# 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

A diagram of a diagram

Description automatically generated

### UML Activity Diagrams

A diagram of a software flowchart

Description automatically generated

cA diagram of a process

Description automatically generated

### UML Sequence Diagram

*A diagram of a process

Description automatically generated*

### UML Class Diagram

*A diagram of a driver pass

Description automatically generated*

## Technical Requirements

Technical requirements for the design are below:

* Hardware:
  + Linux cloud servers.
    - Elastic instances to handle load.
  + Client’s device with a modern web browser not limited to:
    - Tablet
    - Smart Phone
    - Laptop
    - Desktop
* Software:
  + Cloud provided Database instance
  + Linux operating system running Kubernetes and Docker
  + Client browsers that will be tested:
    - Edge
    - Chrome
    - Firefox
    - Safari
  + Platform-agnostic: Will work on client devices running Mac, Linux and Windows operating systems. Requires a browser only.
* Tools:
  + Lucidchart for UML Diagrams
  + Cloud provider dashboard
  + Development environment
  + Version control (git)
  + Usable IDE’s for development
    - Eclipse
    - Visual Studio Code
* Infrastructure:
  + High-speed Internet connection
    - 5G mobile internet
    - Home Internet
  + Extra Instances in Datacenters in Eastern, Western, and Central US