# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. 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 your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* Client: Driver Pass
* Purpose: Alternative learning method for driving lessons
* Intent: to improve the current system of DMV testing’s poor pass rate, encourage deeper understanding of driving technique and laws.

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* Client wants us to create a system that will allow users to practice for their driving test at the DMV.
* DriverPass will be give users access to classes and tests, so they can practice anywhere.
* Having extra practice will give users a better chance of passing the DMV test on their first try.

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* Provide online classes and practices tests, including a reporting system that records progress
* Traditional on the road training, requiring a system to allow scheduling of available times slots for cars and driving instructors.
* System should allow data access anywhere if connected to the internet. Will require a server that is available at all times.

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

Only allow update if a user is online to eliminate redundancy

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* Web based
* Accessibility by all demographics
* Real time access
* System wont need immediate updates but wants ability to do so in future

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* Multiple: android, apple, windows
* Apache web server software
* Needs database for student information and updates from States DMV
* MongoDB or another similar database program

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Admin and user roles
* Case sensitive input and restriction of special characters
* Excessive failed attempts within a time frame
* Logging of multiple similar errors trigger an event for notification of System Administrator

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* Object oriented programming will allow for smoother platform updates
* Inheritance of functionality from parent class can eliminate need for hard coding
* User roles will be hierarchical system admin having highest access privileges

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* Username & Password
* System Logging
* Administrator role to change passwords/work on application
* Web server encryption

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall validate user credentials when logging in
* The system shall log successful/unsuccessful log in attempts
* The system shall allow a user to create a personal account
* The system shall allow students to take practice test, request driving practice, and pay for services
* System will connect to database to store and pull information

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* Simple design
* Coordinated themes by state
* Alternative site layout for mobile users
* Menu with clickable/tap interface
* Accessibility for impaired users
* Sign on screen for users to access their accounts
* Help function to direct customer to right page
* Directory page for contact information

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* The user will have the knowledge how to access the webpage
* They are accessing the page from within the U.S. as driving regulations would be for the United States
* The device they are using is capable of accessing current web applications and software
* They have permission to access the website (students on school computers, employees on company computers, etc.

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* The site will have downtime for certain updates like security or design changes
* The turn around time for updating state regulations may overlap some driving practice/tests
* The site may need to be launched in stages or state by state to meet deadlines
* Server capacity will need monitoring as usage grows

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

A picture containing table

Description automatically generated