Vanier College

Faculty of Science and Technology

System Development

420-436-VA

Deliverable 6

Brown Team

Team Leader: Sadaf Zakria

Nabil Ramadan

Hibba Qaraman

Peter Isaac Fishman

*In collaboration with **Justin Eberwein***

Next Team Leader: Hibba Qaraman

We, the Brown Team, certify that this assignment is our own work

I, Sadaf Zakria, [2151361], certify that I have contributed to this deliverable, S. Z.

I, Nabil Ramadan, [2195270], certify that I have contributed to this deliverable, N.R.

I, Hibba Qaraman, [1760010], certify that I have contributed to this deliverable, H.Q.

I, Peter Isaac Fishman, [1980427], certify that I have contributed to this deliverable, P.I.F.

Table of Contents

Executive Overview

Prototype User Interface Development

In this phase of our project, we will focus on developing a prototype user interface (UI) for our client's software solution. The goal is to create a tangible representation of the system's front-end, ensuring it aligns closely with the client's expectations and requirements. This UI development process is vital for fostering effective communication and collaboration with our clients, enabling them to have a hands-on role in shaping the project from day one.

1. **Initial Hand-Drawn Prototype:**
   The simplicity of this approach encourages client involvement and immediate feedback, ensuring that the interface aligns with their vision.
2. **Usability Guidelines Establishment:**
   As part of the UI design process, we will establish usability guidelines to ensure that the interface is user-friendly and intuitive. These guidelines will serve as a foundation for creating interactive forms and screens that present data in a user-centric manner, deviating from the conventional tabular presentation. Any exceptions will be subject to instructor approval.
3. **Second Computer-Drawn Prototype:**
   After gathering the client's feedback on the initial prototype, we will create a more polished computer-drawn prototype using Figma. This prototype will focus on the visual representation of the interface and will not include functional components. It will provide the client with a clear vision of what the final implementation will look like.
4. **User Stories Update:**
   Based on the insights gained during the UI development process and our evolving understanding of the client's needs, we will update, add, remove, and modify user stories. The story map will also undergo revisions to align with the changes in user stories, ensuring that it reflects the project's current state and priorities.

By actively involving the client in the UI development process, we aim to ensure that the software solution will not only meet their requirements but also provide an exceptional user experience. This iterative and collaborative approach allows us to fine-tune the project to align with the client's evolving needs and preferences.

Summary of the Client

Justin's journey in the fitness industry began in 2016 when he founded Just B Fitness. Back then, his online presence was limited to Facebook and Instagram, until 2020 when he launched his own website. Although the website was created by Silo, who is no longer part of the team, Justin can still rely on him for any necessary website modifications. Today, Justin operates independently but maintains valuable connections with former colleagues Francesca and Ian. He conducts his client sessions at Monster Gym, renting their space for his fitness endeavors. Notably, Justin has collaborated with fitness models throughout his career, as evidenced by the glowing testimonials on his webpage. Despite his lack of computer and programming skills, Justin manages a substantial clientele of over 100 individuals, without the help of a database. His work days span from 6:30 AM to 11:30 PM, Monday through Saturday, with Sundays dedicated to scheduling sessions with clients individually. To streamline his clients' fitness journeys, he relies on the FitLog mobile app, using it to monitor their health and fitness goals. Additionally, Justin collaborates with nutritionists to offer tailored diet plans through the FitLog app, ensuring a comprehensive approach to his client's well-being.

Business problem

The new booking web application is poised to address critical business challenges that have been plaguing Justin Eberwein's "Just B Fitness." Firstly, the absence of a dedicated database and the reliance on a manual client management process has led to inefficiencies in scheduling and information management. Justin currently manages a substantial clientele of over 100 clients, and this manual approach has proven to be both time-consuming and prone to errors. **Without a centralized data repository, client information is scattered and challenging to access, update, and utilize effectively. This reduces the overall operational efficiency of the fitness business, increases the risk of scheduling conflicts, and can result in missed appointments and frustrated clients.**

Secondly, Justin's exhaustive working hours, which extend from 6:30 AM to 11:30 PM, Monday to Saturday, present a considerable business challenge. The current booking process consumes his entire Sundays as he schedules sessions individually with clients, and currently uses a third-party app “FitLog” [1] to provide dietary recommendations to his clients. This not only takes a toll on his personal well-being but also limits his capacity to focus on other vital aspects of growing and managing his fitness business. It is unsustainable in the long term, and Justin's dedication to his clients should be channeled into more strategic and growth-oriented activities.

Our way to resolve these problems:

The new booking web application is expected to alleviate the strain on Justin's schedule, allowing him to optimize his time and energy for broader business development while ensuring a more efficient and client-friendly booking process.

The following application will be used by both the admin (Justin) and his clientele. The app will allow clients to create an account, create/cancel a booking based on the admin’s (Justin) availability, and view their booking history. The admin Justin will be able to modify his availability, view all his previous and current bookings, cancel bookings, and view all client information.

