Academic Year 2015-2016 Semester I

420312 - Middleware Techniques and Platforms

Assignment 1

Requirement

Each team, consisting of 3 or 4 members, is required to explore and study one ORB-based or RPC-based middleware technique/product/framework/platform/system/specification, excluding Java RMI. Candidate topics include (but not limited to):

- Java RMI over IIOP (RMI-IIOP)
- Java IDL
- CORBA
- ZeroC Ice (Internet Communications Engine)
- .NET Remoting
- VisiBroker
- Orbacus
- Orbix
- Artix
- Distributed Component Object Model (DCOM)
- ORBit2
- omniORB
- opalORB
- The ACE ORB (TAO)

The explorative study should cover the following aspects of the middleware:

1. The history
2. Major design objectives

3. Architecture, framework and components
4. Major functionalities
5. Application scenarios
6. Comparison with other related middleware
7. Major steps involved in using the middleware

Presentation

Each team is required to present the explorative study within 15 minutes, including a QA session. The presentation can be delivered in either English (preferred) or Mandarin, while the presentation slides should be composed in English only. The presentation must cover all aspects listed above.

Presentation time slots and venues:

A. Thu, 8 Oct 2015, 10:00-11:40, SSE516 (6 teams)
B. Sat, 10 Oct 2015, 13:30-15:05, SSE430 (6 teams)
C. Mon, 12 Oct 2015, 10:00-11:40, SSE430 (6 teams)
D. Tue, 13 Oct 2015, 10:00-11:40, SSE516 (6 teams)
E. Thu, 15 Oct 2015, 10:00-11:40, SSE516 (6 teams)
F. Mon,19 Oct 2015, 10:00-11:40, SSE430 (6 teams)
G. Wed, 21 Oct 2015, 13:30-15:05, SSE430 (6 teams)
H. Thu, 22 Oct 2015, 10:00-11:40, SSE516 (6 teams)

Submission

Prior to the presentation, each team should submit the presentation slides to the course instructor or teaching assistant, with the first slide presenting the name of the middleware and the full names and matriculation numbers of all team members. (*Format: PPT/PPTX/PDF; document size: less than 100 MB.*)

Grading Criteria

Grading Criterion	*Weight*
The history	5%
Major design objectives	10%
Architecture, framework and components	10%
Major functionalities	15%
Application scenarios	5%
Comparison with other related middleware	10%
Major steps involved in using the middleware	15%
Quality of presentation slides	15%
Quality of presentation	15%

THE END