



**Software Engineering and Testing. BSC Year 2, 2020/2021
(Assignment 2 - 20%)**

Assessment 2: Requirements Document

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Declaration

I hereby certify that this material, which I now submit for assessment on the program of study leading to the award of Ordinary Degree in Computing in the Institute of Technology Blanchardstown, is entirely my own work except where otherwise stated.

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Title

Stressfree Pets

Client

This project is a web system for a pet care, dog-walking and dog sitting business. The reason for the project is a local business Stressfree Pets has been using social media such as Facebook and Instagram for their business and would like to have a system to manage bookings and grow the business.

1. Project Overview

The website will have many functions, these include booking, public feedback, and user profiles. People who would like to do one of the services can create a public profile with some information about themselves, like the type of service they would like to provide or their rating from other consumers. Consumers will be able to book the service they need, see profiles of the service providers, and leave feedback for the service. Each of these will have different privileges on the site with the owner being the head administrator on the site. We will use PHP programming, HTML and CSS to develop dynamic and interactive webpages. We will also be using a database language such as MySQL to handle the data on the site and store data. We believe with these we will be able to build a front-end web system to meet the client's needs of their business.

2. Document Revision

Rev. 1.0 date – initial version

3. Scope

Overview:

The project will implement an online dog grooming services for a local business owner, aiming to introduce a more efficient and organised system, automating various aspects of the business, and replacing some paper-based work. We will develop a user-friendly website to facilitate online dog grooming services, implement an efficient online booking system and help people to find a dog minder. This is expected to increase revenue by expanding service accessibility.

Functionalities:

- *Secure & Efficient User Sign In:* Clients will experience a secure registration and sign in process and access grooming services from the comfort of their homes.
- *Enhanced Client Interaction:* The website will provide clients with a seamless and interactive experience, allowing them to easily schedule grooming appointments, display available services, pricing, and manage user profiles.
- *Transparent Communication:* A notification system will keep clients informed about appointment confirmations, updates, and relevant announcements.
- *Online Booking System:* Clients can efficiently schedule grooming appointments through an easy-to-use online booking system and pay online.

- *User Profiles*: Clients will have personalized user profiles showcasing their provided services, preferences, and service history.

Assumptions are made that customers will have access to a stable internet connection. Where **potential risks** involve customers feeling unsure about the change from in-person to online grooming. **To tackle this**, we plan to have a clear communication strategy to guide customers through the online booking process.

Areas for future Improvement: In the future, we aim to continually assess our clients preferences and explore the possibility of introducing additional features, such as personalized recommendations.

Looking forward, we aim to continually improve by monitoring industry trends, gathering user feedback, and adapting to client preferences. This guarantees an upgraded online dog grooming experience, supporting ongoing success and growth of the business.

4. Walkthrough Scenarios

Admin:

Admins will be able to see all profiles and add or remove them. They will also be able to access the database.

User:

When the user clicks into our website, the first thing that will come up is the home page, which has services, about us, and contact us in the menu bar at the top, the different services the website provides in the middle, and more contact details at the bottom, like email, phone number, and social media pages. The menu bar and the contact details will be available on each page.

They will be able to read a brief about each service, and when they decide which one suits them, they can click on the service and see more details. If they are happy with the service, they will have to create an account, which will be at the top beside the menu bar. They need to put their name, surname, address, email and phone number. Now they have an account where they can put any information about them and their pets, and they can also write a review if they want.

After booking, they have to pay, which will open a new page for them to enter the payment details and their address. Once they are happy, they can submit. If they are not sure about something, they can go back, and they won't need to type their details again. Then they will be able to talk to the person who is going to do the service if they want.

People who are working in the services/Freelancers:

People who are working on the services will be able to see the same stuff that the user is going to see. They need to have an account, and in their profile, they have to have information about themselves and what services they are providing. They will be able to see all the booking appointments and contact the customers.

5. Software Requirements Analysis:

Functional Requirements:

These are statements of services the system should provide – how the system should react to inputs and how it should behave in particular situations. Explicitly state what the system should do. Every major scenario should be represented by a use case. Diagrams are encouraged. UML Use case diagrams, use case specifications (as legible screen dumps, typed listings or activity diagrams)

Can approach them from a *user* and *system* point of view.

User – high level abstract requirements, readable by someone with no detailed technical knowledge.

System – detailed description of what the system should do. Targeted at technical staff and project managers...

e.g.

5.1 User Requirements

CONSUMER:

They must be able to view basic information about the business without having to log into their profile.

They must be able to sign into their account which the system will then authenticate and bring up their profile.