---

[1] FitLog is a mobile app for managing coaching that lets businesses make personalized workout plans, meal schedules, supplement recommendations and other things.

Narrative Description

In this phase of our project, we begin to develop a prototype user interface (UI) for Justin Eberwein's "Just B Fitness." Our primary objective is to create a visual representation of the system's front-end, aligning it closely with Justin's expectations and business requirements. This UI development process assumes a central role in facilitating effective communication and collaboration with our client, Justin, granting him an active role in shaping the project from its inception.

The focus of our approach is the simplicity and intimacy of the initial hand-drawn prototype. We aim to foster deep client engagement by sketching the interface on paper in the physical presence of Justin. This tactile experience encourages immediate feedback and empowers him to visualize and influence the design in real-time. With these sketches, we seek to ensure that the UI seamlessly aligns with Justin's vision for his fitness business. It's a collaborative process that puts the client at the forefront, ensuring their needs and expectations are met.

As part of the UI design process, we will establish usability guidelines. These guidelines serve as a compass, ensuring that the UI is user-friendly and intuitive. We understand that a fitness booking system must prioritize user experience. The guidelines will guide us in creating interactive forms and screens that present data in a user-centric manner, deviating from the conventional tabular presentation. Any exceptions to these guidelines will be subject to instructor approval, guaranteeing that usability remains a top priority.

Following the feedback from Justin on the initial prototype, we will transition to a more refined, computer-drawn prototype. For this, we have chosen Figma as our tool of choice. This prototype will hone in on the visual representation of the interface, providing Justin with a clear, polished preview of what the final implementation will look like. It's important to note that this prototype will not include functional components; its purpose is to give our client a vivid impression of the design. We will create several screens, at least five, to showcase the flow of interaction between them.

Our understanding of Justin's needs is continuously evolving through the UI development process. As a result, we will update, add, remove, and modify user stories to ensure they remain reflective of the project's current state and priorities. The story map, which serves as our project's blueprint, will undergo revisions to accommodate these changes and guarantee alignment.

By actively involving Justin in the UI development process, we are committed to not only meeting his requirements but also delivering an exceptional user experience to his clients. This iterative and collaborative approach empowers us to fine-tune the project, ensuring it aligns precisely with Justin's evolving needs and preferences. We are dedicated to crafting a fitness booking system that streamlines operations, optimizes Justin's schedule, and enables him to dedicate more of his energy to the strategic growth of "Just B Fitness."

10 Usability Guidelines

Consistency and Standards:
Design consistency in the dashboard and terminology used across the user interface. This makes it easier for users to predict how different elements behave, and in our case associate the dashboard with commonly used actions.

Editable and Deletable Services(Admin):
For the admin, services (bookings) can be easily updated and deleted within the UI (clicking a button).

Modify Profile Information and Login Credentials (Admin)
The Admin can edit his profile information and login credentials giving him flexibility for the future.

Modify Availability (Admin)
For the admin, availability can be easily updated and modified within the UI (choosing the time slot that was set as available to another time or just removing it).

View Appointments (Admin)
Admin can view a list of all his appointments that can be updated or canceled within the UI(Admin can browse through appointments, search for a client's name using the search bar, and perform various operations.).

Access List of Clients and their Information (Admin)
The Admin can view all clients and from the list, the admin can click a button to go to the selected client and view their contact information, such as name, phone, and email.

Creating an account (New Clients)
Clients must create an account first by inserting the required information for the admin to know more about simplifying data collection and giving the client account permissions.

Editable and forgot password (Clients)
Clients who entered incorrect information can easily edit it on their profile page and if the client can’t access their account they can easily reset it by email.

Online Appointment Booking (Clients)

Clients can book online by creating an account first by inserting the required information and then completing the booking form.

View Bookings and Cancellation (Clients)
Clients can view their bookings by accessing their account first and they can also while viewing their booking cancel their appointment before 48 hours.

Copies of the Prototype Interfaces

Please view this link for the UI mockup:

https://www.figma.com/file/3eup7OQyoSTInq4rPIZqZK/SysDev_GYM?type=design&node-id=0%3A1&mode=design&t=uhUe67AJse9Byl9b-1

Note that we divided the UI into separate interfaces for Login/Register, Client, and Admin

Client’s Comments

The interaction with the client took place through Microsoft Teams, where our main contact person shared their screen to walk Justin through our UI designs, gather feedback, and document necessary modifications. It's important to note that no hand-drawn prototype was presented to the client; we immediately transitioned to creating our first prototype on Figma.

Regarding the client's comments on the first “hand-drawn” prototype, Justin was satisfied with how user-friendly and straightforward the user interface design was. He did express a preference for 2FA (Two-Factor Authentication) for user login, but due to certain limitations or considerations, we opted for sending a code to the client's email for a password reset. Additionally, Justin wanted us to allow the client to input personal information like age, gender, height, weight, and additional notes (related to health conditions or any other relevant information). He also insisted on the ability for clients to change not only their email, phone number, and password but also their full name (in case of typos), in addition to the newly added fields. Furthermore, admin users must also have the capability to modify every field. Additionally, as an optional feature, if our client were to invest in our final prototype, a support/help center would be included. Notably, it would serve as a user guide for client users (including video records or screenshots with instructions) and a disclaimer about professional integrity regarding data protection and account deletion.

