Assignment 1

Task 1- Agile Values & Principles-

a. The 4 core Values of the Agile Manifesto:

Ans-

1. Individuals and interactions over processes and tools.
2. Working software over comprehensive documentation.
3. Customer collaboration over contract negotiation.
4. Responding to change over following a plan.

b. 3 out of the 12 Agile Principles(in your own words):

Ans-

1. ***Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.***

   Agile emphasizes that delivering valuable product to the customer early and regularly is their primary goal as this keeps them engaged and ensure their needs are being met. This way both the customer and the team can work efficiently.

2. ***Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.***

   This principle says that Agile allows flexibility, meaning if the customer wants any changes even late in the process then also the team can adapt the change and ensure that the final product matches client's expectations.

3. ***Deliver working software frequently, from a couple of weeks to couple of months, with a preference to shorter timescale.***

By frequently delivering updates like every 2 weeks , Agile helps the team to stay aligned with their goals, catch issues early and maintain a steady progress rhythm.

c. Reflection: Traditional vs Agile

Ans-

Traditional Methodologies-

Imagine a software project using the waterfall model. The team spends months gathering requirements and creating documentation before any development begins. In the middle of the development, the client's needs change due to market shifts. But the project plan is rigid, making changes is expensive and slow.

And here Agile methodologies can help in the following way-

As in Agile, development is iterative. Teams deliver small chunks of the product frequently and get continuous feedback. If the client's needs any change in the product , Agile teams can pivot quickly in the next sprint, saving time, cost and ensuring relevance. Using Agile the team can make any changes to the product without any second thought and the client's demands will be fulfilled.

Task 2- Scrum Framework Activity-

a. The Three Roles in scrum:

Ans-

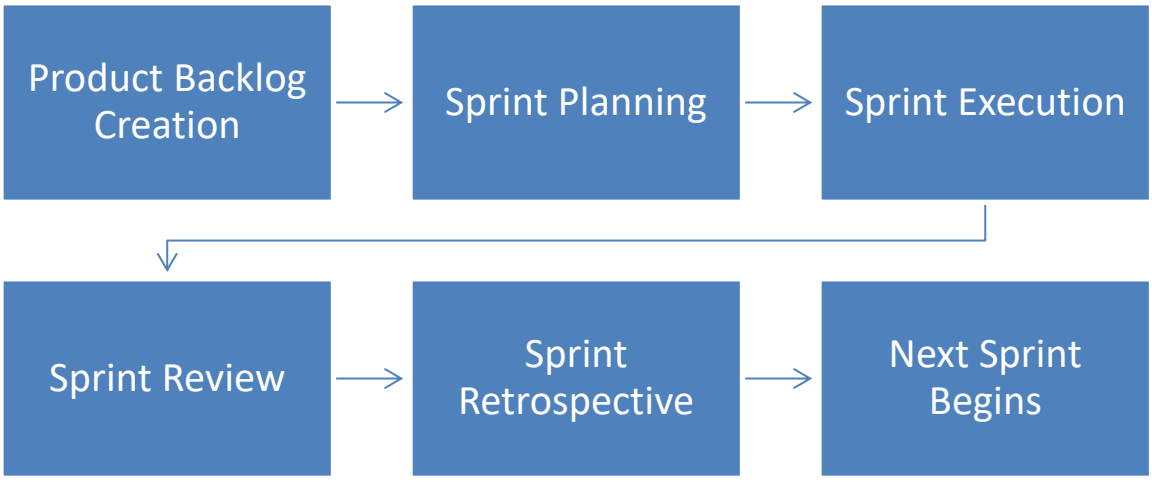
1. **Product Owner –**
   Explains the product vision and manages the Product Backlog.
2. **Scrum Master-**
   Facilitates the Scrum progress and removes the obstacles faced by the team.
3. **Development Team-**

A self-organising team that builds the product incrementally.

b. Scrum Workflow Diagram:

Ans-

1. **Product Backlog Creation** – The Product Owner creates a list of features & requirements.
2. **Sprint Planning** – The team selects items from the Product Backlog for the Sprint.
3. **Sprint Execution** – The team works on tasks during the Sprint, with daily stand-ups.
4. **Sprint Review** – The completed product increment is demonstrated to stakeholders.
5. **Sprint Retrospective** – The team discusses lessons learned and improvements.
6. **Next Sprint Begins** – The cycle repeats until the product is complete.



c. Difference between Product backlog and sprint backlog(with example):

Product Backlog –	**Sprint Backlog-**
A complete list of everything that might be needed in the product.	A subset of the product backlog selected for a specific sprint.
Maintained by the Product Owner.	Maintained by Scrum Team.
Examples- 1. Adding user login feature in the website. 2. Implementing payment gateway.	Examples- 1. Design login page UI. 2. Integrate Google login in backend.

Task 3- Team Role Simulation-

Ans-

Team:

- Scrum Master: Disha (Me)
- Product Owner: Shreya
- Developer: Soham

Fictional Product Idea: Campus Event App

Description:

An app for college students to view , register for, and get updates about campus events such as fests, workshops and cultural programs.

Mock Sprint Planning Meeting Highlights:

- ***Goal of the Sprint:***
  Deliver the minimum viable product with basic functionality: event listing, registration, and notifications.
- ***Sprint Duration:*** 2 week
- ***Team Availability:*** All team members available full-time

1. Scrum Master – Disha

Responsibilities:

- Facilitates all Scrum ceremonies (Sprint Planning, Daily Scrum, Review, Retrospective).
- Helps the team stay focused and removes any obstacles/blockers.
- Ensures the team follows Scrum practices and principles.
- Acts as a servant-leader, not a project manager.

In this simulation:

- Disha ensured the Sprint Planning meeting stayed on track.
- She encouraged collaboration between the Product Owner and Developer.
- She reminded the team to keep the Sprint Goal realistic and time-boxed the meeting.

2. Product Owner – Shreya

Responsibilities:

- Owns and manages the Product Backlog.
- Represents the voice of the customer (in this case, students).
- Prioritizes user stories based on business value and urgency.
- Defines acceptance criteria for each story.

In this simulation:

- Shreya introduced the product vision: a Campus Event App for students.
- She wrote and prioritized the user stories based on what users would need first.
- She clarified what features are “must-haves” for the first sprint.

3. Developer – Soham

Responsibilities:

- Responsible for implementing features defined in the Sprint Backlog.
- Participates in estimations, task breakdowns, and daily updates.
- Collaborates with the Product Owner to understand requirements.
- Commits to delivering a potentially shippable product increment at the end of each sprint.

In this simulation:

- Soham helped estimate the user stories using the Fibonacci scale (3, 5, 8).

- He gave input on what features could realistically be developed in a 1-week sprint.
- He suggested splitting tasks (like UI, backend, notifications) for easier tracking.

3 Sample User Stories (with Prioritization and Story Points)

Priority	User Story	Story Points	Notes
High	A student want to view upcoming campus events, so that the student can decide which ones to attend.	2	Basic listing feature with event title, date, and description
High	A student want to register for an event through the app, so that the student don't have to register manually.	4	Requires backend form, seat validation, and registration confirmation
Medium	A student want to receive notifications about upcoming events, so that the student don't miss out on important dates.	6	Involves push notification setup and notification scheduling logic