# CS 255 Business Requirements Document Template

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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 a company that aids in driver education and test preparation. They would like our consulting company to develop an online system that will manage their in-person driving lessons with an interface for students to schedule driving appointments as well as take classes and practices exams online.

### System Background

* DriverPass hopes to fill a void in the market for driver test preparation with the local DMV. Students can better prepare for their driving exam with the DMV by taking in-person driving lessons and online classes and practice tests with DriverPass.
* The system should operate over the cloud and be accessible from any online computer or mobile device.
* The system requires different rights and roles based on the user.

### Objectives and Goals

* The system receives notifications of new rules, policies, or sample questions from the DMV.
* User tracking: admin can view/print activity report (record of modification made to system by specified user).
* Admin can reset passwords and block access for other accounts.
* Registration (first name, last name, address, phone number, state, credit card number, cc expiration date, cc security code, pick up location, drop off location) can be filled out and submitted online or with the secretary, over the phone or in-office.
* Packages available may be purchased online or with the secretary. There are three package options. Packages may be disabled by admin.
* Driving appointments may be scheduled, modified, or cancelled online or through the secretary.
* A reservation should identify the time, driver, and car that will be used as well as the student’s information.
* Students can fulfill online tasks through their account, for which they can automatically reset their password if needed.
* Page 1 should display the following information: customer info, student photo, driver photo, special needs, online test progress (test name, time taken, score, status. Status can be not taken, in progress, failed, or passed), and driver’s notes (lesson time, start hour, end hour, driver comments). \*See Ian’s sketch.
* Page 2 is the customer info input form.
* Page 3 is a two-way contact page between DriverPass and the customer.
* The system runs on the cloud.
* The system is compatible with any 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?*

* The system shall be a web-based application.
* The system shall not exceed 3 seconds when responding to user interactions.
* The system shall update with individual user modifications immediately.
* The system shall update with system-wide modifications once daily.
* The system shall be available 24 hours a day.

#### 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 shall be cross-platform.
* The system shall use the cloud as a database.

#### 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?*

* The system shall distinguish between users via user accounts.
* Login information shall be case-sensitive.
* The system shall notify admin of suspicious user activity or when modifications/updates fail.

#### 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?*

* Changes to student accounts can be made by employee/admin.
* Changes to employee accounts may only be made by admin.
* Accounts may be added via online form submission by student, employee, or admin.
* Accounts may be removed via archival of file to separate database by employee/admin only.

#### 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?*

* Accounts shall require DriverPass issued ID
* Client and server interaction shall be secured through TLS protocol.
* In the event of a brute force hacking attempt the system shall archive the account and notify admin.
* Users shall be able to request password reset from admin at any time.

### 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 prompt the user for credentials.
* The system shall validate user credentials.
* The system shall retain account information according to credentials.
* The system shall track user activity within the system.
* The system shall designate access and ability according to role.
* The system shall allow admin unfettered access.
* The system shall check the DMV rules and policies for updates daily.

### 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 system shall allow the user to navigate between pages via a menu.
* The system shall provide a calendar and store user appointments and driver availability.
* The system shall prompt and accept user input when scheduling appointments.
* The system shall provide an option to change or cancel appointments.
* The system shall display confirmation page for successfully booked/changed/canceled appointments.
* The system shall accept user input for online tests.
* The system shall retain testing progress for each account.
* The system shall display confirmation page when leaving a test unfinished.
* The system shall display a confirmation page when a test is completed.
* The system shall allow employee-user input in the driver’s notes section of student-users.
* The system shall allow for the user to select package for purchase.
* The system shall allow the user to view the package selected.
* The system shall allow the user to input credit or debit card information for purchase of the package.
* The system shall display a confirmation page when a package is successfully purchased.
* The system shall provide an option for the user to log out of the account.
* The system shall display a confirmation page for a successful log out.

### 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 have access to the internet.
* Drivers have access to the system.
* The system will not hold all accounts indefinitely.

### 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?*

* The system will not be able to verify user information. Student driver permits, licensing, and probation status must be checked by DriverPass with the local DMV.
* The system backend must be primarily outsourced because there is only one IT staff member for ongoing maintenance.
* Current company records on paper or otherwise must be manually entered into the system.
* The system cannot provide drivers for appointments.

### 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.*