As for the client's comments on the "second" prototype, the project was shared directly with Justin, allowing him to review updates at his convenience and communicate directly with our main contact person via text message or phone call. While a significant portion of the changes made were aligned with Justin's initial feedback, we also employed our own insights to further enhance the user experience. These additional changes included the strategic repositioning of buttons to mitigate the risk of accidental clicks, the addition of a notice at the bottom of the booking page to inform clients that they cannot cancel appointments within 24 hours of the scheduled date, and the relocation of search bars to the left side of the UI designs to prevent any conflicts with functional buttons positioned on the right side. Moreover, an adjustment was made to the order of buttons on the admin side, with the 'update' option preceding the 'cancel' option for improved user experience.

Overall, there is no doubt that changes will be inevitable during the implementation phase, given our reliance on an API with which we are not yet familiar. The key is to establish a clear structure to follow and remain committed to the interactive aspects of our prototype. With that said, our client is aware and remains flexible in case any necessary adjustments need to be made from the original plan.

Appendix 1 - Revised User Stories and Tests

*All changes and additions are highlighted in red.

Login/Register interface

	As a	I want to	So that	Test criteria
1.	Client	Register	Client can access the JustBFitness booking application.	**Accepted:** **Given:** The Client wants to register. **When:** The Client provides all required registration information accurately. **Then:** The Client's registration is successfully processed, and they can access the booking application. **Fails:** **Given:** The Client wants to register. **When:** The Client attempts to register but provides incorrect or incomplete information. **Then:** The Client is prompted with a message indicating that their registration attempt was not successful.
2.	Client	Register	Client can access the JustBFitness booking application.	**Accepted:** **Given:** The Client wants to register. **When:** The Client provides all required registration information accurately. **Then:** The Client's registration is successfully processed, and they can access the booking application. **Fails:** **Given:** The Client wants to register. **When:** The Client attempts to register with registration information that matches an existing account in the system. **Then:** The Client is prompted with a message indicating that their registration attempt was not successful because the credentials are already in use by another account.

3.	Client	Login	Client can access their account.	**Accepted:** **Given:** The Client wants to log in. **When:** The Client enters the correct credentials. **Then:** The Client successfully logs in. **Fails:** **Given:** The Client wants to log in. **When:** The Client enters the wrong credentials. **Then:** The Client is prompted with invalid credentials.
4.	Client	Reset password	Client can access their account.	**Accepted:** **Given:** The Client forgets their password. **When:** The Client resets the password by entering the correct identity verification information(email). They are sent a code to this email and prompted to enter the code on the web application. After entering the correct code the Client inputs a new password (twice), and clicks ‘update password’. **Then:** The Client successfully updates the account’s password. **Fails:** **Given:** The Client forgets their password. **When:** The Client resets the password but enters incorrect information **Then:** The Client is prompted with a message indicating that their attempt was not successful.
5.	Client	Logout	Client can securely leave the application by signing out from their account.	**Accepted:** **Given:** The Client is logged into their account. **When:** The Client initiates the logout process by signing out. **Then:** The Client successfully exits the application, and their session is securely ended. **Fails:** **Given:** The Client is logged into their account. **When:** The Client attempts to sign out. **Then:** The Client is prompted with a message indicating that the logout attempt was not successful.

6.	Admin	Login	Admin can access the administrator account.	**Accepted:** **Given:** The Admin wants to log in. **When:** The Admin enters the correct credentials. **Then:** The Admin successfully logs in. **Fails:** **Given:** The Admin wants to log in. **When:** The Admin enters the wrong credentials. **Then:** The Admin is prompted with invalid credentials.
7.	Admin	Reset password	Admin can access their account.	**Accepted:** **Given:** The Admin forgets their password. **When:** The Admin resets the password by entering the correct identity verification information(email). They are sent a code to this email and prompted to enter the code on the web application. After entering the correct code the Admin inputs a new password (twice), and clicks 'update password'. **Then:** The Admin successfully updates the account's password. **Fails:** **Given:** The Admin forgets their password. **When:** The Admin resets the password but enters incorrect information **Then:** The Admin is prompted with a message indicating that their attempt was not successful.
8.	Admin	Logout	Admin can securely leave the application by signing out from their administrator account.	**Accepted:** **Given:** The Admin is logged into their account. **When:** The Admin initiates the logout process by signing out. **Then:** The Admin successfully exits the application, and their session is securely ended. **Fails:** **Given:** The Admin is logged into their account. **When:** The Admin attempts to sign out. **Then:** The Admin is prompted with a message indicating that the logout attempt was not successful.

