# 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.

**Analysis by: Gunnar Dulle**

## 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 DriverPass.
* DriverPass wants a system to facilitate driver 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?*

* Noticed a need for better driver training.
* DriverPass wants a new system to offer driver education with on-the-road training along with online classes and practice tests.

### 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?*

* Store data in database
* Allow reports to be downloaded from database
* Have administrator access to reset passwords and block access to employees that have been let go
* Track driving lesson reservations
* Make reservations for driving lessons
* Track driving lesson reservations with customer, driver, car, and time of lesson
* Offer 3 driving lesson packages
* Have ability to disable a package so customers can not access
* Store customer info: first name, last name, address, phone number, state, credit card number, expiration date, security code, pickup location, and drop-off location
* Ability for customer to reset password automatically
* Access DMV to ensure lessons and practice tests have up to date information
* Display status of tests taken, customer information, driver notes including lesson times, and special needs
* Have additional pages were customers can input information and communicate between DriverPass and Customer

## 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 should be a web-based application to allow for communication between the user and the system.
* System should be updated monthly to ensure that included lessons are up to date and include the latest rules of the road.

#### 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 should be operating system agnostic which can be achieved with a web-based application. If possible developing an application for Windows and Mac OS would also be desirable.
* Databases to hold lesson information as well as holding user information will be required.

#### 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?*

* Users will have a username and password to log in, usernames will be the user identifier and each will need to be unique.
* Input will be case-sensitive to assist in maintaining security of the application.

#### 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?*

* Users will have the ability to update the user information without changing code.
* By keeping the application predominantly web-based it should be agnostic of the platform that it is operating on and be unaffected by platform updates.
* IT admin needs access to user information and the ability to edit this in the event that a user gets locked out of their profile.

#### 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?*

* A user will need their username and password to log in, password and username will be case sensitive.
* Client and server will be secured by usage of encryption during communication, as well as ensuring that certificates are authenticated before establishing a connection.
* In the event that more than 3 login attempts are made the account will be locked for an hour.
* Only a single instance of a user’s profile can be open at a time.

### 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 have separate access portals for students and driver instructors.
* The system shall have options to purchase one of the driving lesson packages.
* The system shall allow students to input information required to make a profile.
* The system shall put students in touch with driver instructors to allow for communication about their lessons.
* The system shall allow users to schedule their in person driving lessons and connect with a driving instructor that is available to conduct their lesson.
* The system shall allow users who have opted to have the online lessons and practice tests to access these lessons and tests.
* The system shall update to ensure that lessons and tests reflect the most up to date information about rules and laws of the road.
* The system shall allow instructor users to add notes and comments about a lesson to give feedback to the student users.

### 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 interface will display progress of any online tests, notes from the instructor about the most recent lesson, any special needs for the student, student information, and photos of the student and the driver instructor.
* The users of the interface will be students, driver instructors, and DriverPass administrators.
* The students will need to be able to schedule and cancel lessons, add student information, and find study guides and take practice exams. Students and instructors will be able to message one another via the interface.
* Users will interact on a web browser either on mobile or desktop.

### 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?*

* A student user will be assigned or select a driver instructor.
* A user is completing a driver’s education course

### 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 application will only be accessible with a device that is connected to the internet.
* The application will need to be finished by May 10th

### 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.*

*Chart, waterfall chart

Description automatically generated*