Software Engineering (CSE 415)

Introduction

Introduction

- Course Title: Software Engineering
- Course Code: CSE-415
- Credit Hours: 3
- Section: 1

Rules and Regulations

- Must have at least 85% class attendance to pass this course. Failure to do so will result in an automatic UW.
- Must appear in at least two quizzes in each term.
- Must appear in the midterm and final exams.
- No make-up quiz will be taken for missed quiz.
- No late submission of projects/assignments.
- No request will be entertained for Mid Term/Final Grade.

Cheating Policy (official rule)

- You'll get an **F** in the course

Grading Policy

▪ Attendance	:	10%
▪ Assignment	:	10%
▪ Quizzes or Class Test	:	10%
▪ Mid-Term	:	30%
▪ Final-Term	:	40%
▪ Course Total	:	100%

Text/Reference Books & Study Materials

- Software Engineering: A Practitioner's Approach (6th Edition) – Roger S Pressman, is the required text
- Software Engineering, 7th Edition, Ian Sommerville
- Lecture notes will be posted at the course website on a regular basis
- Additional handouts/photocopies will be provided by the Instructor if necessary

What is Software?

- What is Software?
  - Computer software, or just software, is a collection of computer programs and related data that provides the instructions to a computer what to do and how to do (for perform a specific job).
- Types of Software:

1. Generic(These **software** are produced by a development organization and sold on the open market to any customer.)

2. Customized(These **software** are developed especially for a particular customer by a **software** contractor.)

What is Software Quality?

- **Software Quality (as per ISO/ IEC 9126):**

  The totality of functionality and features of a software product that contribute to its ability to satisfy stated or implied needs.

- **Software Quality (as IEEE Std 610):**

  The degree to which a component, system or process meets specified requirements and/or user/customer needs and expectations.

What is Software Quality?

- According to ISO/IEC 9126, software quality consists of:
  - Functionality
  - Reliability
  - Usability
  - Efficiency
  - Maintainability
  - Portability

Software Engineering

- What is Software Engineering?
- What is the main objective?

Software Engineering

❑ What is Software Engineering?

- An engineering discipline that is concerned with all aspects of software production.
- Application of systematic, disciplined, quantifiable approach to software development, operation and maintenance.

Software Engineering

- What are the main challenges of software development now-a-days?
  - High cost
  - Difficult to deliver on time
  - Low quality

Software Engineering

- What is the objective of Software Engineering?

- To develop methods for developing software that can scale up and be used to consistently develop high-quality software at low cost.

Summary

- Any Questions ?!!?