Client interface

	As a	I want to	So that	Test criteria
1.	Client	Make a booking	Client can reserve a training session	**Accepted:** **Given:** The Client is logged into their account and is on the booking application page. **When:** The Client selects the desired service or product, specifies the details, and confirms the booking. **Then:** The system processes the booking and provides a confirmation message. The booking details will be visible in the Client's account. **Fails:** **Given:** The Client is logged into their account and is on the booking application page. **When:** The Client attempts to make a booking, but there is a technical issue or an error occurs during the process. **Then:** The system displays an error message, indicating that the booking could not be completed.
2.	Client	Confirm Booking	Client can ensure their reservation is valid and confirmed.	**Accepted:** **Given:** The Client has made a booking and is logged into their account. **When:** The Client navigates to the booking section of their account. **Then:** The system displays the booking details, including the booking status (Confirmed) **Fails:** **Given:** The Client has made a booking and is logged into their account. **When:** The Client accesses the booking section of their account, but there is a system error or the booking details do not load. **Then:** The system displays an error message, indicating that the booking information was not retrieved.
3.	Client	Update My Profile	Client can ensure the	**Accepted:** **Given:** The Client is logged into their account.

			security of their account.	**When:** The Client selects the option to update anything in their profile (e.g., change name, age, gender, weight, height, password, email address, and/or additional note). **Then:** The system allows the Client to make the desired changes and confirm that the profile has been updated successfully. **Fails:** **Given:** The Client is logged into their account. **When:** The Client attempts to update their profile, but there is a validation error (e.g., password doesn't meet requirements) or a technical issue. **Then:** The system displays an error message, explaining why the update could not be completed.
4.	Client	View Bookings	Client can check the details of their existing reservations.	**Accepted:** **Given:** The Client is logged into their account. **When:** The Client accesses the booking section of their account. **Then:** The system displays a list of the Client's bookings, including details such as date, time, service/product, and booking status. **Fails:** **Given:** The Client is logged into their account. **When:** The Client attempts to access the booking section of their account, but there is a system error or the booking information is not retrieved. **Then:** The system displays an error message, indicating that the booking details cannot be displayed.
5.	Client	Cancel booking	Client can change their plans or preferences.	**Accepted:** **Given:** The Client is logged into their account and has an existing booking. **When:** The Client navigates to the booking details and selects the option to cancel the booking.

				Then: The system processes the cancellation request and provides a confirmation message. The booking status updates to "Canceled." **Fails:** **Given:** The Client is logged into their account and has an existing booking. **When:** The Client attempts to cancel the booking but encounters restrictions such as disabled buttons for bookings in the past. **Then:** The system displays an error message, explaining why the cancellation could not be completed. This might include reasons like a cancellation deadline has passed or technical errors.

Admin interface

	As a	I want to	So that	Test criteria
1.	Admin	View Bookings	Admin can check clients' reservations	**Accepted:** **Given:** The Admin is logged into their account. **When:** The Admin accesses the list of bookings. **Then:** The system displays a list of the Client's bookings, including details such as date and time, as well as the client's full name and client's ID. **Fails:** **Given:** The Admin is logged into their account. **When:** The Admin attempts to access the booking section of the client account, but there is a system error or the booking information is not retrieved. **Then:** The system displays an error message, indicating that the booking/reservation details cannot be displayed.

2.	Admin	Search for a Specific Booking	Admin can quickly find and manage the booking's information or perform related actions.	**Accepted:** **Given:** The Admin is logged into their account. **When:** The Admin types the booking's ID, the client's name, or the client's ID into the search bar and presses the search button. **Then:** The system displays a list of relevant bookings matching the search criteria. **Fails:** **Given:** The Admin is logged into their account. **When:** The Admin performs a search in the search bar, and no results are found for the entered criteria. **Then:** The system displays a message indicating that no results were found, along with suggestions or tips for refining the search criteria.
3.	Admin	Update Bookings	Admin can make necessary changes or modifications to client's reservations.	**Accepted:** **Given:** The Admin is logged into their account and the client has an existing booking. **When:** The Admin navigates to the Client booking details and selects the option to update the booking. **Then:** The system processes the update request and provides a confirmation message. **Fails:** **Given:** The Admin is logged into their account and the Client has an existing booking. **When:** The Admin attempts to update the client's booking but encounters restrictions for bookings in the past. **Then:** The system disables the action button as it cannot be performed on past bookings
4.	Admin	Cancel Bookings	Admin can cancel any client bookings	**Accepted:** **Given:** The Admin is logged into their account and the client has an existing booking. **When:** The Admin navigates to the Client booking details and selects the option to cancel the booking. **Then:** The system processes the cancellation request and provides a confirmation

				message. The booking status updates to "Canceled." **Fails:** **Given:** The Admin is logged into their account and the Client has an existing booking. **When:** The Admin attempts to cancel the Client booking, but the system encounters an issue or there are restrictions on the cancellation. **Then:** The system displays an error message, explaining why the cancellation could not be completed. This might include reasons like a cancellation deadline has passed or technical errors.
5.	Admin	View Client Info	Admin can view any clients' information	**Accepted:** **Given:** The Admin is logged into their account. **When:** The Admin selects a Client from a list and clicks on their account. **Then:** The system allows the Admin to view all the client information, such as their full names, age, gender, contact information (email and phone number), and additional notes. **Fails:** **Given:** The Admin Is logged into their account. **When:** The Admin attempts to view a Client account, but there is an error or a technical issue that prevents the Admin from viewing a client. **Then:** The system displays an error message, explaining why the client's information could not be retrieved.
6.	Admin	Search for a Specific Client	Admin can search for a specific client in the search bar	**Accepted:** **Given:** The Admin is logged into their account. **When:** The Admin types the client's name or client’s ID into the search bar and presses the search button. **Then:** The system displays a list of relevant clients matching the search criteria. **Fails:**