They should be able to create a profile and have the system store this data.

They should be able to view any invoices for services they have booked and pay them.

When signed in they should be able to book a service and review a business.

BUSINESS:

They should be able to apply to have their business on the website.

Once they have been approved, they can set up services that they offer by logging in

They can create a timetable of availability for consumers to use to book themselves in.

They should be able to see these booking and invoice the customers.

They should be able to look at reviews.

ADMINISTRATOR:

They should be able to add or delete profiles.

They should be able to view businesses applications and decide if they suitable for the website.

SYSTEM:

The system should have a database of profiles which can be changed using CRUD.

The system should be able to only allow people that are logged in to view the services in more detail and book.

The system should be able to authenticate the logging in of users.

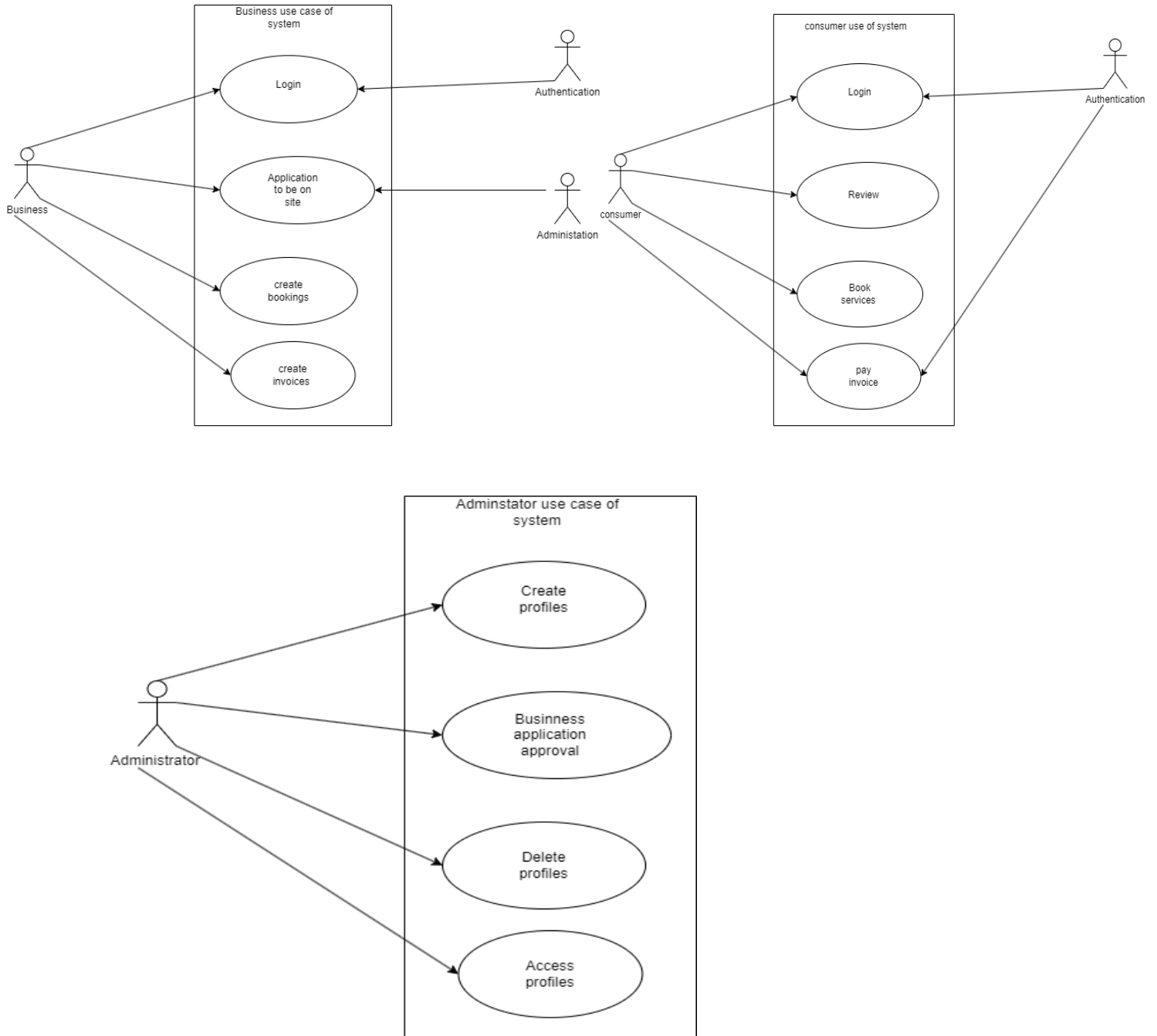
The system should only allow administrators to have access to all areas of the system.

