SOUTHEAST Technical College

Southeast Tech · · Computer Information Systems

Advanced Application Development

CIS-248 1 HF

Spring Term 2022-2023 School Year   Section 1 HF   3.00 Credits   01/09/2023 to 05/05/2023   Modified 01/08/2023

🖥 Course Description

Provides experience in computer information project management and development. The student or a small group of students working together will design and develop a complete information systems project from start to finish. This will include utilizing the complete system development life cycle, with emphasis on the analysis and design phases of development. Students will be exposed to concepts such as project analysis, data flow diagrams, selection of design tools, creation of project schedules, project budgeting, prototyping, system proposals, user feedback, graphical user interface (GUI) design, and testing/quality assurance procedures. Prerequisite: CIS 130, plus a minimum of 4 credits in one programming language.

📶 Outcomes

The student should have the following skills upon successful completion of this course:

- An understanding of the Agile Software Development approach and how to apply it to the planning, selection, design and implementation of a software development project
- An understanding of project planning and project selection activities including a general understanding of when an organization should develop an IT application vs. when it should acquire the application
- An understanding of user requirements as they relate to an IT project and how to determine and document the requirements
- The ability to create Progress Reports and Time Sheets for planning and tracking progress on projects
- The ability to create Data Flow Diagrams (DFDs), Entity Relationship Diagrams (ERDs) and UML Class Diagrams and to utilize them in the project design process
- The ability to fully develop the software for a computer application using their choice of programming languages & IDE
- A basic understanding of software application testing and implementation procedures

◎ Additional Outcomes

📘 Course Materials

Modern Systems Analysis and Design

Author: Joseph S. Valacich, Joey F. George
Publisher: Pearson
Edition: 9th Edition
ISBN: 9780135172759
Optional

☷ Deliverables

Project: Information System/Prototype

A working system is expected to be at least prototyped (preferably coded for real) by the end of the semester. The project grade will include measures of difficulty and professionalism of the design/development effort, and the working system/prototype.

Project: Final Presentation

A PowerPoint presentation and product demo by the group.

Project: Interim Project Reports

These will include 4 project deliverables, due every few weeks during the semester. The details of content to be included in every report will be provided later.

Project: Final Report

This will include all the interim reports, plus an intro, an executive summary, conclusion, and references.

Project: Weekly project reports

Each project report will consist of a short presentation (5 slides usually) by the group/pair about the progress made toward project completed. More details will be provided later.

Individual Assignments: Weekly timesheets

On a weekly basis, students must track the time spent on each activity included in the project.

Individual Assignments: Quiz

2 quizzes based on the lectures.

Individual Assignments: Writing Across the Curriculum Memo

A self-assessment memo to your instructor describing your project, progress results, reflection on what the project experience taught you, the skills you gained through it, and how you will apply those skills to a current or future job. This 1-2 page memo is submitted at the end of the course.

✔ Evaluation Procedures and Grading

Criteria

Find below the weights and basis for calculation of your grade:

Type	Weight	Topic	Notes
Project	30%	Information System/Prototype	
Project	10%	Final Presentation	
Project	5%	Final Project Report	
Project	20%	Interim Project Reports	4 Reports @5% each
Project	15%	Weekly Progress Reports	
Individual Assignments	5%	Weekly Timesheets	
Individual Assignments	5%	Writing Across the Curriculum Memo	
Individual Assignments	10%	Quiz Based on Lectures	2 Quizzes @5% each

▤ Additional Items