# CS 255 Business Requirements Document Template

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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?*

* The client is DrivePass
* My consulting company hopes to create a system that will meet the client’s needs
* The client wants to help people pass their driving test
* DriverPass want to offer online classes and practice tests
* DriverPass wants to offer on-the-road training

### 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?*

* DriverPass sees the need for better driver training
* They think this because many people fail their driving test at the DMV
* DriverPass has a vision of helping people pass their driving test
* They want to offer an online tool to accomplish this

### 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?*

* Ian needs to have full access over all accounts
* Users off the app need to be tracked by who made a reservation, cancelled it, and modified it last.
* Liam needs to be able to print an activity report
* Customer needs to be able to make reservations for driving lessons each of which is 2 hours. Need to be able to specify date and time of the reservation they want.
* Customers need to be able to make reservations online their account, by phone, or by visiting the office
* Need to be able to keep track of which customer is with which driver in what car
* Customers need to be able to make, cancel, and modify appointments
* Need to implement 3 different package options to the customer
* Packages need to be able to be disabled
* Tests need to be maintained to remain in compliance with the DMV
* Application needs to run on the web, preferably on the cloud
* UI needs to be implemented based on the sketch provided
* Online test progress should show the tests the customer took
* Driver notes and drive times need to be tracked and stored

## 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?*

* This application needs to be web-based since users will be able to access it from a variety of different devices.
* The system needs to be able to run fast enough to handle thousands of customer request at one time
* This application needs to be able to be updated at all times so the user know when there are new practice tests or new drivers.
* System also needs to immediately update the available blocks of time available for reservation after a reservation is processed.

#### 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?*

* This system needs to be able to run on Windows, Mac, and Linux so
* The system will have a database that can be accessed from any of the operating platforms.
* The database will be used to store and organize customer information

#### 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?*

* The system will distinguish user by the username they create and the user id that is given to them
* Both the username and ID will be case sensitive.
* Each user will also create a case sensitive password when they create their account.
* User will be flagged and an email will be sent to the admin with 5 failed login attempts.
* Users will have the option of two-factor authentication that will send a 4-digit code to their cell phone.

#### 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?*

* The system will be create in a way that the user will modify their information without any changes that a developer needs to make to the code.
* Admin accounts will have the ability to modify user accounts if needed.
* Quality Assurance maintenance will be done once a month to make sure the system is functioning correctly.

#### 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?*

* For the user to log in, they will be required their username and password.
* Information transfer between the client and the server will be encrypted to protect customers from man in the middle attacks from malicious hackers.
* If there is a brute force attack, all accounts will be locked and the admins will be emailed to deal with this issue.
* If the user forgets their password they will be able to click on a “forgot password” box which will send an email to create a new password to the email that the user provided when they first created their account.

### 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 will be accessible through mobile devices, as well as desktops and tablets.
* The system will shows update driving laws and guidelines to the user.
* The system will be able to distinguish one user from another.
* The system will be able to add, delete, and modify user accounts.
* The system should be able to show the progress of the user from their online driving hours completed to the results of their practice test.
* The system will have practice materials and tests for the user to study with.

### 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 will need to display each user profile.
* The system will display a calendar where the user and click on a date and time to make their appointments.
* The system should display practice exams.
* The system should allow a user to click on an appointment and change or delete it if needed
* The system display should be well organized and easy to access the different tabs available.

### 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?*

* I assume that the user will have an internet connection.
* I assume the user will have a device that can download the application and connect to the internet.
* I assume the user has funds to spend on the different packages that will be available to them.

### 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?*

* A limitation for this system could be that
* A limitation could be the budget that the client has will affect how many developers we can use and how much we can invest on security.
* Schedule will be a limitation since there will be several months to ddign, implement and test the application before it is ready for use.

### 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.*

