# 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 DriverPass
* Projects is meant to help people pass their driving test
* System should: give customers practice tests and resources
* Be a structure for customers to purchase and schedule road times

### 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?*

* Problem: Not enough resources for people to pass driving tests
* System should:
* Be a web-based application
* Allow access from both customers and employees of the company
* Have an integrated calendar and scheduling system
* Be flexible, allowing for modification of data to ensure compliance
* Allow employees (or just Sam) to modify the packages that are available to customers

### 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?*

* Display practice tests and materials to customers
* Display available packages to customers
* Allow customers to choose and pay for packages
* Allow some employees to modify the information on the site
* Allow customers to schedule their driving sessions
* Allow customers or certain employees to reset passwords
* Be on a cloud OS

## 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?*

* Will likely be mostly web-based
* Likely need mobile site
* System will need to be responsive, but not real-time
* System should not need to be updated often
* Database should be accessed every time the site is opened, especially on the schedule

#### 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?*

* With a web-based application, we user server-client model
* Client models for Windows, Android, Linux and MacOS
* Will need a database to keep the calendar
* Need a secure database for client information
* Need secure payment processing

#### 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?*

* We will need a database of users, which tracks the user type
* User type is determined at log in
* Will need several types of users: customers, admins, IT and teachers
* Standard security protocols, case sensitivity, password requirements
* Security notifications to a security team or admins in case of potential attacks

#### 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?*

* Will have code for updating the user database, so no software updates will be needed
* Will likely use browser tools to account for platform updates
* IT will need access to troubleshoot the client side code
* IT will need access to database to fix formatting errors

#### 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 security protocols
* Password requirements
* Two factor auth
* Case sensitive usernames and passwords
* Login attempt limit
* IP tracking for log in attempts
* Locked accounts after limit is reached
* Third party database for security

### 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
  + Display opening screen based on user type
  + Allow customers to
    - View purchased resources
    - View upcoming scheduled driving events
    - Update their profile
    - Schedule new and reschedule driving events
    - Browse catalog of product and services offered by the company
  + Allow teachers to
    - View upcoming driving events
    - Contact customers
    - Update their profiles
  + Allow admins to
    - View and update catalog
    - Update prices
    - Change customer orders
    - View transaction and site metrics
    - Ban or unban 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.)?*

* For customers
  + Front page will show current promotions and notifications
  + Have several links to peripheral resources
  + Simple design, with most common resources accessed most easily
* For Teachers
  + Front page will show their upcoming events and lessons
  + Front page will also have any notifications or communications
  + Have extra info and links in a side menu
* For Admins
  + Be more utilitarian, with a list of functions they can choose from when they log in
  + Each item in the list will link them to the page that will let them accomplish that task

### 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?*

* Assuming whatever site service we use allows us to update the info on a whim
* Assuming users know what the service is for
* Assuming we have some kind of third party security measures

### 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?*

* Biggest limitation is budget
  + Right now we’re planning on using a lot of third party resources
  + While this makes things run a bit smoother with less manpower, it might get expensive
* Other limitations include data structures and security

### Gantt Chart

Chart, waterfall chart

Description automatically generated