# 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 client wants to develop an online storefront that is accessible remotely (from the internet).

### 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 client wants to be able to access the online storefront remotely, requiring internet access.
* There will be different privilege levels.
* Shipping/customer info will need to be stored.
* The catalog/inventory will need to be updated.

### 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?*

* Validate users.
* Calculate order totals.
* Store shipping info
* Keep backend documentation.
* Update inventory
* Remote access

## 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.*

The online storefront is going to allow users, both customers and administrators, to register, login, and update their profiles. The user will then be verified. Once verified, users can fill the shopping cart and then orders can be placed. Shipping info will be updated and finally the price will be calculated.

#### 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?*

* Monthly catalog (stored items) updates
* Real-time inventory (currently held items) updates.
* This is a web-based application.
* User info should be updated when requested.

#### 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?*

* A simple database can be used to store the user/shipping info.
* The store’s inventory can be stored on a database as well.
* This is going to be a web-based application, meaning there should not be any problems with cross-platform communication.
* Back-end documentation should be stored on the 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?*

* Having user verification implies the use of user IDs.
* The admins should be able to set custom alerts (say if some one moves 500 apples instead of 50

; they can set an alert for any amount more than 50)

* The database should not be case sensitive, but the user credentials should be case sensitive.

#### 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?*

* Most databases support the addition, removal, and modification of objects within the database. Assuming none of the active code becomes deprecated, updates should not be a problem.
* The IT admin should have universal access, assuming the admin is vetted.

#### 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?*

* Password recovery is common with most modern internet security systems.
* Time-outs and captchas are effective at mitigating the attempts of a brute-force cyber attack.
* Network encryption is a good first step.
* SSL, TLS, and HTTPS all have well defined security protocols which can be used to protect the transfer of data.

### 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 will need a secure connection to the Internet.
* The ability to access/store data within a server database.
* The ability to run as a plug-in on web browsers.
* The ability to do an audit.
* User verification (log-in/pass.)
* A server to host the application.

### 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.)?*

* Simple/intuitive
* There will be a log-in box area somewhere (probably in the top left on the browser)
* On mobile the login will be the first thing the user sees
* Wherever a user is interacting with the application simplicity is the best policy
* A search bar/function
* Multiple language options

### 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 ability to interface with private networks (such as university networks) Most universities have in-house networks to keep class/student data both secure readily available. It will also allow our system to grab data from that system, rather than having to create and maintain a copy of said data.

The system should sterilize any text it receives. Whenever a user is able to input information into the system, and it has not been sterilized, there is a chance for a breach in the system’s security.

### 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?*

* Depending on how the server is being hosted, a user-limit may need to be implemented. This is to prevent a slowdown in service. Also, if the system is hosted by a third-party server, this is a way of capping the amount of data/server time used.

### 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.*

