# CS 255 System Design Document Template

## UML Diagrams

### UML Use Case Diagram

A diagram of a company

Description automatically generated

### UML Activity Diagrams

Login/Register

A diagram of a computer program

Description automatically generated

Package Purchase

A diagram of a process

Description automatically generated

### UML Sequence Diagram

Package Purchase

A diagram of a process

Description automatically generated

### UML Class Diagram

A diagram of a company

Description automatically generated

## Technical Requirements

* **Hardware Requirements:**
  + Dedicated Server for stability
  + Reliable Internet connection (fiber optic)
  + Scalable storage for all data being gathered
  + Computer or mobile device for user access to the website
* **Software Requirements:**
  + Windows Server to run on dedicated server
  + SQL Server for the database
  + Backup software for both website and database
  + Software to host the web server
  + Front end static testing and security software
* **Additional Considerations:**
  + Scalability and Load Balancing
  + Monitoring tools to track system performance and detect issues
  + Compliance standards to protect user data
  + Documentation to aid in troubleshooting and future upgrades.