The system should be able to store reviews given by consumers and link them to the business being reviewed.

The system should have a search function to make it easier to look up services.

5.2 System Requirements

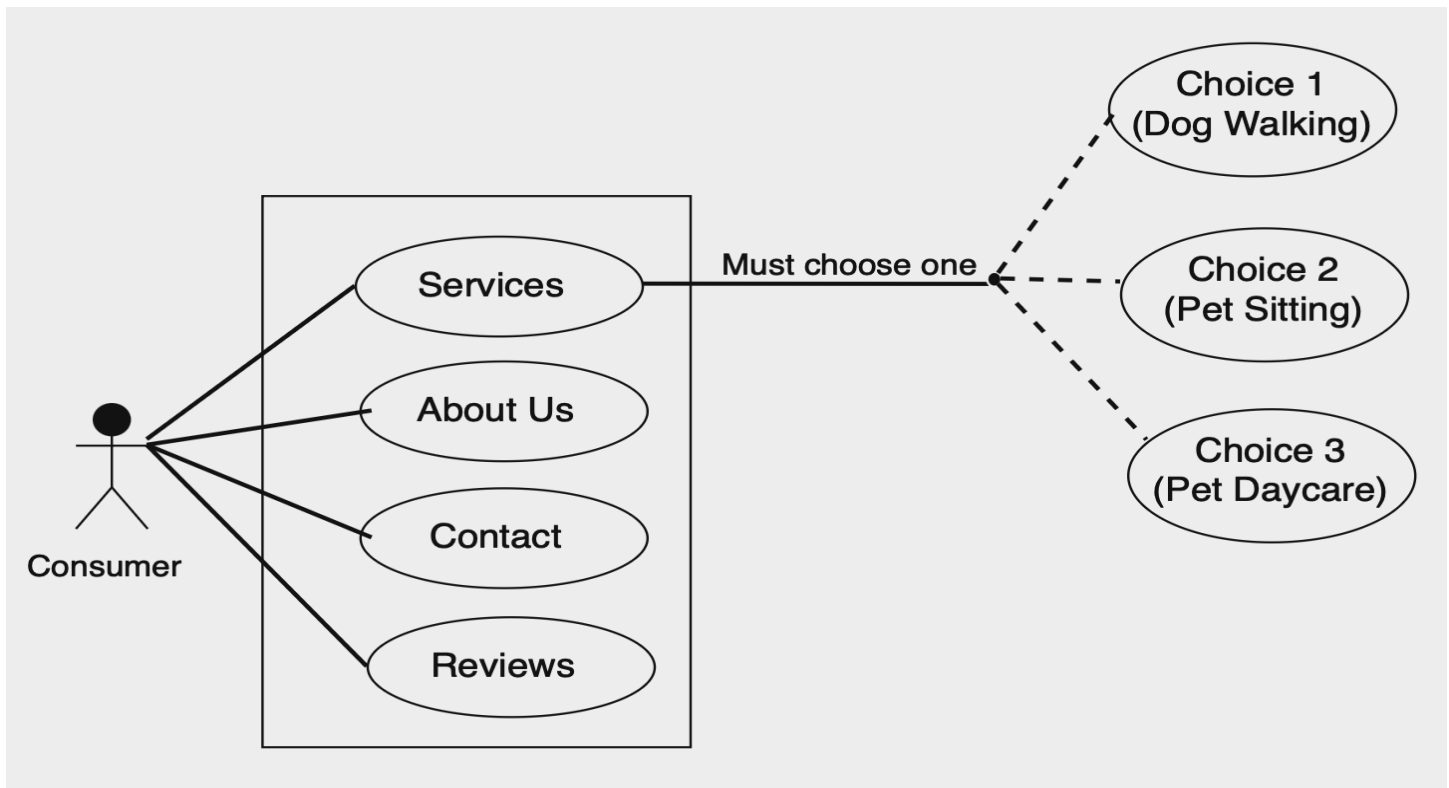
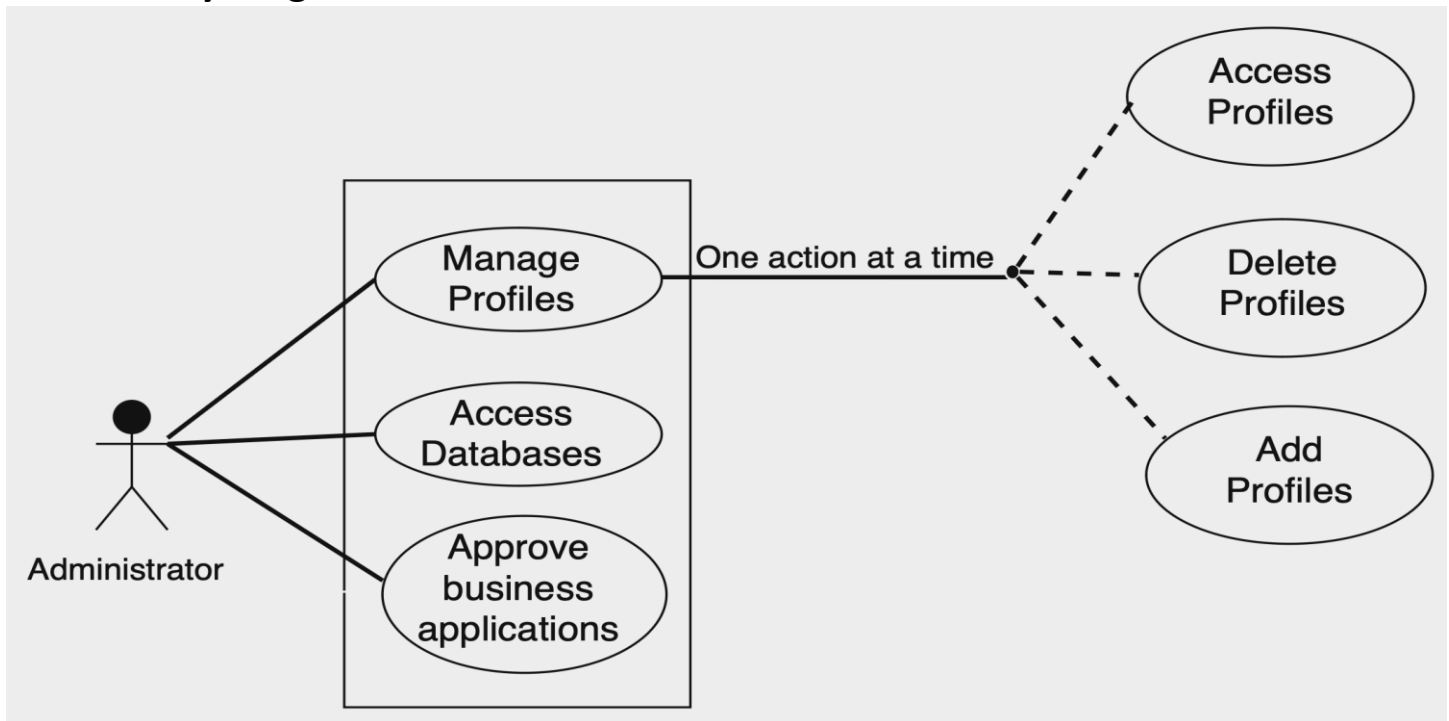
5.2.1 Use Cases