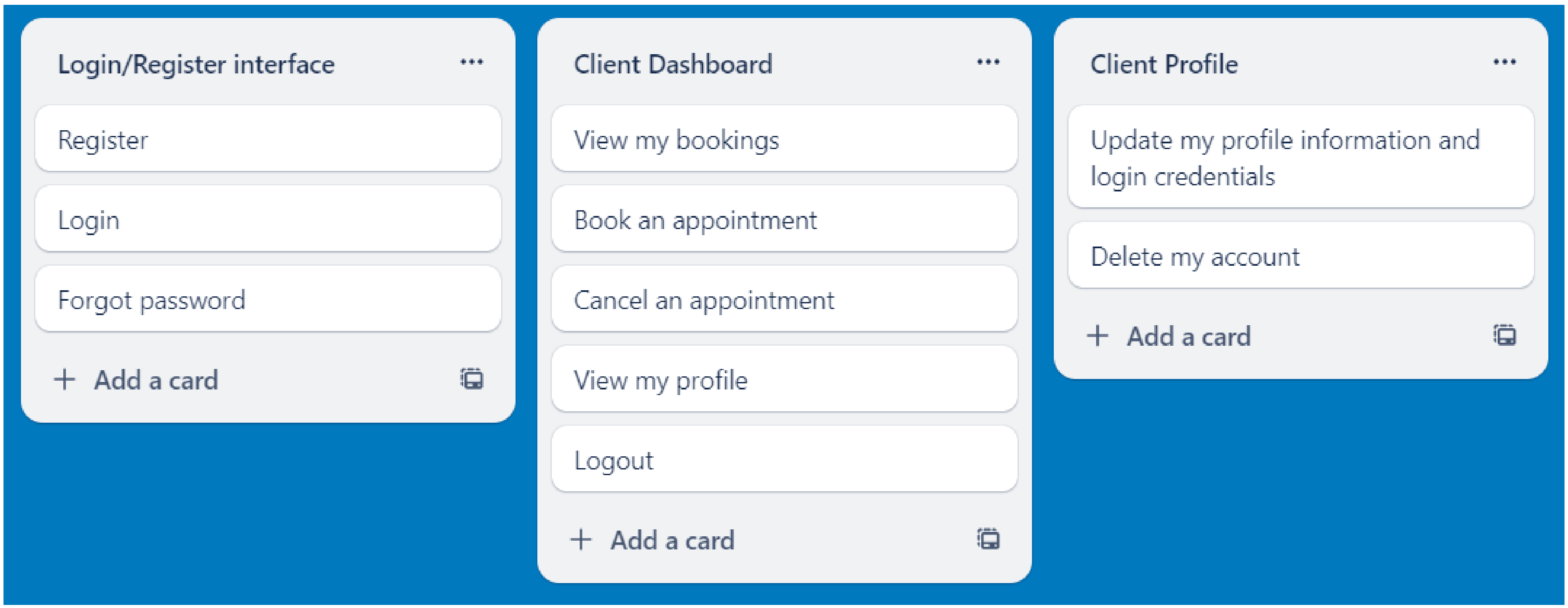
				Given: The Admin is logged into their account. **When:** The Admin performs a search in the search bar, and no results are found for the entered criteria. **Then:** The system displays a message indicating that no results were found, along with suggestions or tips for refining the search criteria.
7.	Admin	Modify Availability	Admin can update their schedules for the clients to book reservations	**Accepted:** **Given:** The Admin is logged into their account. **When:** The Admin accesses the bookings section of the clients' accounts. **Then:** The system displays a list of the Client's bookings, including details such as date and time, as well as the type of service they requested. **Fails:** **Given:** The Admin is logged into their account. **When:** The Admin attempts to access the booking section of the client account, but there is a system error or the booking information is not retrieved. **Then:** The system displays an error message, indicating that the booking/reservation details cannot be displayed.
8.	Admin	Update My Profile	Admin can ensure the security of their account	**Accepted:** **Given:** The Admin is logged into their account. **When:** The Admin selects the option to update anything in their profile (e.g., change name, password, email address, and/or phone number). **Then:** The system allows the Admin to make the desired changes and confirm that the profile has been updated successfully. **Fails:** **Given:** The Admin is logged into their account. **When:** The Admin attempts to update their profile, but there is a validation error (e.g., the password doesn't meet requirements) or a technical issue.

