# 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?*

* The client would like to increase the success rate of driver education by allowing for more flexible education both online and in person.
* Customers should be able to sign up for and manage in person lessons.
* Customers should be able to do lessons and view learning material online.

### 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 to reduce the rate of failure on driving tests.
* Liam, the owner of DriverPass, wants to build a web platform meant to provide customers a better driving education as he feels that there is an opportunity in the market.
* Data should be accessible both online and offline, but there should be limitations to how the user can update the data when offline.
* Security features that grant users private access to their data and resources should be incorporated.
* The system should keep a log of all actions made by all users for recordkeeping purposes.

### 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?*

* The system should be a fully functional website with the ability to register accounts, book/manage lessons, and view learning material.
* The customer should be able to take practice exams and receive feedback.
* IT employees should be able to make modifications to the system if needed.
  + Should include object and process models.

## 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?*

* DriverPass wants the system to run as a cloud-based web application
* DriverPass did not specify how fast they need the system to run.
* The system should be updated as often as DriverPass’s team determines necessary. There will be no pre-determined update cycle, but the system should be able to accommodate updates as needed.

#### 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?*

* As the project will be a web-application, the platform that it runs on should not be important.
* The web-application should be capable of running on all of the major web browsers such as Edge, Chrome, and Firefox.
* The back end needs a database for storing action logs, user information, software packages, and transaction 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?*

* Each user will be assigned a role that will give them certain privileges.
* All inputs for user information should be case-sensitive.
* The only notable scenario for contacting an admin should be when content is accessed illegally by someone without valid access.

#### 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?*

* User data will be capable of changing without modifying the source code.
* The system will need to be adapted by the company’s IT team whenever a platform update occurs; however, since this project will be cloud-based updates may be optional.
* The company will need admin with an understanding of the platform that the project will be hosted on (AWS, Google, etc.).

#### 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?*

* HTTPS should be required when accessing the site.
* Customers will be required to have a validated email attached to their account.
* Passwords will need to comply with some strength guideline.
* Repeated failures to log in should result in the account being temporarily locked.
* Locked accounts may require calling the company’s phone line to unlock the account.
* Passwords should expire on a regular basis determined by the company.
* Customers can have password reset links sent to their provided email.

### 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 the user credentials when logging in
* The system shall let users view and modify the personal information they provide
* The system shall let users view any upcoming events such as lessons or exams.
* The system shall let admins manage what content the customers can see.
* The system shall give admins the ability to view and modify any account.
* The system shall let the company’s secretary create, cancel, and modify scheduled lessons.

### 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 users will need the ability to interact with the application’s interface via browser.
* Users of this interface will include the customers, the scheduling secretary, the company’s IT team, and the administrators.
* All users will need to be able to view the content that the admins have approved for their role.
* Customers will need the ability to purchase packages through the interface.
* Administrators will need the ability to view both user and package information through the interface.
* Users should be able to access the interface via all web-capable devices.

### 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?*

* We are assuming that all users will have a web-capable device.
* We are assuming that the system will have a cloud back-up.
* We are assuming that administrators will oversee user account maintenance and package availability.
* We are assuming that users have access to a telephone.

### 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?*

* At this point, the system will be unable to add new packages. Administrators will be able to enable/disable existing packages
* The system will need to be delivered on May 9.
* There is no budget constraint provided at this point.

### 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.*

Timeline

Description automatically generated