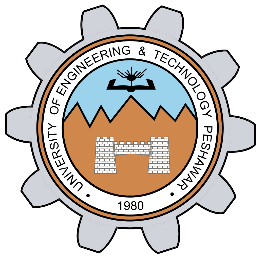
**ASSIGNMENT NO 1**

**RELATED TO CLO1 AND CLO2**



**Fall 2023**

**Software Engineering**

Submitted by: **Maaz Habib**

Registration No.:**20PWCSE1952**

Section: **C**

“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Submitted to:

# Dr. Samad Baseer

**D**epartment of **C**omputer **S**ystems **E**ngineering

**U**niversity of **E**ngineering and **T**echnology, **P**eshawar

**Software Engineering Assignment 01**

**Question 01:**

**Why does an iterative process make it easier to manage change? Is every agile process discussed in this chapter iterative? Is it possible to complete a project in just one iteration and still be agile? Explain your answers.**

An iterative process is breaking a big task into smaller parts and working on each part one at a time. This makes it easier to manage changes because you can adjust each part as needed without disrupting the whole project. Agile methods like Scrum and XP use iterations to deliver work in small increments, which makes it easier to adapt to changes. It's possible to finish a project in just one iteration and still be agile, especially if the project is small or well-defined. Even with just one iteration, you can still use agile principles like teamwork, flexibility, and responding to feedback to get the job done effectively.

**Question 02:**

**Try to come up with one more “agility principle” that would help a software engineering team become even more maneuverable.**

Encourage the team to regularly reflect on their processes, practices, and outcomes, and adapt accordingly. This means taking time to review what's working well and what could be improved after each iteration or milestone. By reflecting on their experiences and adjusting as needed, the team becomes more adaptable and responsive to changes, ensuring continuous improvement and better outcomes in future iterations.

**Question 03:**

**Why do requirements change so much? After all, don’t people know what they want?**

Requirements change all the time as we work on a project, we learn what's needed and what is useless, which can change our original plans and ideas. People testing our project might suggest changes or notice things we hadn't thought about before and sometimes, we discover better ways to do things or new features that would make our project even better. Budgets can sometime cause problems, It might be really useful and good but off budget. Even though we might have an idea of what we want at the beginning, things can change along the way for various reasons, and it's important to be able to adapt to these changes to make our project successful.

**Question 04:**

**Most agile process models recommend face-to-face communication. Yet today, members of a software team and their customers may be geographically separated from one**

**another. Do you think this implies that geographical separation is something to avoid? Can you think of ways to overcome this problem?**

Geographical separation has its own challenges of communication and collaboration, in agile software development where face-to-face interaction is preferred. However, it doesn't necessarily mean that geographical separation is something to avoid. Instead, finding strategies to overcome the challenges by distance and find effective means of communication and collaboration.

Here are some ways to overcome the problem of geographical separation in software teams:

**Utilize Technology:**

There are various communication and collaboration tools to facilitate virtual interactions among team members and stakeholders. Video conferencing platforms like skype, zoom, google meet me etc. instant messaging apps like WhatsApp, signal, Telegram etc. project management software, and collaborative document-sharing tools can help distance and enable real-time communication.

**Establish Regular Meetings:**

Schedule regular virtual meetings for team members to discuss project progress, share updates, address concerns, and align priorities. These meetings can include daily stand-ups, sprint planning sessions, sprint reviews, and retrospectives, depending on the agile framework being used.

**Encourage Transparent Communication:**

Openness and transparency where team members feel comfortable sharing information, asking questions, and raising concerns, regardless of their location. Clear and frequent communication helps mitigate misunderstandings and ensures everyone is aligned with project goals and expectations.

**Emphasize Documentation:**

Document project requirements, user stories, design decisions, and other relevant information in a centralized location accessible to all team members.

**Build Relationships:**

Encourage team members to build strong relationships and trust through virtual team-building activities, informal chats, and shared experiences, despite being geographically separated.

**Plan Face-to-Face Meetings:**

Whenever feasible and safe, plan occasional face-to-face meetings or workshops to strengthen relationships, resolve complex issues, and align on strategic goals. These in-person interactions can enhance team bonding and understanding, supplementing virtual communication.

**Acknowledge Cultural Differences:**

Be mindful of cultural differences among team members when communicating and collaborating in a geographically distributed environment. Respect and adapt to diverse communication styles, working norms, and time zone differences.

**Question 05:**

**Write a user story that describes the “favorite places” or “favorites” feature available on most Web browsers.**

**User Story:** I want to be able to rapidly travel to my favorite websites by saving and accessing them with ease as a web browser user.

**Acceptance Standards:**

* Add websites to favorites with a "star" icon.
* Manage favorites with an intuitive interface.
* Organize favorites into folders.
* Rearrange favorite order easily.
* Search functionality for quick access.
* Dedicated section/button in new tabs/windows. ➢ Sync favorites across devices.

**Extra Things to Think About:**

* Import/export option for backups.
* Customize icons/thumbnails for favorites.
* Suggested popular websites based on history.
* Visual indicator for existing favorites.

**References:**

1. *"Scrum: The Art of Doing Twice the Work in Half the Time" by Jeff Sutherland.*
2. *"Kanban: Successful Evolutionary Change for Your Technology Business" by David J. Anderson.*
3. *"Agile Estimating and Planning" by Mike Cohn.*
4. *"The Lean Startup: How Today’s Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses" by Eric Ries.*