				Then: The system displays an error message, explaining why the update could not be completed.

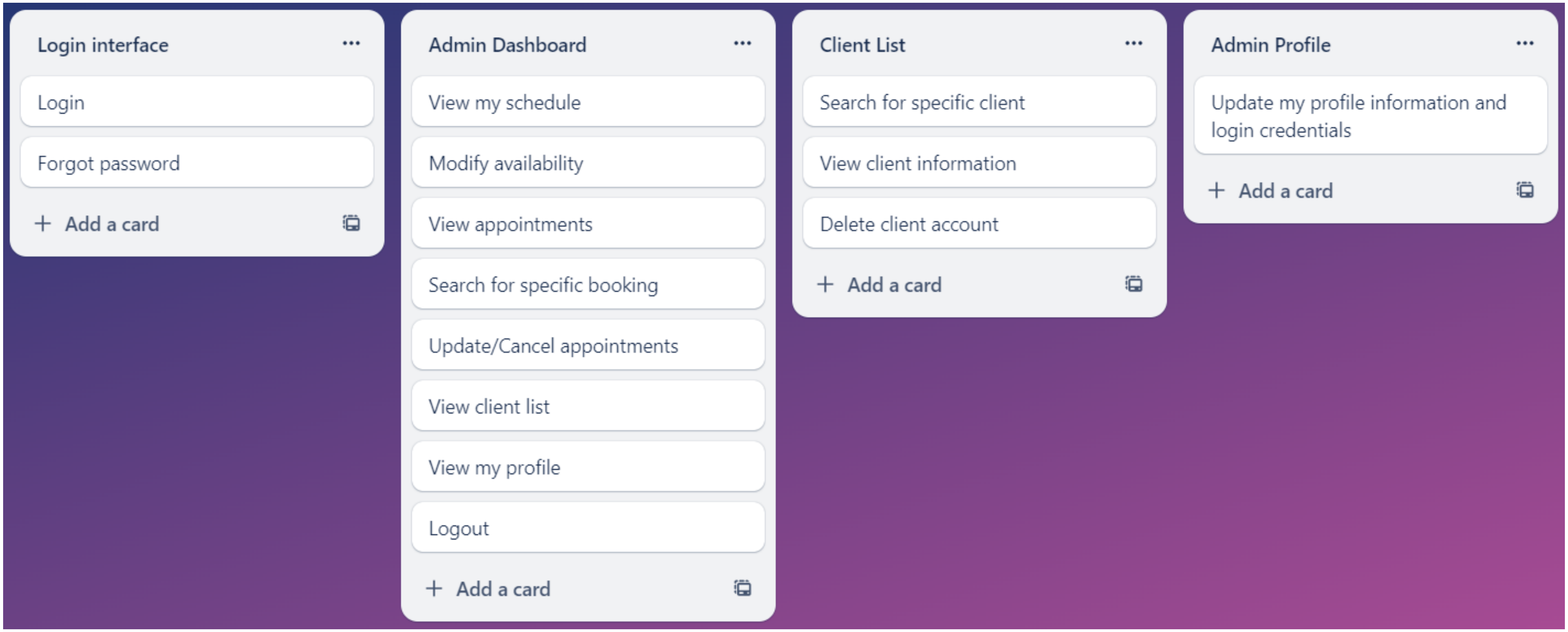
Appendix 2 - Revised Story Map

Link for Story Maps: https://trello.com/b/8TNHWzBs/web

