

Tutorial 08

(1) What is a use case?

A use case is a description of a specific interaction or scenario that outlines how a system or technology can be used to achieve a particular goal or objective. It is commonly used in software development, project management and requirements analysis to capture and understand the functional requirements of a system from the perspective of its users or stakeholders.

(2) Define the steps of use case methodology.

1. Identify all system users and create a profile for each one.
2. Select one user and define their goal.
3. Describe the course taken through the system to reach that goal.
4. Consider every alternate course of events and extend use case.
5. Identify all commonalities in user journeys to create a common course

use case

6. Repeat Step 2-5 for all other system uses.

- (a) Define the context of the basic use case description template.
- Use case name - A concise and descriptive title for the use case.
- Description - A brief overview of the use case, highlighting its purpose and objectives. It should provide a high-level understanding of the problem being solved or the functionality being implemented.
- Actors - Identifies the different roles or entities interacting with the system or application involved in the use case. This may include end-users, administrators, external systems, or other relevant stakeholders.

Main Flow - Represents a step-by-step sequence of actions that occur during the execution of the use case. It outlines the interactions between the actors and the system, detailing the input, processing and output involved.

Alternative Flows - Captures alternative paths or deviations from the main flow, which may occur based on different conditions or user choices. These alternative flows should cover any significant variations in the use case's execution.

Preconditions - Describes any necessary conditions that must be met before the use case can be initiated. This may include system states, data availability, or user permissions.

Postconditions - Specifies the expected system state or outcomes after the successful completion of the use case. This section outlines the results, effects, or changes resulting from the use case execution.

- (4) Write a use case for the following example:

User requirements :

As a user, I want to register on an online shopping website to buy some accessories.

Use case: User registration on an online shopping website

Actor: User

Pre-conditions: The user has access to a computer or mobile device with an internet connection.

The online shopping website is accessible and functioning properly.

Post-conditions: The user has successfully registered on the online shopping website and can proceed with purchasing accessories.

Main Flow: The user navigates to the homepage of the online shopping website.

The user locates the "Register" or "Sign up" button/link and clicks on it.

Alternative Flows: If the email address provided is already registered, the user is prompted with an error message and asked to log in instead of registering with a new account.