# 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?*

* DriverPass is a company that aims to release software that will help new drivers pass both the driving and exam part of the driving tests more efficiently. They noticed that most people failed their driving test the first time and related this to a lack of proper studying and training.
* To counter this, their software will give many tools and accurate practice tests for the actual exam section. They will also offer services that allow students to register themselves and schedule training sessions with a professional driver for the driving section of the exam. These services will adhere to all regulations regarding providing driving examinations and advice.

### 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 wants their system to offer a new and efficient way for students to pass their drivers test when they take it.
* They want to fix the issue of lack of proper learning materials and practice exams that are available to these new drivers.
* The different components would include a secure database of customer information, online and offline access to the material, as well as a high-quality variety of information to access.

### 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?*

* When completed, the system should have a very simple UI that shows things like areas of improvement, different packages to purchase, notes from the driving instructor, tracking of driving information and offline accessibility.
* To achieve these things, there must be tracking abilities to track driving progress, distances, exam progress, etc.

## 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 system would need to run in a web-based environment to run.
* To ensure that the system is always running fast and smoothly, regular updates and modifications should be made to improve it. It needs to constantly be running fast, due to the amount of information being relayed often, such as exams. The system should be updated as much as needed. Any changes in regulations, need for improvements, bugs, breaches, and other important events should lead directly to an immediate update.

#### 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 platform should run on Windows, as it will have the highest number of native tools and previous knowledge for both clients and hosts.
* The back end should hold a relatively large database inside it to accompany a growing number of clients. It also should have a cloud storage system for the data to be stored.

#### 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 be distinguished by a full legal name, username, password as well as photo identification.
* The input should be case sensitive to distinguish users more accurately.
* The system should inform the admin of a problem when something needs attention such as hacks, glitches, bugs, etc.

#### 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 pre-existing code should allow for user access to change their information without changing the code itself.
* The system would adapt to platform updates by slowly adjusting and updating the system at first to ensure there are no issues with the changes, and then fully allow for complete updates once adjusted and confirmed.
* The IT admin would need full access to the system to make any necessary changes.

#### 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?*

* To log in, the user must provide their username and password. To fully enhance this, two-factor authentication could be added to the log in process.
* To secure the data exchange between client and the server, a secure and reliable cloud platform would need to be used, as well as things such as APIs. There should be a sort of disabling the account if user information is entered incorrectly for multiple attempts. To enable the account again, the true user must provide all their information and a photo ID to match the pre-existing one.
* If a user forgets their password, a recovery option should be available that sends the next steps to their email address.

### 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 allow users to purchase the package of their choice.
* The system shall confirm identity details about each customer.
* The system shall be available in a web-based environment solely.
* The system shall regulate access between admins and clients.
* The system shall allow users to change or remove packages from accounts.
* The system shall disable accounts if necessary.
* The system shall allow users to change information without the help of an admin.
* The system shall show exams and driving progress.
* The system shall fully keep up with changing DMV and federal regulations.

### 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 needs of the interface include a home page, exam section, grading section, information about users, exam statuses, notes from instructors, and a registration page.
* The different users for this interface will include admins and clients.
* The admin will need to be able to regulate, change, delete and add to the interface. The client will need to be able to access only their information and statuses.
* The user will interact with the interface over any browser.

### 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?*

* Something not addressed in the design above, but is needed, would be how a driving instructor will be verified as reliable and trustworthy. There should be a specific standard on how instructors are chosen.
* I am assuming that the system will always be available, the students will mainly include teenagers who will be turning the minimum state age for a driver’s license, and that the system will continually be updated for updates and bug fixes.

### 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 limitations that I could think of would include a constant and reliable internet connection on both sides, budgeting, access to newer DMV materials, and a constant increase of drivers and cars being added to the program.
* Time will be a big factor in creating this software, especially with fully complying with all regulations. Budgeting will not only need to be accounted for the software creation and upkeep, but also the number of cars and drivers that will need to be paid for their services. If the company does not have a very solid infrastructure and technical setup already, creating the software might prove more challenging.

### 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 screenshot of a graph

Description automatically generated*