# 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?*

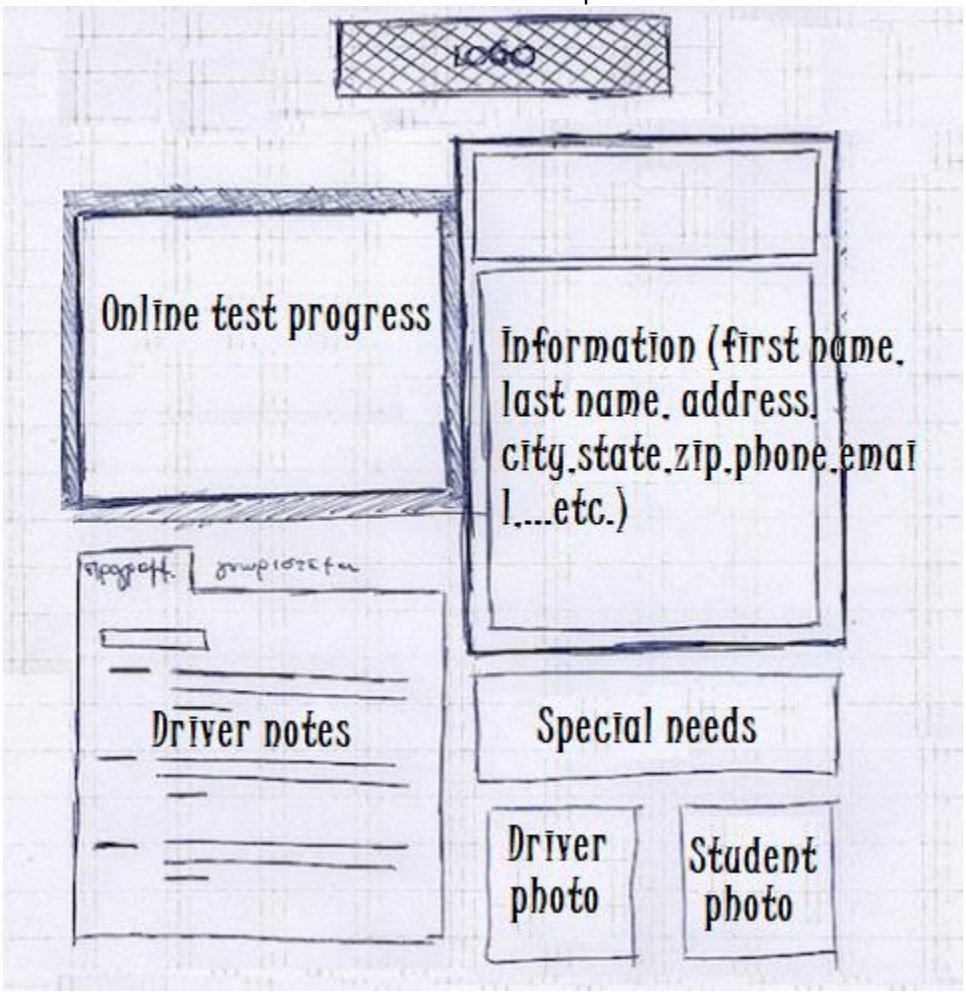
- The purpose of this project is to develop better drivers and a higher pass rate of drivers tests.
- The client is DriverPass and they want their system to be able to take online classes and practice tests, as well as physical driving lessons.

### 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?*

- Access his data online
- have the data downloadable and exportable to excel
- Ian wants access to all accounts for resetting passwords / locking accounts
- Liam needs tracking cape to see who made a res, who cancelled it, and who modified it. (activity reports)
- Online reservation system for customers booking driving lessons. Also can call to book, or come in person & book w/ secretary.
- Lessons are two hours, day & time for reservations
- System to match customer with driving instructor, also time included
- System users: Liam (Boss), Ian(IT), secretary(appointments)
- 10 cars/ 10 drivers.
- Packages: Package One: Six hours in a car with a trainer Package Two: Eight hours in a car with a trainer and an in-person lesson where we explain the DMV rules and policies Package Three: Twelve hours in a car with a trainer, an in-person lesson where we explain the DMV rules and policies—plus access to our online class with all the content and material. The online class also includes practice tests.
- Each driving session is two hours long. wants customizable packages —remove some of them, add new ones—so the system has to be flexible.

