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 Resources	homework_lesson_10_agile_scrum.pdf
 Tags	agile

Question 1

Complete definitions for Scrum related key terminology provided below.

SCRUM CEREMONIES

Product backlog refinement

A product backlog is a list of things to be delivered in a project. The refinement of the product backlog involves sorting through this list of deliverables, and performing a number of activities to update them including: ordering them in terms of priorities, adding more details to some items, eliminating some items etc.

Sprint planning

A sprint is the name of the short (1-4 week) period that an Agile project is broken down into. The sprint period corresponds to a set amount and type of work that is expected to be completed, and set deliverables that are expected to result.

Daily scrum

A daily scrum is the name for a short daily meeting (ideally at the same time everyday) that all members of the scrum team take part in to touch base and update on progress - essentially just making sure that everyone is always in the loop! When I say a 'Scrum team', I mean all of those who are involved in a project using an Agile framework.

Sprint review

This is the name of the meeting that takes place at the end of a sprint. It is where the team talk about and present their outcomes of the sprint.

Sprint retrospective

A sprint retrospective is similar to the sprint review in that it is a meeting occurring post-sprint. But while the sprint review meeting is perhaps more concrete and action-oriented, the retrospective gives the team a chance to discuss highs and lows of the sprint. This reflective process will allow the team to perform more effectively in the future.

SCRUM ROLES

ScrumMaster

The ScrumMaster is responsible for ensuring that the project is operating within an agile framework. The ScrumMaster has a number of specific roles to help agile values be at the heart of the project e.g., establishing good rapport within the team that allows for constant communication, identifying and eliminating any blockers to good team dynamics etc.

Product Owner

The product owner is responsible for the concrete tasks that the team are doing, by defining stories and dealing with the product backlog. While the ScrumMaster is responsible for *how* things get done, the product owner is responsible for *what* gets done.

Development Team

The development team are a group of people who work together to get the tasks done that gives rise to the tangible product. These people are looked over by both the ScrumMaster (who examines how they operate) and the product owner (who determines what they will be creating)

Question 2

BACKGROUND

You are leading a development team that was given a task to create a new **yoga booking system**.

High level description of the system is as follows:

1. It has a very simple interface to accept user input (bookings) and display classes information
2. All bookings, appointments, schedule etc should be stored in a SQL database.

3. There is 'backend' system that should be written in Python to handle the logic and manage the data flow.

Your team has two weeks to build a simple prototype that will be shown to the client to seek their feedback and discuss further enhancements.

TASK

1. Break this task into smaller stories (chunks of work) for the team to work on.
2. Assume that one person works on one task.
3. Mark tasks that can be worked on in parallel and perhaps those that need to be worked on in particular order.

High-level goals of system

1. Create SQL database
2. Display booking availabilities from an SQL database on website
3. Accept bookings from users on website
4. Show new booking availability on website after each booking

Manageable stories

Create SQL database (all tasks must be completed first but can be completed in any order)

1. Retrieve from client a database of yoga class times and dates and maximum capacity
2. Use information from client to create a database of yoga availabilities in SQL

Display availabilities from an SQL database (all tasks must be completed second but can be completed in any order)

1. Use Python to create a 'configuration' file that connects python and SQL through credentials

2. Use Python to create a file that allows queries to be made from Python to SQL, and define functions that retrieve the booking availabilities
3. Create an API controller in Python displays the queries SQL data on the website

Accept bookings from users on website (all tasks must be completed third but can be completed in any order)

1. Define functions in Python to ask users to select their desired date/time

Show new booking availability on website after each booking (all tasks must be completed last but can be completed in any order)

1. Define function in python which updates the class size with each booking
2. Maintain count of class size and remove availability once class is full

A note on ordering

Within each of the above steps, tasks can be completed in parallel as they are all branches of the same overall goal and so are not dependent on each other. However, tasks within a certain goal should not be completed until all of the tasks in the goal before it have been completed, since the goals have been defined in a step-by-step order and roadblocks will occur.