



Advanced CASE Technology & Language Systems

ACTL Systems Ltd.
21775 Jaffa St. P.O.B. 8129
91081 Jerusalem, ISRAEL
Tel. 972-2-5376459
Fax. 972-2-5370425



UML OO Workshop Using Enterprise Architect 2 Days

1. Course Description

The course applies the UML and unified process approach on a mini project. The participants will develop a solution using Enterprise Architect. The participant will draw the various project artifacts starting from Use Case diagrams, continuing to the class and sequence diagrams, and finally use the component and deployment diagrams to reach the complete lifecycle.

2. Goals

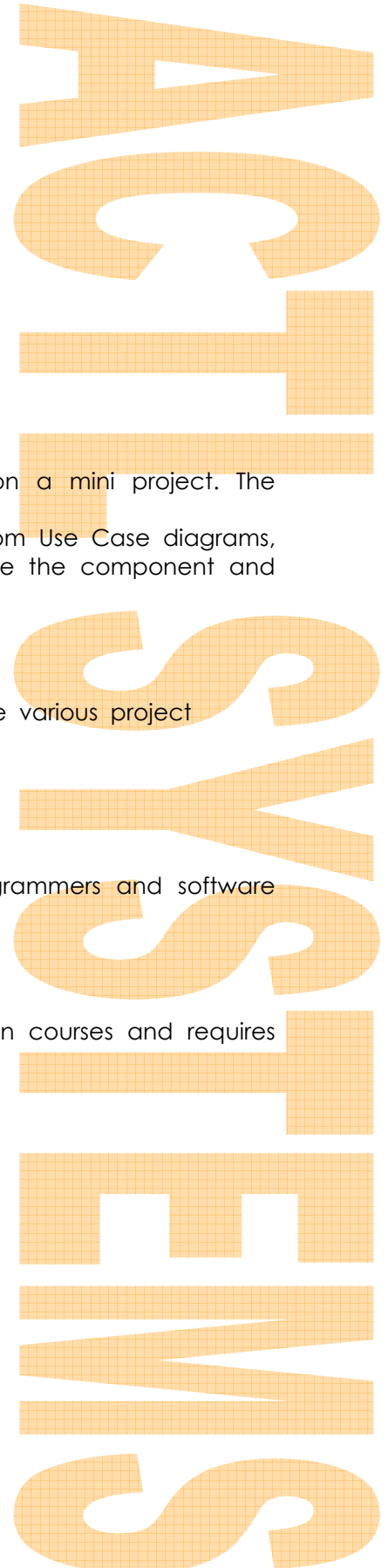
- To receive hands on experience on a small project.
- To become comfortable using Enterprise Architect for the various project artifacts.
- To avoid common pitfalls and to learn best practices.

3. Participants

The course is meant for software engineers, experienced programmers and software architects.

4. Pre-requisites

The participants should have taken our OO Analysis and Design courses and requires knowledge and experience in OO with UML and OO development.





Syllabus

1. Becoming familiar with the workplace.

- The Project browser
- The diagram window
- The UML toolbars.
- Navigating the project.

2. Requirement Specifications of a mini-project

- Use-Case modeling
 - Drawing actors and Use Cases.
 - The various Use Case diagram views.
 - Included and extended Use Cases.
 - Generic processes and concrete processes.
- Conventional requirements entry.
 - Functional requirements.
 - Other requirements.
- Creating the test matrix.

3. The Analysis Diagrams

- Class diagrams.
 - Drawing classes, associations, aggregation and nested classes.
 - Defining and drawing the inheritance structure.
 - Adding Attributes and Operations.
- Interaction diagrams.
 - Choosing and dragging the objects.
 - Drawing messages.
 - Object creation.
 - Fragments and loops.
 - Self message.
 - Object diagrams, links and messages between objects.
- State machine diagram
 - States, transitions and events.
 - Internal state behavior.

ACTL
SYSTEMS



4. Use Case Realization

- Use Case realization Package.
- Tracing the requirements to the implementation.
- Coverage and testing matrix.

5. Design diagrams.

- Packages and logical architecture diagrams.
- Packages as workspaces.
- Composite structure and object creation.
 - Ports, interfaces and assemblies.
- Component diagrams.
 - Package usage and ownership.
- Timing diagrams.
- Code generation and reverse engineering.
- DB schema creation and reverse engineering.
- Deployment diagrams.