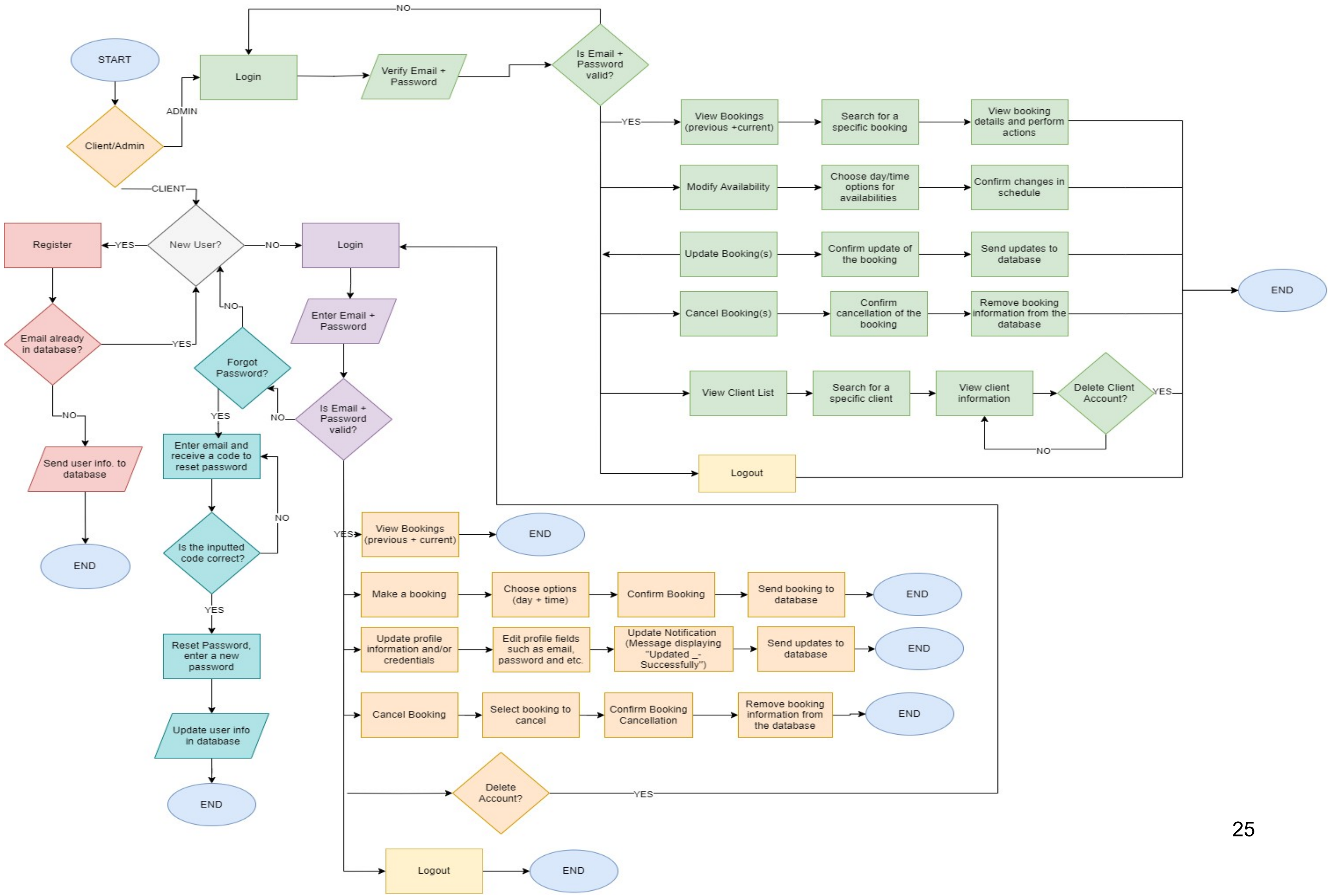
Client interface



Admin interface



Appendix 3 - Revised Flowchart

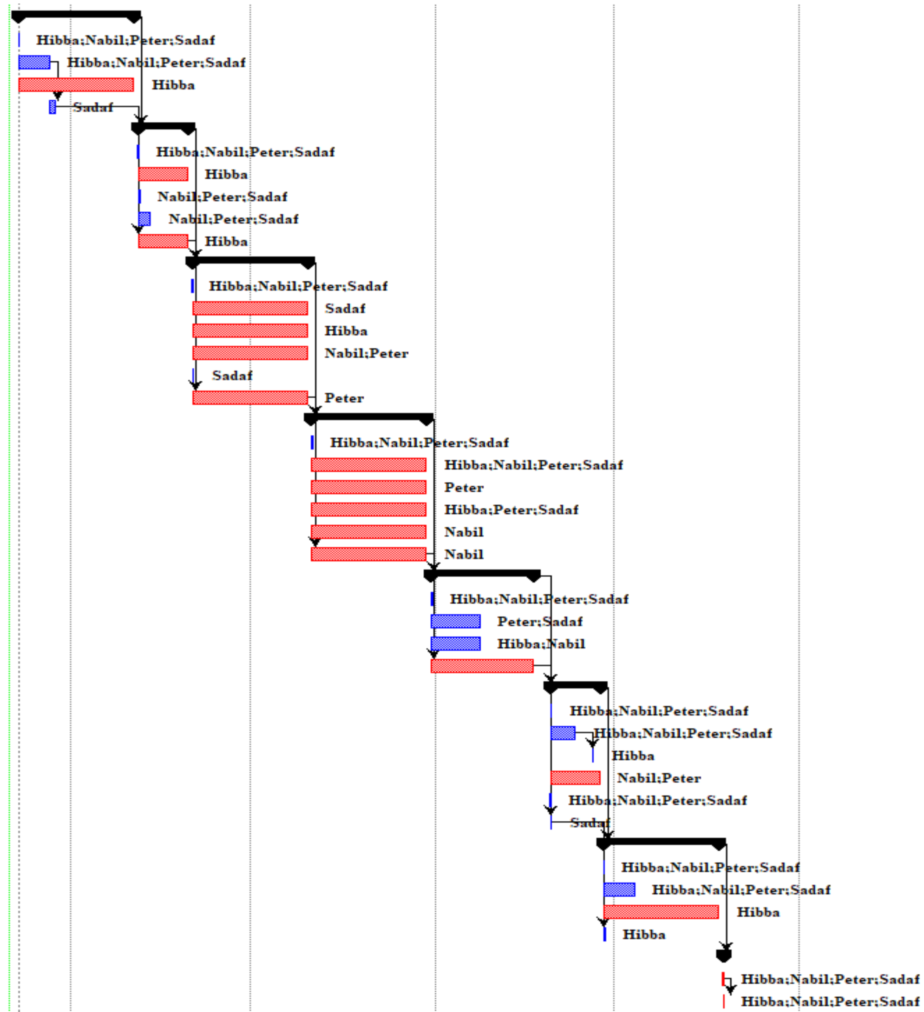


References (APA Style)

