Seminar 1

Friday, 17 March 2023 16:26

Software Engineering (SE):

1. Formulate a problem
2. Analyze the problem
3. Searching for solutions fitting the problem
4. Deciding upon solution
5. Specifying the solution

Object-Oriented Software Engineering (OOSE):

1. Requirements elicitation
2. Analyze
3. System Design
4. Object Design
5. Implementation
6. Testing

1. Requirements elicitation

Steps:

1. Identifying actors
   e.g. user admin, IT guy
2. Identifying scenarios
3. Identifying use cases.
   A scenario is an instance of a use-case,
   e.g. login use-case with scenarios:
   - google;
   - fb;
   - system credentials,
4. Refining use cases.
   e.g.

Scenario:
Name: LoginGoogle
Actors: User
Flow of events:
1. User accesses system;
2. User is redirected to Login;
3. User chooses LoginWithGoogle;
4. User is logged in.

Usecase:
Name: Login
Actors: User
Flow of Events:
1. User accesses system;
2. User is redirected to Login;
3. User chooses LoginWithGoogle;
4. User is logged in.

(Functional requirement) Post condition:
Actor is logged in.
(Non-functional requirement) Quality requirements: Actor is logged in within a maximum of 3 seconds response time.

5. Assessing relationships between actors and use cases.

Types:
1. Non-functional requirements:
   - Functionality
   - Usability
   - Reliability
   - Performance
   - Supportability
   - +
2. Functional requirements:
   Use case diagram