# 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

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### UML Activity Diagrams

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### UML Sequence Diagram

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### UML Class Diagram

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## Technical Requirements

This system has several technical requirements. Regarding infrastructure, the system will need to be available to all users 99% of the time. While maintenance can be expected, orders can come in at any time, so the system needs to be up the overwhelming majority of the time to handle them. In addition, the system must have an average page load time of less than a couple of seconds. The system needs to be quickly responsive for users to know it is working properly.

Regarding the hardware of the system, the system’s servers must be able to store at least 500 GB of data. While this may be more than needed, it guarantees that info regarding customers, drivers, and lessons can be stored with no risk of going over in the near future. The software and UI of the system must be accessible by all common operating systems for computers and mobile phones/tablets, as well as all common browsers. Users could come from many walks of life, and it is vital for the system to be available to them regardless of how they access the internet and applications.

The system and the tools it uses must be able to be used by at least 5,000 simultaneous users. While the business is not large yet, it is very scalable. Even just beginning in one state, it is not hard to image a few thousand users accessing it at once to schedule lessons during rush periods. The server must still be responsive while this demand is happening.