# 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

* DriverPass is my client, and it’s a company that wants to provide online training to better prepare students for driving exams.

### System Background

* DriverPass wants to solve the problem of students being ill prepared for their driving test
* DriverPass asked us to build a system that enables users to register for packages, schedule times with driving instructors, and see their information and driving notes.
* DriverPass needs a system that connects students, instructors, and the business
  + DriverPass needs to be able to collect money from users when they purchase a package, so they need component that deals with money transactions/e commerce
* The system will consist of a web-cloud based program that can store a lot of information (text information, ecommerce information, and even data to store images), and be updated via the internet

### Objectives and Goals

* DriverPass must be able to run 24 hours, 7 days of the week
* DriverPass must be able to handle any operating system, and be able to be accessible on any device, desktop, mobile, etc
* DriverPass must be able to handle X amount of users on it at the same time
* DriverPass must be able to process X registrations of packages per hour
* DriverPass must be able to handle X amount of financial transactions per hour
* DriverPass must be able to handle X amount of downloads of reports per day

## 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

* The system shall run off any web cloud based platform
* Rationale: The client said he wanted to utilize cloud however this design is not necessary in order to fulfill all the functions the client wants to accomplish. Therefore utilizing a fully web based system is sufficient.
  + The system shall be compatible with PC, mobile devices, and any other device that can access the application through a secure connection
* The system shall display all information for user in less than 2 seconds at least 80% of the time, and less than 4 seconds, 90% of the time
  + Rationale: According to the research (Wiegand, 2019) a load speed from 0-4 second load time is good for website engagement but one should aim for 0-2 second load times.

#### Platform Constraints

* The *client* system shall run on any platform (Windows, Unix, etc), for accessibility
* The system shall have database to store data about users and educational content

#### Accuracy and Precision

* DriverPass shall distinguish between regular users and special users (admin, developer, or system analyst) via password/pin
* The system shall store information like first name, last name, address, phone number, state, credit card number, expirations date, and security code, pickup locations, and drop off location, for when customers call in to register.
* The input in the system shall be case-sensitive
  + Rationale: According to (Sether, 2015), case sensitive passwords significantly increase the number of possibilities, therefore the increased search space makes attacks on leaked hash databases less feasible. In other words, it helps with security.

#### Adaptability

* The system shall allow staff to update instructional content and exam to current DMV requirements upon update by the DMV
* The system shall allow a developer or a system analyst to dynamically update packages (for example add or remove modules, instructors, etc.
* The system shall allow the owner to be able to disable a package without code.

#### Security

* The system shall let customer who forgot their password to be able to automatically reset it
* The system shall allow an IT to block access to someone’s access if they are ‘let go’ (meaning if an employee is fired or a customer cannot pay)
  + The system shall allow the IT to have full access over all accounts so that he/she can reset them if someone forget their password
* The system shall not allow duplicate users to be made

### Functional Requirements

* The system shall allow the owner of DriverPass access to all accounts to reset or block access to customers
* The system shall be able to track(record) activity like reservations, modifications, cancellations,
  + Each event shall be logged into the DriverPass database
* The system shall be able to print out an activity report with information (customer information and transactions)
* The system shall be able let customers reserve 2 hour long sessions noting the day and time the customer wants to take a driving lesson.
  + The customers must be able to make reservation online using their account or by call or visit to schedule an appointment with a secretary
* The system shall be able to identify the driving instructor the customer will go out with
* The system shall be able to display some information in the database through an interface, which includes the driver’s notes, their information, their driver and student photo, special needs, and test progress.

### User Interface

* The interface needs to be able to display pictures, information (text)
* Through the interface, the user must be able to see the drivers notes, their information, their driver and student photo, special needs, and test progress.
* All regular users should have a relatively consistent format
* The interface needs to provide the user an option to choose packages and/or exchange currency

### Assumptions

* The client will provide his/her own car for the lesson
* All users have a secure connection
* All users can access the software
* DriverPass will be updated about new DMV content (ie new rules, policies or sample questions via notification)

(Also this is another assumption in general… This is a greenfield system so technically this would make us responsible for the internal company operational platforms/brick and mortar operation… however, as IT specialists, it is more realistic to assume that our only responsibility is to make and integrate this online platform to the physical DriverPass operation)

### Limitations

* The system will only be compatible with 3 of the most dominant (market share) web browsers
  + Rationale: According to (Technologies, 2023), Chrome, Safari, and Firefox make up in total 86% of market shares, and so projects should focus on being compatible with those first.
* The database needs to be able to carry a lot of information and be able to handle an influx of new users if need be. The software also needs to be quick to retrieve information from the database as well. There is a limit to how much the system can handle.
* The owner of driver pass wants to look and manage accounts personally, however this responsibility may be unrealistic if the product gets popular and there are many requests to change data or reset passwords. Maybe hiring a worker to deal with this and creating a separate interface where they can do all these operations with ease would be a helpful add on later on)
* Data cannot be updated offline.

References

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