**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 the project is to take advantage of a void in the market related to training students for driving tests at their local DMV. The client, DriverPass, is owned by Liam working with his IT officer, Ian.
* The application will allow students to study for driving tests, practice online exams, and sign up for on the road training

**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?*

* Provide better driver training for people practicing/studying for their driving test. Many people fail their drving tests and this system aims to change that. The system needs to be able to provide onlince classes, practice tests and on-the-road training for drivers.
* The system needs different roles such as Student(with their account information), Driver(who provide on the road lessons), Secretary(who organize appointments both online and walk in), and Admin(who can control user accounts and the application as a whole)

**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?*

* Accessible data from anywhere (online and offline), Provide tracking of reservations made by customers, Take in data from customers (name and personal info, drop-off and pickup location, and credit card information), and packages need to be removeable/customizable. The Tasks/Goals for development are listed below.
* Collect Requirements
* Use Case Diagrams
* Activity Diagrams for Use Cases
* Research User Interface Designs
* Build Class Diagram
* Build interface and link DB to Interface
* Build Business Logic
* Test System
* Deliver System

**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?*

* Certain aspects need to be downloadable for admins for use outside of the applicaiton. The system needs to be able to run on all modern pc and mobile OS, including home and business version of pc OS and both i-phone and Android OS.
* Updates should happen as needed (i.e. patches for bug fixes, module removals etc.)

**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 needs to run on modern day OS. Including, but not limited to, Windows home and office editions, Mac, and mobile OS (android and iOS)
* The system needs access to the DMV for any changes made real time

**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?*

* Users will be distinguished by their full name which is attatched to their account and their account name. Account names shouldn't be case sensitive to avoid name overlap
* Admins should be informed if a user somehow gains access to a different user's account and if a user needs to reset their password within the system

**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 the user will not require a change in the code only to the account itself
* The system will need a developer or system analyst to modify, add, or remove modules and handle platform updates
* IT admin will need access to user accounts with the ability to reset account passwords and be able to disable packages when they no longer want customers to register for them

**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 account name and password are required for user login
* Encryption and input validation will be used to properly secure user to server communication
* All security issues should be handled by the chosen cloud service as the owners do not want to deal with backup and security
* IT will be in charge of resetting passwords for users who forget theirs

**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 new users to create a new account
* The system shall accept user login attempts and validate credentials within the system
* The system shall allow users to access course and exam material
* The system shall allow students to sign up for on the road tutoring
* The system shall allow secretaries to view the appointment schedule and accept/cancel appointments
* The system shall allow Admin members to reset changes to user passwords
* The system shall allow Admin members to view and print out reports based on system interactions

**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 needs to be able to run off of the web
* Students, Drviers, Secretaries, and Admins will need to use the interface
* Students need to be able to view and update account information, contact admins, sign up for on the road training, and view their in progress and completed courses/material
* Secretaries need to be able to neter and update student information

**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?*

* How the users will interact with the interface wasn't fully addressed. I'm assuming that mobile users will be able to use their touch screens to access account information, scheduling, and more in a similar manner to clicking the links on a pc
* I'm also assuming that the layout for the application may change slightly depending on what type of user is accessing the account (student vs secretary vs admin)

**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?*

* Mobile accessiblity is my first concern with the systems design. A seperate interface for the mobile version of the application may be necessary.
* The application also needs to be accessible offline, which could cause redundancy issues with the data.
* There doesn't seem to be a listed limit on the budget or technology, however the development time for the application has been layed out over the course of about 3 months

**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.*

