University of Detroit Mercy
College of Engineering and Science
Department of Mathematics, Computer Science and Software Engineering

CSSE-4150 Software Engineering - Term Project-

A company hired your team to engineer the software for the **Nim Game**. The company planned to have this system as the best software in the market and compete with other systems. To this end, you are required to study all the available software for competing (Sudoku Game) products, if any. Details of the game will be provided.

PROJECT REQUIREMENTS

The IT department at the company asked your team to address all the requirements below. There is no real customer in this project but the instructor will play the customer role in addition to his advisory role.

1. Select the most suitable Process Model.
2. Perform Requirements Engineering, Data, Architectural, User Interface, and Component-level Design within the economic, environmental, social, political, ethical, health and safety, security, and sustainability constraints.
3. Provide Program Design and write the Program(s).
4. Plan a software testing strategy and apply software testing technique(s).
5. Select technical metrics that are suitable and useful for this product and apply them.
6. Provide a maintenance plan.
7. Apply Software Engineering Code of Ethics.

DELIVERABLES

Document all your software engineering efforts in a report and submit it by the due date. Your team will present their project and engage in discussion with the instructor and other teams. Each of the above requirements should be placed in a chapter of your report. References must be included. You may use appendices at the end of the report. The report must be bound. **Project Collection Date is 11/24**. Below is the required Table of Contents with the Submission dates for each chapter. ***Missing any deadline will result in losing 5 points.***

Abstract
Chapter 1: Introduction (9/10)
Chapter 2: Problem Definition and System Description* (9/10)
Chapter 3: Process Model (9/10)
Chapter 4: Requirements Engineering (9/17)
Chapter 5: Architectural, User Interface, and Component-level Design (10/08)

Chapter 6: Code Design (10/29)
Chapter 7: Software Testing (11/03)
Chapter 8: Software Quality (Metrics) (11/03)
Chapter 9: Software Maintenance (11/05)
Chapter 10: Computing Issues and Responsibilities (11/05)
Chapter 11: Local and Global Impact of Computing (11/05)
Chapter 12: Conclusion
References

* Here you need to include details about your system, available systems solving the same problem, what they are missing, etc.

NOTE: The contents of each chapter should be project-specific. They should apply to and describe your selected system. You MUST avoid generalities.

IMPORTANT: Students should prepare a poster for presenting their projects at the University Poster Presentation Event, which will take place in March. Posters will be checked and approved by the instructor.