework that aims to produce higher quality software, and higher quality of life for the development team. XP is the most specific of the agile frameworks regarding appropriate engineering practices for software development. Similar to other Agile Methods of development, Extreme Programming aims to provide iterative and frequent small releases throughout the project, allowing both team members and customers to examine and review the project's progress throughout the entire software development life cycle.

### **Question 2.**

Who are the members of an agile team and what are their roles?

1. Development Team (designers, writers, programmers, etc.)

Delivering the work through the sprint.

To ensure transparency during the sprint they meet daily at the daily scrum ( sometimes called a standup). The daily scrum provides transparency to the work and provides a dedicated place for team members to seek help, talk about success and highlight issues and blockers. The scrum master might facilitate the daily scrum, but ultimately it is the responsibility of the development team to run

this meeting. It is their meeting to help them, as a group, to inspect and adapt the work they are doing and work in a more effective way.

## 2. The Product Owner.

Managing the scrum backlog - This does not mean that they are the only one putting in new product backlog Items into the backlog. But ultimately they are responsible for the backlog that the development team pulls to deliver from. The product owner will have to work with all these people to effectively ensure that the development team is delivering value. That can mean a large amount of stakeholder management and communication.

## 3. The Scrum Master.

The scrum master is the role responsible for gluing everything together and ensuring that scrum is being done well. In practical terms, that means they help the product owner define value, the development team deliver the value, and the scrum team to get better. The scrum master is a servant leader which not only describes a supportive style of leadership but describes what they do on a day-to-day basis.

### Question 3.

List 5 Project Management Tools;

- 1. Storyboard
- 2. Trello
- 3. Slack
- 4. LiquidPlanner
- 5. GanttPro

# Question 4.

List the Phases of Software Development Life Cycle.

- 1. Planning
- 2. Analysis
- 3. Design
- 4. Development and Implementation
- 5. Testina
- Maintenance.