

Reading Assignment 1 (AXK180025)

1. Define what is actor?

- A) An **actor** is something with behavior, including the system under discussion itself when it calls upon the services of other systems. Actors are roles played not only by people, but by organizations, software, and machines. **Example:** A cashier.

2. What are three kinds of actors?

- A) There are three different kinds of external actors in relation to the system under discussion (SuD)
- **Primary Actor** – has user goals fulfilled through using services of the SuD.
Example: Cashier.
 - **Supporting Actor** – provides a service to the SuD. Often a computer system but could also be an organization or a person. **Example:** The automated payment authorization service.
 - **Offstage Actor** – has an interest in behavior of the use case but is not primary or supporting. **Example:** A government tax agency.

3. What is the actor goal?

- A) **Actor goal:** An actor goal is to create solutions to an existing problem that produce a result of value. Use cases are defined to satisfy the goals of the primary actors. The basic procedure to find actor goal is: Choosing system boundary, finding primary actors and goals, defining use cases.

4. Define what is a use case?

- A) A use case is a business process. It begins with an actor, ends with the actor, and accomplishes a business task for the actor.
- a. **Are they diagrams?** - Use case models are not diagrams. They are text documents.
 - b. **Are they functional requirements?**
A) The use case model is not only the requirement artifact in the UP. There are also the supplementary specification, Glossary, Vision, and Business Rules.

5. What are common use case format?

- A) Use cases can be written in different formats and levels of formality. There are three Common Use case formats.
- **Brief:** Terse one-paragraph summary, usually of the main success scenarios.
Example – The Process Sale example.
 - **Casual:** Informal paragraph format. Multiple paragraphs that cover various scenarios.
Example – The Handle Returns example.
 - **Fully Dressed:** All steps and variations are written in detail, and there are supporting sections, such as preconditions and success guarantees.

6. Define what are scenarios?

- A) A **scenario** is a specific sequence of actions and interactions between actors and the system under discussion. It is one story of using a system, or one path through the use case. It is also called a **Use case instance**.
Example: Successfully purchasing items with cash or failing to purchase items because of a credit card transaction denial.

7. How we pick a name for a use case?

- **Names begin with a verb** – A use case models an action so the name should begin with a verb.

- **Make the name descriptive** – This is to give more information for others who are looking at the diagram. For example: “Print Invoice” is better than “Print”.
- **Highlight the logical order** – For example if you’re analyzing a bank customer typical use cases include open account, deposit and withdraw. Showing them in the logical order makes more sense.
- Place included use cases to the right of the invoking use case – This is done to improve **readability** and add **clarity**.
- Place inheriting use case below parent use case – Again this is done to improve the **readability of the diagram**.

8. What is the relation between use case and actor goal?

- A) Customers and end users have goals (needs) and want computer systems to help meet them, ranging from recording sales to estimating the flow of oil from future wells. There are several ways to capture these goals and system requirements. The better ones are simple and familiar because this makes it easier especially for customers and end users to contribute to their definition or evaluation. Use cases are a mechanism to help keep it simple and understandable for all stakeholders.

9. Define extensions section in a use case?

- A) Extensions are important and normally comprise most of the text. They indicate all the other scenarios or branches, both success and failure. In thorough use case writing, the combination of the happy path and extension scenarios should satisfy “nearly” all the interests of the stakeholders.

a. How we notate them? Please use an example.

- A) Extension scenarios are branches from the main success scenario, and so can be notated with respect to its steps 1...N. For example, an extension is labeled “3a”, it first identifies the condition and then the response. Alternate extensions at Step 3 are labeled “3b” and so forth.

Extensions:

3a. Invalid identifier:

1. System signals error and rejects entry.

3b. There are multiple of same item category and tracking unique item identity not important

1. Cashier can enter item category identifier and the quantity.

b. Compare the two-column use case table (Kung) with the fully dressed use case table

No	Two table Column	Fully dressed use case
1	Uses tabular form(2column) for actor and system	Descriptive procedure in a detailed fashion
2	various use cases handled between actor and system. Also includes domain model	Talks about stake holders, preconditions, success and failure scenarios
3	Reviews actor-system interaction using review checklist	Specifies extensions (or alternative flows)
4	Response is specified in TUCEW clause	Resolves all functional and nonfunctional requirements
5	Does not mention alternatives, other than the main scenario	Specifies alternatives, technical info, issues etc.,