# CS 255 System Design Document Template

This template lays out all the different sections that you need to complete for Project Two. Each section has guidance to prompt your thinking. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead the goal is to complete each section based on what your client’s needs are. Remove this note when you are finished, and replace all bracketed text with the relevant information.

## UML Diagrams

### UML Use Case Diagram

Chart, diagram, bubble chart

Description automatically generated

### UML Activity Diagrams

Diagram

Description automatically generated

### Diagram Description automatically generated

### UML Sequence Diagram

Diagram

Description automatically generated

### UML Class Diagram

Diagram

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## Technical Requirements

For the system to run as intended we are going to need a lot of software and hardware. For hardware we are going to need 2 servers, one for the website and one for the database that stores all user information. These servers will be sourced from AWS, and we will use their solutions that already exist for these applications to get the software up and running. We are also going to need a payment processor. Because of the complexity and security requirements for processing payments we are going to use a third-party service to process all our user’s credit/debit cards. Cash can be used at the front desk, and we will use that same payment processor for cash payments. The front desk will need a computer running windows to process payments as well as access the website. Drivers will have tablets with the app/website on them. These tablets will need cellular connectivity for tracking, navigation, and website access during the drives. On the software side of things, the server running the database will be running SQL and use the provided APIs from AWS to integrate into the AWS system. The website will also be hosted by AWS because they provide access to multiple datacenters, load balancing, autoscaling, and will let us easily access our AWS database. All other devices will not need any special software in order to use the product.