Elements of Software Engineering (CS 300)
Ref. No: 40857
Winter 2021

Course Objective

▪ To study techniques for software development from problem specification through design, implementation, testing, and maintenance

Class Homepage

▪ http://web.cecs.pdx.edu/~xie/cs300-w21/cs300-w21.htm

Instructor

▪ Prof. Fei Xie
  Office: FAB 120-10
  Phone: (503) 725-2403
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Office Hours

▪ By appointment

Prerequisites:

▪ Programming skills (CS 161, 162, 163, and 202) in a high-level programming language

Meeting Time and Location

▪ T/Th 12-1:50PM, Remote

Textbooks


Grading

▪ Exams: 40%
  o In-class Exam on Mar. 11.
▪ Term project: 40%
  o The term project will be an individual software development project.
  o The term project will be announced in Jan. 19.
  o Due Days:
    ▪ Feature Document Due: Jan. 26
    ▪ Architecture Document Due: Feb. 16
    ▪ Test Plan Due: Mar. 9
    ▪ Project Report and Final Deliverables: Mar. 14
- **Homework assignments**: 15%
- **Class participation and popup quizzes**: 5%
  - Popup quizzes may be given at the beginning or the end of each lecture.

**Homework Policies**

- **Submission Policy**
  - Each assignment must be submitted electronically on D2L by 12pm on due day.
- **Late Policy**
  - Extension is only given due to illness and other hardships.

**Class Schedules**

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<th>Week</th>
<th>Dates</th>
<th>Topics</th>
<th>Readings</th>
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<tr>
<td>1</td>
<td>Jan. 5, Jan. 7</td>
<td>Software Product</td>
<td>Chapter 1</td>
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<td>Jan. 12, Jan. 14</td>
<td>Agile Software Engineering</td>
<td>Chapter 2</td>
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<td>3</td>
<td>Jan. 19, Jan. 21</td>
<td>Features, Scenarios, and Stories</td>
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<td>Jan. 26, Jan. 28</td>
<td>Software Architecture</td>
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<td>Feb. 2, Feb. 4</td>
<td>Cloud-Based Software</td>
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<td>Feb. 16, Feb. 18</td>
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<td>Mar. 2, Mar. 4</td>
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<td>Mar. 9, Mar. 11</td>
<td>Devops and Code Management</td>
<td>Chapter 10</td>
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(In-class Exam: N/A)

(This schedule is subject to changes according to the need of the class. All suggested readings are from the required textbook, *Engineering Software Products: An Introduction to Modern Software Engineering (1st Edition)* by Ian Sommerville.)

**Academic Integrity**

- Academic misconducts will be handled according to the rules of the Department of Computer Science, Maseeh College of Engineering and Computer Science, and Portland State University.)