- Ability for Liam(boss) to disable packages so they can't be booked
- Registration process: receive phone call, customer gives info: first, last, address, phone, state, drop off location/pick up (should be same
- Ian to reset customer's accounts if they get locked out.
- Connected with DMV so the current new rules, policies, sample Questions
- Ran off of web(cloud)
- Ian does not want to deal with backup & security.
- Online test progress needs to show: tests customer has taken. What's in progress, and the ones complete. (test, name, time taken, score, status(not taken, in progress, failed, passed)
- Interface built based off sketch shown in transcript




- Driver notes:

| Lesson Time | Start Hour | End Hour | Driver Comments |
|---|---|---|---|
| | | | |
| | | | |

- Input form: student or secretary fills in student's first, last, address, phone, state, pickup/dropoff
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**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?*

- Customer and Driver instructor "calendars"

| Task | Start Date | End Date |
|---|---|---|
| Collect Requirements | 22-Jan | 4-Feb |
| Create Use Case Diagrams | 11-Feb | 18-Feb |
| Build Activity Diagrams for Each Use Case | 15-Feb | 9-Mar |
| Research User Interface Designs | 27-Feb | 7-Mar |
| Build Class Diagram | 1-Mar | 9-Mar |
| Get Customer Approval | 10-Mar | 11-Mar |
| Build Interface | 12-Mar | 24-Mar |
| Link DB to Interface | 24-Mar | 3-Apr |
| Build Business Logic | 5-Apr | 27-Apr |
| Test System | 27-Apr | 7-May |
| Deliver System | 8-May | 9-May |
| Sign-off Meeting | 9-May | 10-May |

## 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 system needs to run on the internet, a cloud would be ideal.
- Based on the interview, the system should run so that customers and administrators can view and access data on the site from both computers and mobile devices.
- The system should be updated when the DMV changes their rules, requirements, or policies.

**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 able to run on any available web browser such as google, Firefox, edge, safari, etc..
- The backend will require a database to store data which will be reflected through the system.

**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 will distinguish between different users based on their login credentials
- Case sensitive is more secure, so yes case sensitive.
- The system needs to be able to keep a record of who creates, cancels, or changes reservations.
- Needs to inform the admin of a problem immediately when accounts are locked, times are booked by multiple customers/instructors, and access attempts that were not permitted.

**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?*

- The system needs to allow for managing accounts without changing code. It needs to be flexible and allow for customization of user and admin accounts.
- The system needs to be synced with the DMV site to allow for automatic updates to be made to the system to reflect the DMV's changes. Ian needs full and complete access over every account, both user instructor, and admin.

**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?*

- Users will need a username and password to access their accounts and the system..
- Because this will be web-based, the connection will be secured via the chosen cloud platform.
- If there is a brute force hacking attempt, the system will automatically lock out the account after x number of attempts.

## 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 allow customers to participate in online classes and take exams.
- The system shall allow Liam to access his data online and be able to download his reports for offline work.
- The system shall give Ian full access to every account for password resetting and blocking users.
- The system shall track who created a reservation, who cancelled it, and who edited it.
- The system shall let Liam print activity reports.
- The system shall allow customers to make reservations.
- The system shall allow customers to create edit and cancel reservations online.
- The system shall be connected to DMV database to make automatic update regarding rules and policy changes.
- The system shall run over the internet, through a cloud.
- The system shall display input forms for customers to input personal information.
- The system shall create a contact form for all students and instructors
- The system shall show test progress including test name, time, start time and end time.

## 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 interface needs to allow for customers, instructors, and administrators to interact with the system in different ways.
- Students need to be able to track their test progress including times started and finished, scores, status, etc..
- Instructors needing to view and input driver nots, lesson times, reservations, cancelations and driver comments.
- Liam needs interface to access data online and download offline data to be able to work on.
- Liam needs to be able to print activity reports.
- Secretary needs input form to input customer personal information
- Car and instructor management and allocation.
- Should coincide with provided sketch.

## 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?*

- DriverPass will follow all DMV rules and policies.

- DriverPass gives all content needed for courses and testing.

- Students will have internet access.
- System will have centralized database
- Third party will handle backup and security
- Payment services will be included in the site.

## 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 only have English as a language availability
- The schedule given to us doesn't allow for maintenance and updates/changes.
- The system will not manage vehicle maintenance scheduling

## 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.*