CIS 501 Software Architecture and Design (Spring 2015)

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Textbooks:

- to be distributed

Course Objectives:

1. To learn the object-oriented design process based on Rational Unified Process (RUP) and techniques to implement the designs in C#.NET
2. To learn the GoF's object-oriented design patterns at source code level in C#.NET

Course contents:

1. Part1: Object-Oriented Design and Implementation
   1. Review of Object Oriented (OO) programming
      - Class, object, association, link
      - Execution environments of OO programs
      - UML class diagram, inheritance, polymorphism
   2. Specifications for software systems
      - output: actors and use-cases
   3. Design of the specifications
      - output: UML class diagrams and use-case realizations
   4. Implementation of the designs in C#.NET
   5. Refactoring
2. Part2: Object-Oriented Design Patterns
   1. GoF (Gang of Four) 23 Design Patterns at source code level

Grading:
There will be 3 design and implementation projects, 2-3 exams, and several assignments:
1. Exams: 25-35% (the final exam, which will cover only the Design Patterns, will count at least 15%)
2. Design and Programming Projects: 60-70%
3. Assignments: 5-10%
   - Project 0 is considered to an assignment.
I reserve the right to determine the final weight distribution.

- Read "NoteOnGradebook.html" in this site

Statement Regarding Academic Honesty

Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reached via the following URL: www.ksu.edu/honor. A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

Statement for Academic Accommodations for Students with Disabilities

Any student with a disability who needs a classroom accommodation, access to technology or other assistance in this course should contact Disability Support Services and/or the instructor. DSS serves students with a wide range of disabilities including, but not limited to, physical disabilities, sensory impairments, learning disabilities, attention deficit disorder, depression, and anxiety.

Statement Defining Expectations for Classroom Conduct

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article VI, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

For more information, visit the web page on K-State Course Syllabi Statements at: http://www.k-state.edu/provost/policies/course.htm

Also read "AcademicHonesty.html" in this site.

K-State Online:

All course materials will be distributed via K-State Online. Grade information may be
accessed there, and announcements will be posted there from time to time. Important class messages will be emailed to your KSU email accounts and posted as announcements. You must be enrolled in the course to access K-State Online.