# 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 the customer
* The customer requires a platform to aid in training new drivers
* Students will be able to access training material, practice tests and be able to set up in person driving training sessions.

### 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?*

* Customer sees market for driver training program
* DriverPass wants to build a system that will help people prepare for drivers tests
* System will likely need a database hosted on a cloud based server.
* Users should be able to set up profile that saves their individual data and progress
* Admin functions for DriverPass team to be able to manage appointments and user access items

### 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?*

* Create a database that stores content, customer info, and and appointment information
* Create interactive UI that is easy to navigate and professional
* Create log to show which users add delete or modify information
* Employee profiles with various levels of access for scheduling appointments to adding or removing content

## 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?*

* Users should be able to quickly load site, login, and access content without excessive delays
* The System should be managed on a cloud based server, but users should also have the ability to download content to study offline
* The system should be able to handle simultaneous requests from user without significant slowdowns

#### 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?*

* Platform should be accessible through standard web browsers that are available on Windows and Mac machines.
* Platform should run on linux and be administered by a cloud computing firm.
* Database will also be hosted on cloud servers.

**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?*

* Login credentials should be case sensitive for password
* Different types of users should be clearly defined, with different permissions for access of content, modifying content, grades, scheduling, payments and infrastructure
* Platform should log and report slowdowns or potential downtime
* Maintenance should be scheduled and users notified

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing ? How will the system adapt to platform updates? What type of access does the IT admin need?*

* Tech admins should have the ability to reset or change login credentials
* Instructors should have the ability to add or modify content library
* Tiered access for tech admins should exist for more experienced admins to make high level code changes. While lower tiers can still modify user profiles and complete other normal admin tasks.
* Appointment scheduling should be easily modified by all types of users
* All admin users can add or remove other users without code 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?*

* Basic password recovery procedure through link to verified email
* Manual password override via contact w/ tech admin verifying identity
* Multi-factor ID optional via ADP, google auth or similar application
* Automatic lock placed after too many failed attempts, unlock must go through tech admin

### 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, provide access to all learning content
* The system shall, grant various levels of access to the platform based on user role
* The system shall, function quickly and efficiently
* The system shall, display appointment schedule and details
* The system shall, allow for downloadable content
* The system shall, provide grading system to track student progress
* The system shall, generate and send notifications to students and instructors for upcoming appointments and changes to curriculum
* The system shall, offer a discussion board where students and instructors can communicate with one another
* The system shall, offer a private messaging system from which students can message their instructors directly
* The system shall, provide a search function in which students can quickly find and access specific learning content

### 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.)?*

* Multiple OS system should be considered during design, Android, IOS, Mac, Windows through mobile apps or various browsers
* Backend interface for admins should be available with varying degrees of access based on role
* Discussion boards should be available
* notification center should be available
* User profile editing should be 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?*

* Users must have access to the internet via a browser or app store (if a mobile app is also developed)
* Users are comfortable with an online learning environment
* Instructors and other business personnel have the necessary knowledge of the web and computer systems.

### 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?*

* Resource limitations: This project will only have the resources allotted as seen fit by driverpass, this could limit things like the amount of cloud storage the system will have available to it.
* User adoption: The success of the system will be determined by if potential students view this online platform to be a suitable way to prepare for drivers testing
* Lastly time limitations: While we want to be sure to meet all of the functionality, if certain portions of the project take too long we may be limited in which features can be completed in the allotted time.

### 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.*

