# 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?*

* Liam is our client and the product owner of DrivePass, which will be online software to help potential drivers to take practice exams online to be better equipped for taking the actual test at the DMV, and possibly provide the physical portion of driving training out on the road as well.

### 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?*

* DrivePass seeks to provide online training for potential drivers.
* The issue DrivePass seeks to rectify is to reduce the number of test failures at the DMV through use of online practice exams as well as on-the-road training if the user so chooses.
* Users need access to site on both computer and mobile devices.
* Users must have the ability to create accounts as well as make and cancel reservations and do so securely.
* Changes and modifications to accounts must be tracked.

### 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?*

* Users will be able to access the site on any mobile device that has an internet connection.
* Users will be able to create and cancel training reservations at any time.
* Employees will ensure customer security.
* Any modifications to accounts will be tracked.
* Customers will be able to choose one of three driving packages, which vary in time and depth of training as well as price.
* The system will be cloud-based.
* The UI will list the user’s test progress, information, notes, special needs (such as corrective vision, etc.), the user’s photo, and the photo of the employee assigned to train the user.
* Developers and analysts will be selected for the creation of this web program.

## 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.*

#### 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?*

* The system will need to be run with all devices computer and mobile alike, and will require an internet connection, which depending on the speed of that connection can serve to be problematic for most users. Updates to the software should be frequent as outdated software can not only hinder the user, but is also vulnerable to tampering, and with the user’s information at stake, updates should occur often.

#### 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?*

* The system must be able to be ran across all platforms Windows, iOS, Linux, as well as mobile devices that run Apple and Android.

#### 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?*

* Each user will have to input their username and password, which will be case sensitive and require capital and lowercase letters as well as numbers and special characters, in addition, two-factor authentication, as well as three security questions should also be implemented in case of a breach. Users will be given 5 attempts to put in their password, after that, the admin will ask the user their respective security questions and reset the user's password.

#### 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?*

* Though most modifications can be made without changing the code, the admin will have full access to the system in the event that patches need to be implemented, and the users will be informed in advance if such updates take place.

#### 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?*

* As stated before, each user will have to input their username and password, which will be case sensitive and require capital and lowercase letters as well as numbers and special characters, in addition, two-factor authentication, as well as three security questions should also be implemented in case of a breach. Users will be given 5 attempts to put in their password, after that, the admin will ask the user their respective security questions and reset the user's password. Using public Wi-Fi is STRONGLY discouraged as it is too risky for the user’s information, a secure, encrypted network can’t be stressed/recommended enough.

### 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.”*

* User’s credentials will be validated upon logging in to the account, in addition, the user’s progress throughout the course will be tracked, the user will have access to the Department of Motor Vehicles online regulations, a grading system should be implemented, and should the user fail an online exam, they should have the ability for a retake. The ability to schedule the physical driving portion of the training should also be available when the user reaches that section of their training.

### 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.)?*

* The system must be compatible with all platforms such as Windows, iOS, Linux, as well as mobile devices that run Apple and Android. The interface must also display the user’s progress and 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 main assumption being made is that the user is technically savvy and can navigate software without much effort, perhaps the IT department should be made aware that users might call for assistance.

### 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?*

* Budget concerns are definitely at the forefront, we already have a series of set time constraints as stated in the chart below, there will also need to be a competent development team that is well-versed in multiple languages and experience with multiple platforms, which can be costly, but for a quality product, quality work is paramount.

### 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.*

