

CSC431 Course Reflection

This software engineering course provided me with a strong conceptual foundation in the principles, methodologies, and structures behind professional software development. Rather than focusing on coding, the course emphasized key software engineering approaches such as the waterfall model, agile development, and iterative design. We also explored system design principles, UML modeling, and common design patterns like singleton, factory, and observer, which helped me understand how complex systems are architected and maintained in real-world settings.

One of the most impactful parts of the course was learning how different development methodologies influence project planning, communication, and delivery. Understanding the benefits and trade-offs of approaches like agile and waterfall gave me insight into how teams organize their workflows and respond to change. This course deepened my appreciation for the structure behind software projects and gave me tools to think more critically about software design, team dynamics, and long-term maintainability—even outside the context of actual coding.