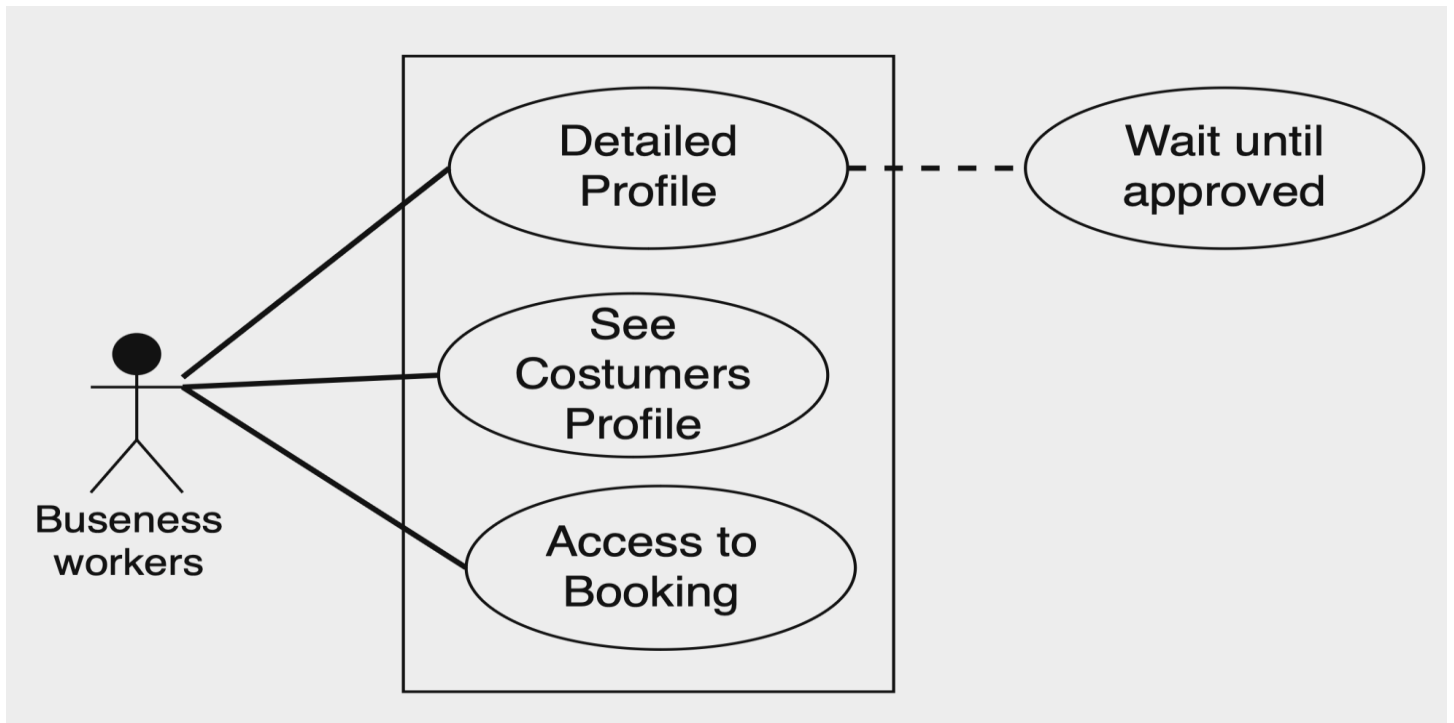


5.2.2 Use Case Specification:

Login	<ul style="list-style-type: none"> - The user needs to have an account including their name, surname, phone number, email address, and address. - An authentication request was sent to the database to confirm user details. - Authentication is confirmed. - Users now have their own profile where they can add more details if they want, and they can book an appointment. - Freelancers need to do the same, and their details will be in a different database from the users. - After they have an account, they will be able to contact the users. - Admins also need to have an account. - Their details will be saved in the database in a different table from users and freelancers.
Booking	<ul style="list-style-type: none"> - Users need to say what services they need. - Decides which date suits them. - Then they need to pay and put in their payment details. - After confirming their details, they will be saved in the database. - They will receive an email confirming the payment and a number, which will be their ID number in the database.
Cancel Booking	<ul style="list-style-type: none"> - The user needs to enter the number that is given to them. - The system will make a request to the database to search for the number. - The database will return the details to the system. - The user will then be able to see his booking details, and they need to confirm their cancellation. - The cancellation will be requested in the database, and a new email will be sent to the user confirming their cancellation.

5.2.3 Activity Diagrams:





5.3 Non-functional Requirements:

- *Technologies:* The website will be developed using PHP combined with CSS and HTML as the primary programming languages.
- *Architecture:* The system will have a database that will be designed according to needs of the website and will be created in MySQL workbench.
- *Platform Compatibility:* The website will be designed to be compatible with commonly used web browsers and adopt to devices of users.

6. Graphical User Interface Design



Above is the main design of our page. This is the homepage, but the rest will follow a similar design while changing the content. The image in the top left will be our logo. The three images in the middle are going to be pictures of the services we provide and the three at the bottom right are going to be links to social media pages. We wanted to keep it simple, but functional and eye catching.

7. Technical Requirements and Feasibility:

The client wants to switch from social media to an online platform. We are going to use PHP, MySQL, JavaScript, HTML, CSS:

PHP is an interpretive language and it's a server-side language. We can make the web page dynamic and interactive.

MySQL to handle the data on the site and store data and it will handle the back-end data.

We can use bootstrap template for the CSS side of the website.

CSS handle the visual clarity of the website and HTML tells the browser what each part of the website is. It can define headers, paragraphs, links, images etc.

8. Conclusion

We believe that this system will be achievable in the time given to deliver it. We are already confident in the design of the GUI and our use case diagrams give us a clear picture of actors and use cases in the system. The languages needed (HTML, CSS, PHP, MySQL) have been studied by us and we have a general

idea on what to do to implement all our ideas. We believe the system we are creating will meet the client's needs in terms of visibility, consistency, and simplicity.

As we go along all aspects of the site will be thoroughly tested for any issues and errors and to spot any potential problems that could arise before the website is launched. We have a clear vision of what we need to achieve in the time given, which will be achievable due to the research and discussion that went into this document. We are all clear in our objectives and will meet multiple times weekly to check in with our progress.