Course Description:

The World Wide Web now is becoming an interoperable platform for integrating heterogeneous information in a uniform way. On the other hand, Java has been widely recognized as an interoperable programming language suitable for developing Internet and WWW applications. The goal of this course is to introduce the concepts and applications of Java with an emphasis on the enterprise computing and Internet computing. We will pay more attention on the diverse applications of Java such as multimedia, EC, network, database, etc. With a good training skill in Java, it will definitely bring benefits to the students in professional and research abilities.

Learning Objectives:

To provide students the fundamental and advanced Java programming skills with an emphasis on the emerging web computing technology.

Prerequisite:

Comprehensive experience on coding programs in C/C++ or other languages is highly required. This course is NOT an introduction to programming.

Content Summary:

The course will begin with the introductions to basic concepts in Java. In the following, several advanced topics such as distributed computing and database systems will be covered. Students will be asked to turn in program assignments each week to practice the material learned in each course unit. Students are expected to be trained as professional Java programmer with the full set of skills which are required to develop industry-quality applications. In addition, they will be familiar with the interoperability feature of Java in heterogeneous platforms such as UNIX, Windows and Linux. By conducting a real-world project, the student will be capable of achieving sufficient proficiency with the language.

Textbook:


References:


Course Requirement:

- No late turned-in assignment will be accepted.
- Three more times of unexcused absence will result in a failing grade for this course.
- The students are expected to class discussion actively.

**Grading Policy:**

- Program assignments: 20%. No late turned-in assignment will be accepted.
- Topic presentation: 15%
- Final project: 15%
- Midterm: 20%
- Final exam: 20%. The final will be comprehensive and cover all materials in class to date.
- Class attendance/participation: 10%. Class attendance and participation is highly likely correlated to your final grade.
- The passage of Sun Certified Java Programmer (SCJP) exam will receive more than 90 points in the final grade.
- **Cheating and plagiarism can not be tolerated and will result in a failing grade for the course.**