Nielsen, J. (1994, April 24). *10 Usability Heuristics for User Interface Design.* Nielsen Norman Group. https://www.nngroup.com/articles/ten-usability-heuristics/

Project Plan

⊟ **Deliverable 1: Planning**	14 days	**23/08/23 8:00 AM**	**11/09/23 5**
Team Planning	0.25 days	23/08/23 8:00 AM	23/08/23 10
Find Client	3.5 days	23/08/23 8:00 AM	28/08/23 1:0
Plan Prototype with Client	14 days	23/08/23 8:00 AM	11/09/23 5:0
Team Lead Presentation 1	1 day	28/08/23 1:00 PM	29/08/23 1:0
⊟ **Deliverable 2: Client Sun**	7 days	**12/09/23 8:00 AM**	**20/09/23 5**
Team Planning	0.25 days	12/09/23 8:00 AM	12/09/23 10
Get Client Summary	7 days	12/09/23 8:00 AM	20/09/23 5:0
Business Domain, Environm	1 day	12/09/23 8:00 AM	12/09/23 5:0
Create Questionnaire	2.333 days	12/09/23 8:00 AM	14/09/23 10
Team Lead Presentation 2	7 days	12/09/23 8:00 AM	20/09/23 5:0
⊟ **Deliverable 3: Use Cases**	14 days?	**21/09/23 8:00 AM**	**10/10/23 5**
Team Planning	0.25 days	21/09/23 8:00 AM	21/09/23 10
Appendix 1: FlowChart	14 days	21/09/23 8:00 AM	10/10/23 5:0
Appendix 2: UML	14 days	21/09/23 8:00 AM	10/10/23 5:0
Appendix 3: Use Cases	14 days	21/09/23 8:00 AM	10/10/23 5:0
Appendix 4: Class Diagram	1 day?	21/09/23 8:00 AM	21/09/23 5:0
Team Lead Presentation 3	14 days	21/09/23 8:00 AM	10/10/23 5:0
⊟ **Deliverable 4: User Stori**	14 days	**11/10/23 8:00 AM**	**30/10/23 5**
Team Planning	1 day	11/10/23 8:00 AM	11/10/23 5:0
Re-Evaluate Requirements	14 days	11/10/23 8:00 AM	30/10/23 5:0
Narrative Description	14 days	11/10/23 8:00 AM	30/10/23 5:0
Appendix 1,2: User Stories	14 days	11/10/23 8:00 AM	30/10/23 5:0
Appendix 3: Story Map	14 days	11/10/23 8:00 AM	30/10/23 5:0
Team Lead Presentation 4	14 days	11/10/23 8:00 AM	30/10/23 5:0
⊟ **Deliverable 5: Database**	14 days	**31/10/23 8:00 AM**	**17/11/23 5**
Team Planning	1 day	31/10/23 8:00 AM	31/10/23 5:0
Design Database	7 days	31/10/23 8:00 AM	08/11/23 5:0
Implement Backend Featur	7 days	31/10/23 8:00 AM	08/11/23 5:0
Team Lead Presentation 5	14 days	31/10/23 8:00 AM	17/11/23 5:0
⊟ **Deliverable 6: Prototype**	7 days?	**20/11/23 8:00 AM**	**28/11/23 5**
Team Planning	1 day	20/11/23 8:00 AM	20/11/23 5:0
Create Prototype	5 days	20/11/23 8:00 AM	24/11/23 5:0
Show Client Prototype	1 day	27/11/23 8:00 AM	27/11/23 5:0
Usability Guidelines	7 days	20/11/23 8:00 AM	28/11/23 5:0
Appendix 1, 2: Revised Us	0.25 days?	20/11/23 8:00 AM	20/11/23 10
Team Lead Presentation 6	1 day	20/11/23 8:00 AM	20/11/23 5:0
⊟ **Deliverable 7: Implemen**	14 days	**29/11/23 8:00 AM**	**18/12/23 5**
Team Planning	0.25 days	29/11/23 8:00 AM	29/11/23 10
Implement All Features	3.5 days	29/11/23 8:00 AM	04/12/23 1:0
Update Client	14 days	29/11/23 8:00 AM	18/12/23 5:0
Team Lead Presentation 7	1 day	29/11/23 8:00 AM	29/11/23 5:0
⊟ **LIA Demonstration**	0.5 days	**19/12/23 8:00 AM**	**19/12/23 1**
Debug and Analyze Probler	0.25 days	19/12/23 8:00 AM	19/12/23 10
Present Project	0.25 days	19/12/23 10:00 AM	19/12/23 1:0



[Link to WBS and Gantt Chart & PDF Version]