# 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 is Liam and Ian of DriverPass
* They want to develop a driving training system
* They want to profit from a mostly void market
* They want the system that contains updated training and policies
* The system must also work with the DMV to quickly apply any compliance changes needed.

### 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 a system that allows new drivers to learn and take practice tests online
* Additionally, coordinate with driving teachers to schedule on the road lessons
* The system should be accessible from anywhere so that administrators can view reports
* The system should identify the instructors and customers, appointment schedules and modifications
* A website is needed for students to access their lessons, test scores, and appointment information

### 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?*

* Reservations are being made and canceled daily, over the website and the phone, thus the system should be constantly updating
* Alerts for both the driver and customer about reservations
* Show customer test progress, including score, and times taken
* Customer information, including name, address, payment details

## 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?*

* A web-based system would fill the client needs, specially if a cloud server is deployed to handle the high level of traffic.
* The system should be fast enough to handle multiple users accessing the server without a performance drop per user.
* The system should be updated based on client expansion needs and new services. Additionally, if any errors or bugs are discovered then an emergency updated can be deployed.

#### 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?*

* A Linux platform should be used to run the web-based system.
* The cloud service requires a database to contain customer, instructor and lesson information. Additionally, implementing security measures to protect the company and customers.

#### 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 should be able to do differentiate users based on their class, student, instructor, or admin.
* Each user will have a username and password identifier with case-sensitive input generated when the user first accesses the system.
* A ticket system can be used to inform admins of potential problems, then the admins can look into the tickets and decided what order to tackle the problems and issues.

#### 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 permit the adding of new users by signing up for the service.
* The system will allow users to modify their DriverPass package and account information.
* The system will allow users to remove their accounts after selecting and confirming the account deletion option.
* The system will slowly introduce updates to the user platform as needs arise and will be monitored and tested throughout to ensure that all clients have a fluid transition and experience.
* IT admis will have full access to the system in order to assist users with issues in a technical nature, like unlocking accounts, troubleshooting bugs and removing accounts that are inactive.

#### 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?*

* The system will require a username and password for log in credentials.
* A account lock should occur after at least three incorrect login attempts, requiring admin intervention to unlock the account.
* A recovery email will be used when the user wants to change a forgotten password or unlock the 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 shall validate user credentials when logging in.
* The system shall run fast and efficient.
* The system shall provide a custom service based on the user’s class.
* The system shall offer students three different driving packages.
* The system shall provide courses and practice tests.
* The system shall monitor student progress.
* The system shall pair a student to an instructor.

### 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 must be intuitive for all different user classes.
* For the students, the user interface must have options for making reservations, signing up for classes, viewing payment information, and viewing progress information.
* For the instructors, the user interface must have options for adding and updating lesson plans, viewing and changing reservation times, viewing payment information, updating schedule and payment rate, and student progress reports.
* Ideally all these options should be accessible from both a computer or mobile device.

### 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?*

* Since a budget for the system was not provided, we could make the assumption that the client has agreed to provide all the financial needs necessary to provide for the approved project.
  + Still, contacting the client about the budget should be priority.
* We are assuming the team is familiar with the Linux web-based server that we must build.

### 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?*

* Our team was given a five month timeframe to build the system.
* A budget for the project has not been provided.
* Our team might be understaffed and could be a potential limitation to complete the system.

### 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, timeline

Description automatically generated*