CS555: Agile Methods for Software Development
Homework 02

Question 1: How are user stories similar to use cases?

Answer:

A user story is a short description of something that your customer will do when they will use your application software or come to your website , focused on the result they get from doing this thing. A user story is written from the point of view of a person using your website or application. While, a use case is a description of a set of interactions between a system and one or more actors.

User stories and use cases are similar because both of them are used to express the actions performed by different actors, identify the actors who will be interacting with the systems, determining the action performed by different actors and communication between them. In a nutshell, both user stories and use cases are used to document the requirements from a user's perspective.

Question 2: How are user stories different to use cases?

Answer:

A use case captures the detailed requirements of a user system interaction, with the primary purpose of handing it off to the development team who will develop the solution. In contrast, a user story captures high-level requirements without going into details that might be changed later, for the primary purpose of identifying features and their associated business value, so that they can be prioritized appropriately.

User stories are light weight and doesn't require to capture all details while use cases are heavy weight describing normal and alternate flow of actions. Other difference between use cases and user stories is in the matter of perception. User story is a customer's perception of interacting with system while use case is a developer's perception of interacting with system.

Question 3: Give an example user story for a college registration system.

Answer:
User Story 1

Title: Registration		
Acceptance Test: registerStudent	Priority: 3	Story Points: 2
As a student, I want to register and drop courses online so that I can change the class schedule efficiently.		

User Story 2

Title: Course Status		
Acceptance Test: courseStatus	Priority: 3	Story Points: 1
As a student, I want to know the status of courses so that I can know which courses are filled up and in which courses seats are available.		

User Story: 3

Title: Hold Status		
Acceptance Test: holdStatus	Priority: 2	Story Points: 1
As a register, I would like to be able to put a hold on status for student who have not completed necessary requirements.		

User Story: 4

Title: Credits Status		
Acceptance Test: creditStatus	Priority: 1	Story Points: 2
As a student, I want to know the status of credits which I have taken so I don't cross the maximum limit of credits for this semester.		

Question 4: Give a corresponding use case for a college registration system.

Answer:

Use Case 1
Use Case Name: Course Schedule
Brief Description: The user should be able to check course schedule and should not be able to add courses that are at the same time.
Actor: Student

Use Case 2
Use Case Name: Hold Status
Brief Description: The registrar should be able to put a hold on add/drop courses if the student has not completed the minimum requirements.
Actor: Registrar

Use Case 3
Use Case Name: Add or Drop Course
Brief Description: The student should be able to add or drop the course he/she wishes to take.
Actor: Student

Use Case 4
Use Case Name: Credit Status

Brief Description: The user should be able to check how many credits he/she has taken so it not exceeds the maximum limit.
Actor: Student

Question 5: Explain how your two examples support your answers to the first two questions.

Answer:

By seeing the example, we can tell that the user stories are defined by the users of the system which is informal and is written from the point of view of a person using your application. i.e. As a student, I want to register for the courses. On the other hand, use cases defines the flow very clearly in a formal way. It is point of view of the system from the developer's perspective i.e. The user should be able to perform the add/drop operation.

User stories and use cases, both of them are used to express the actions performed by different actors, identify the actors who will be interacting with the systems, determining the action performed by different actors and communication between them. In a nutshell, both user stories and use cases are used to document the requirements from a user's perspective.