

# **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?

- purpose of application is to allow people to get practice for obtaining their driver's license.
- DriverPass is the client.
- DriverPass wants their system to host practice tests, online courses, and also offer in person driving sessions for clients.

#### **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?

- System needs to host practice tests, drivers ed courses with DMV rules and regulations, and allow for reservation and scheduling of in person driving sessions.
- Want to allow students to have better driver training.
- components:
  - 3 packages for customer
    - in person driving sessions only (6 hours 3 2 hr sessions)
    - in person driving and in person lesson over dmv rules and policies (8 hours 4 2 hr sessions)
    - in person driving, in person lesson over dmv rules and policies, and access to online practice tests and courses (12 hours - 6 2 hr sessions)
  - o ability for customer to schedule in person drives online
  - o registration done through phone
  - run off web, cloud preferred
    - backup and security handled off site (not by client)
  - box w/ online test progress



- completed + in progress tests
  - display test name, time taken, score, and status (not taken, in prog, failed, and passed)
- contact page for company.
- input form for student/secretary to enter information about student.

### **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?

- system should be able to allow students to schedule drives, access online content if required, and see completed parts of their bundle.
- use case diagrams
- activity diagrams
- UX design
- database design

## 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 environment needed to run the system should be web-based. The system should run as fast as most popular websites do. The system should be updated when there are bugs or when there are new DMV rules and regulations.

#### **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 run on Windows and MacOS. The backend requires a database of user info as well as a place to store their completion rates for the entire course.

#### **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?

• Different users will be distinguished by unique, one time only usernames. The input will be case sensitive, and the system should inform an admin of a problem when a user submits a ticket,



customer service/support reports issues to them, or when a user has reached the max amount of login attempts.

## **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, you can make changes to the user without changing code with admin specific functions and an admin specific console. Backing up the website and creating a test environment for the system should allow developers to see how platform updates could potentially affect the web-app. The IT admin needs access to add, modify and remove users from the database.

## 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?

valid input of username and password matching exactly as it is on the database. Connection can
be secured between client and server using HTTPS. There should be a maximum number of
incorrect password attempts before a user's account gets locked, sending an email to a user and
requiring a call to admin or IT to unlock the account. If a user forgets their password, there
should be the ability to request a password reset email.

## **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 display a homepage that contains information about the bundles offered by DriverPass, who DriverPass is, and contact information for DriverPass.
- The system shall allow a user to register when all information is filled out and a password meets requirements set by the developers.
- The system shall validate user credentials when logging in.
- The system shall allow users (both customers and employees on behalf of customers) to sign up for in-person driving sessions.
- The system shall allow users (both customers and employees on behalf of customers) to register for educational courses.
- The system shall allow customers to take online practice tests (paid) and read through the rules and regulations of the DMV (all access).
- The system shall allow customers to view their progress in the current online practice tests, coursework, and driving lessons in one window on the homepage when logged in.

#### **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 needs of the interface are to be as simple as possible so both people with all experience levels of browsing can find what they need effectively.
- The different users include the admin, owner, employee and the customer.
- Each user should be able to log in or register with their information and navigate to the practice tests.
- The user will interact by clicking (desktop) or pressing (mobile) the sections on the screen where they want to navigate to.

# **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?

- I'm assuming most people know how to navigate a website.
- I'm assuming most people have basic contact information (email and cellphone).

#### 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?

- Clients may have slower internet access, causing frustration.
- Clients may not use a browser that is supported.

### **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.

