# CS 255 Business Requirements Document Template

Nick Franklin

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?*

* Create a website for an online driving school because of low driver’s test pass rates and a void in the market
* Customer is Liam, the owner of DriverPass
* System should provide online training, tests, and scheduling for in-person driving training

### 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 solve the problem that 65% of the students applying for the driving license exam fail
* System needs user accounts with data that can be viewed online or offline
* System needs classes, practice exams, and scheduling for in-person driving training
* System scheduling for in-person training should allow for reservations, cancelations and offer three different packages with the ability to modify selections
* System needs proper security for user information and different access for regular users compared to administrators
* Stay connected with DMV to update test and course information with any changes

### 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?*

* System should allow for users to take online classes, tests and schedule in-person driving training
* Users should be able to create and account that stores their information and progress securely
* Users should be able to access their accounts from anywhere online
* System should allow users to take classes and tests online or download the information for offline use
* System should only allow certain functionalities to admin accounts for security
* Some admin tools will include adding or removing training modules, a head admin that can remove others in case they let go of an employee, etc.
* Users should be able to schedule, cancel or modify in-person driving training and view their scheduled training at any time
* Measurable tasks needed are creating diagrams (object, process, etc.), choose an OS, and decide on what programming languages will be used

## 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?*

* System should be in a web-based form able to be viewed on platforms through a web browser
* The system needs to run fast enough for a smooth experience for users
* System should be updated immediately whenever DMV makes a change and scheduled system updates should be at a time with lowest user activity

#### 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 system should be compatible with Windows and web browsers for both IOS and Android
* The database can be stored in the cloud to be accessed through the application via web browser

#### 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 create a unique account and have to login with a username and password to access their information
* Input is case-sensitive for added security
* System should inform the admin of a problem if there is any bugs or issues and if a user has 3 failed login attempts or if requesting a password reset

#### 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?*

* System should allow admin to make changes to the user without editing code
* System will be updated at times with the least user traffic and introduce added platform updates as needed down the road
* IT admin will have full access over the system to make changes from the DMV or to modules as well as remove/restore users and edit passwords. Should also have the ability to remove other admins in case an employee leaves the company

#### 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?*

* User is required to enter their user ID, password, and some form of multifactor authentication to login
* Cloud service will handle security
* Failed login attempts will be reported to the admin as well as attempted login location so that the admin can better determine if it is hacking.
* Account will be locked for a period after 3 failed login attempts
* Security questions will be set up by the user upon account creation that can be answered in case they forget their password or want to reset it
* Otherwise, user can contact support to restore their password and 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 update format based on platform
* The system shall allow the user to view and edit their account information
* The system shall allow for the scheduling of in-person driving training from one of the three packages
* The system shall allow for editing of the scheduled training
* The system shall provide learning modules and test exams
* The system shall save user progress and hours
* The system shall update with any changes from DMV
* The system shall only allow access based on the account clearance

### 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.)?*

* Interface needs to allow users to access account information, learning modules and tests, in-person driving scheduling, and customer support
* Interface must allow admins to make changes to modules and tests and view and edit scheduling
* Interface must allow the special permissions of the IT officer such as remove/restore users
* Users will interact with the interface with mouse and keyboard or touch controls

### 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 users use windows, IOS, or Android
* Assuming the application will be created on Windows
* Assuming the budget can afford all of the aspects and requirements

### 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?*

* Time limitations may cause problems for any errors and bugs and optimization for the different platforms
* Staffing limitations: with such a small team it may affect the time for completion
* Budget is unknown so it may be a limitation

### 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

Description automatically generated