Event Driven Programming

Course Introduction

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Course Description

- Software Development
- The course is about using event driven programming language to develop software systems
- The course is designed to give introduction to C# to develop Windows Application Programs

Learning Outcomes

- At the end of the course students should be able to:
  - ✓ Understand the concept of event driven programming
  - ✓ Demonstrate knowledge of a high-level object oriented programming language specifically C# language
  - ✓ Be familiar and Use MS Visual Studio IDE to develop Windows applications
  - ✓ Analyze problem domains, design and develop software system for a client or a person using C# as event driven programming language

Course Content

- Introduction
  - ✓ Software development
  - ✓ Event driven programming
  - ✓ .NET framework
  - ✓ MS Visual studio IDE
- Programming with Event Driven in C#
  - ✓ C# fundamentals
- The Elements of event driven programs
  - ✓ Event
  - ✓ GUI Design
- Exception Handling and Data Validation
- Working with Files and Database Programming
  - ✓ File and IO stream
  - ✓ ADO.Net programming
  - ✓ Introduction to LINQ
- Advanced Programming with event driven
  - ✓ Creating Controls On-the-Fly
  - ✓ Connecting C# program with Microsoft Office
  - ✓ Creating ActiveX Controls
  - ✓ Creating Programs for the Internet
  - ✓ Making Programming Easier with add-Ins
  - ✓ Localization/internationalization
  - ✓ Deploying your event driven Applications

Course Organization

- Lectures
- Practical exercises
- Reading Assignments and presentation
- Written Assignments
- Practical Group Projects/software development

Course Assumption and Requirements

- Assumed Background
  - ✓ Introduction to OOSAD/SAD/Software Engineering course
  - ✓ knowledge of OOP in C, C++, or Java
  - ✓ Knowledge of relational database system
- Course Requirements
  - ✓ Every student should attend all lectures(at least 85%) and practical sessions(100%), unless you are not allowed to sit for final exam.
  - ✓ Students should group themselves into 5 for the project work and identify their own project titles by the deadline.
  - ✓ Students should submit every assignment according to the deadline.
  - ✓ Students should present/demonstrate their assignments
    - All members should equally participate
  - ✓ Students should sit for the written examination.
  - ✓ Students should onetime, unless do not interrupt the class

Assessment Methods

- The course is assessed by submitted written documents, project results and written examination.
- Percentage contribution to the assessment
  - ✓ **Theoretical ----------100%**
    - Attendance with Participations -------- 5%
    - Quizzes ---------- 10%
    - Individual Assignments ---------- 10%
    - Group Assignments ---------- 10%
    - Written Tests ---------- 15%
    - Final examination ---------- 50%
  - ✓ **Practical ----------100%**
    - Attendance with Participations --------- 10%
    - Pair work ----------10%
    - Lab Assignments ----------20%
    - Lab Exams ----------10%
    - Software Project ----------50%

Software Development Project

- A major component of the course is a software development project.
- The objective is to develop a desktop based software using C# as programming language
- For this purpose, form project teams up to 5 members.
- During the semester, the project team will work together through the full development cycle,

What is next….

- Form project teams having 5 members and
- Submit your project description(previous SAD/OOSAD/OOSE course project recommended) through email before March 15.
- The project description should contain
  - ✓ Your project title
  - ✓ Team member Id, name and email addresses
  - ✓ Short description about the problem you are going to deal with
    - Include list of functional requirements
  - ✓ FIFO principle will be applied

Reading Materials

- Lalit Arora. .Net framework with C# programming, 2007 India (HC available in your library)
- Brian Bagnal. C# for Java programmer. 2002 USA. (HC available in your library)
- Michael Haluorson. MS Visual C# 2008 Step by Step. 2008 India (HC available in your library)
- Trey Nash. Accelerated C#. USA. 2002. (HC available in your library)
- Deitel, C#-How to Program. USA, 2005 (HC available in your library)
- Joel Murach, Anne Boehm. Murach C# 2012. Mike Murach & Associates Inc USA, 2013 (Get from Instructor in soft copy)
- Svetlin Nakov *et al*. Fundamentals of Computer Programming With C#. Sofia, 2013 (available at 10.18.3.6)
- John Sharp. Microsoft Visual C# 2013 Step by Step, 2015 Microsoft Press USA (Get from Instructor in soft copy)
- Karli Watson.. et al. Beginning Visual C# 2012 Programming (available at 10.18.3.6)
- Ian Griffiths et.al. Programming C# 4.0. O'Reilly Media USA. (available at 10.18.3.6)
- Additional Reference can be provided during class and lab hour, at the end of each lesson

Contacts

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