# 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

• Online Trainings and Practice Exams for Driving Tests

• Scheduling of On-the-Road Training w/DriverPass

### 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?*

• The point of this company is to fill a need in that lots of people are failing their driving test at the DMV. Liam believes that this type of online preperation and in-person training could give people the skills they need to pass their tests.

• These Trainings, Practice Exams, and Scheduling Tools, would all need to be accessible over the internet.

• Data needs to be accessible from PC and mobile.

• Data needs to be in a format that Owner can use Excel to access.

• Need administrator tools for Ian to give different employees rights and roles, also he needs to be able to reset passwords, and block access.

• Transaction Logging needed for user activity. Who, What, When, How will need to be in the logs. Liam needs to be able to get a report of the activity.

• Driver schedules, and Car availability need to be managed by the system. When a reservation is made online or over the phone, this needs to get updated. Also all the reservation times are tracked with the Driver, User, and Car.

• User needs to be able to CRUD all appointments they schedule whenever they wish to.

• User Roles for the system are Owner, Admin, Secretary, User

• All 3 packages will change the booking time in the scheduler and need to ensure that the User gets what the package says they are getting.

• Sessions are 2 hours each. A Package that includes more than 2 hours is spread across more than 1 session.

• Owner needs to be able to disable packages.

• Session scheduler should allow customer to specify pickup and drop-off location.

• Liam wants to have registration over the phone and have the secretary input account details, including payment information. Maybe also online needed for this. Would need to clarify with Client.

• Password Reset feature.

• DMV updates automatically given to business.

• Host website over the cloud. Client doesn’t want to deal with backups and security. Client doesn’t want to deal with technical issues, just business ones.

• Client provided UI they prefer. Will want to handle with Agile methodology, quick feedback and iteration loop. Clients don’t always know exactly what they want, especially when it comes to UI.

### 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?*

• User Roles and Rights

• Administrative Features

• Package Modules

• Package Selector

• Payment Processing

• Account Processing

• Database Connection

• User Interface

• Scheduler

• Training Engine

• Training Progress

## 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?*

* This needs to run in browser for desktop and mobile. The owner of the application would like to access his employee portal from his phone.

#### 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?*

* This should be a web application that can run in a browser regardless of operating system. There should also either be a very well ported mobile site, or a mobile client application. If a client application is needed then it should be ported to both iOS and android.

#### 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?*

* There would be 3 different types of users for the system. Customer, Instructor, Administrator.
* Customers will have access to course content and the ability to take exams and schedule on the road trainings.
* Instructor accounts should have access to their schedule and the ability to send messages to their students.
* Administrator account will have full-access to the site. They will also have the ability to reset passwords and block accounts. The owner would like to be able to disable packages. This should be tied into the administrator account type with a special portal to do this.

#### 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?*

* Yes. All of the User information would be stored in a database. There will be an administrator portal that will allow them to add, remove, and modify user information with ease.

#### 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?*

* The system shall validate user credentials for access.
* The system shall not be vulnerable to common web hacking techniques including SQL injection.

### Functional Requirements

### 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 user interface is outlined in the sketch provided by the driver pass owner. The first thing that was evident to me was the amount of screen real-estate dedicated to certain things was probably disproportionate to the value that feature added. One example was that the training only took a small portion of the screen. I think a full screen training section, or at least 75% would be much easier to watch, and would be just as functional. I think this comes down to the fact that most customers don’t know what they want until they see it in front of them. I would definitely make the UI the way the customer wants, but I would have the alternate UI built and keep it in my back pocket until the inevitable time comes where they don’t like the UI.

### 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?*

* The customer knows what they actually want.
* Customers are going to want to create accounts.
* A SQL database will be used.
* A web application will be used over a client.

### 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?*

* This will most likely be streaming video. This is best done through UDP and companies like Amazon had entire dedicated teams to just get that right.
* Packages with offers will require development to create.

### 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.*

