

Object Diagram

Objects

- Class name and object name (optional) must be underlined in the format 'objectName:ClassName'
- Should not include methods, only attributes that are relevant to the task

Non-functional requirements

- Specify the constraints under which the system is developed and operated

Example requirements

Data Size, volatility, persistency (shouldnt be more than 20MB, no crashes, respond within 2s)

Environment Technical environment which the system would operate in or need to be compatible in (work on 32-bit systems with java installed)

Characteristics

- Unambiguous, testable, clear, feasible, atomic (indivisible), necessary, **implementation-free**
- Consistent, non-redundant, complete

User Stories

- Short simple descriptions of a feature told from perspective of person who wants the capability
- Must be in the format 'As a {user type/role} I can {function} so that {benefit}'
 - Benefit can be omitted if obvious
- User story should not include any implementation details

Use cases

- Interaction between the user and system for specific functionality of system
- Should only describe externally visible behaviour not internal details of a system
 - This is wrong: *LMS saves file into cache* and indicate success
- Step should give the intention of the actor instead of the mechanics
 - UI details should be omitted to give UI designer flexibility in implementation
- Can include other use case which **MUST BE underlined** (inclusions)

Main Success Scenario (MSS)

- Most straightforward interaction for a given use case, assuming nothing goes wrong
- Should be self-contained (complete usage scenario)

Extensions

- Add on to the MSS that describes exceptional/alternative flow of events
- Extensions should be numerically marked based on when the event may happen
 - Extensions marked 3a. happens just after step 3 of MSS (3a1, 3a2...)
 - Extensions marked *a happens at any step (*a1, *a2...)
 - Subsequent extensions will be 3b, 4a or *b...

Format

Software System: Online Banking System

Use case: UC23 - Transfer Money

Actor: User

Preconditions: User is logged in. *State that the system is expected to be before starting the case*

Guarantees: - Expected outcome/output after use case

- Money will be deducted from the source account only if the transfer to the destination account is successful.
- The transfer will not result in the account balance going below the minimum balance required.

MSS:

1. User chooses to transfer money.
2. OBS requests for details for the transfer.

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