

Vanier College
Faculty of Science and Technology
System Development
420-436-VA (Sect. 00001)

Deliverable 02-03

Orange Team

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Signatures

I, Maxime Mir-Orefice (2319522), certify that I contributed to this deliverable. M.M-O

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I, Sen bellotiny Donissaint (2255525), certify that I contributed to this deliverable. S.B.D

I, Trevor Obodoechina (2149315), certify that I contributed to this deliverable. T.O

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Executive Overview

Delivery 2-3 revolved around answering questions that help with coming up with the user stories. We came up with a questionnaire that was used on Sunday September 8, 2024 during a meeting with the client. The deeper comprehension of the business itself was required to be able to write up about the business domain and environment, that being **nail service** business and our client's (**Madeleine Snook**) business state. Information on where the business is done (her home), what should you expect there and a little on her personal life.

Description of the Business Domain

All in all there are 10 types of manicure; a **basic, gel, acrylic overlay, French, American, shellac, paraffin, reverse French, hot stone** and **dip powder**. Manicures are said to be popular due to their therapeutic effect and are pleasing to the eyes. The majority of those manicures take up between 30 to 40 minutes and can last from 1 to 3 weeks. They can be removed with acetone or nail polish remover. It is recommended to contact a professional to have it done or removed in order to prevent harm to the nails. Manicures include the cleaning, clipping, filing and shaping of nails to fit a customer's needs. The cost for a whole basic manicure can range between 15\$ to 25\$, while other manicures that require more work might range between 25\$ to 50\$.

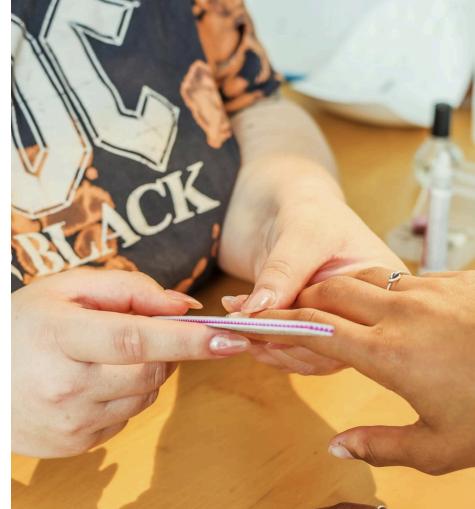
Description of the Business Environment

Madeleine currently operates alone from her home in Lachine. Her business is B2C since she is serving individual people not other businesses. Since she recently started this business she has been keeping track of expenses on pen and paper, she also does not have an extensive amount of services. She also has cats so clients should be privy to this situation due to allergies. She has limited French comprehension and verbal skills.

Competition is fierce in her area. There are already three other nail salons on the street however her prices undercut them due to her experience in the business domain. She does not have an official logo for her business but on the services list she has a very pink and flashy scheme that is made to attract mainly female audiences.

Description of the Client

Madeleine is proficient in computer software for organizing like excel. She is quick to understand technology and has a very positive attitude towards it.



Business Problem

A nail salon can face several challenges such as appointment scheduling issues, lack of reviews, and more. These problems can be resolved by creating a website that is well - defined. This will improve the connection to clients and provide a chance for business growth. One of the most common problems that a nail salon business encounters is lack of exposure. A website could open a wider area to reach new clients. This will not only increase profit but also can bring stability to the business. Another challenge is appointment scheduling issues. Relying on manual booking , such as phone and direct messages, this can cause overbooking or missed appointments that can cause trouble not only for the owner but also the clients. A website can also allow clients to change or cancel appointments without taking any time from the client.

Open Questions and Notes

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- Optional features:
 - AI Chat box; Automatic payment system (Using a separate service apart from banking process)
 - In the admin section, should there be a way to keep track of clients, expenses, etc.?
 - To replace all the paper needs. Yes (Owner should be able to keep track of expenses and keep track of all client info on the website)
 - Just to confirm, if people book on the website, will they pay a 10\$ down payment and then pay the rest in person after the service?
 - Yes
 - Select a color (3 max) or bring your own (Selecting 3 colors from proposed colors and if client brings in their own then it will replace the offered colors. Bringing the count back to 3)
 - Extra 5\$ per appointment outside of her house, max 20 min drive from home. Added amount will be given after service (maybe radius or google maps API)

Questionnaire

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1. What are your desired main features?
 2. What is the main purpose of the website?
 3. How would you like the interface to look?
 4. Do you have any websites that you want to take inspiration from?
 5. What do you mean by color swatches and how should it be implemented?
 6. Payment methods (Cash or online payment)?
 7. For the booking process, should it be a new page or a popup page?
 8. What should the owner be able to do?
 9. Should there be admins? If so, what should they be able to do?
 10. Should there be employees? If so, what should they be able to do?
 11. What should the clients be able to do?
 12. Should there be a way to chat with the client directly on the website?
 13. Should there be an AI chat-bot? Should it be an optional requirement?
 14. Should there be a way for the client to send an email through the website? (Like a Contact Us section) Should there be a confirmation email?
 15. Should there be special discounts, holiday discounts, fidelity points or other advertisements?
 16. Should there be a client login or an email newsletter subscription?
 - a. (If login) Should clients be able to login with Google?
 - b. (If login) What should user accounts be used for?
 - c. (If login) Should the users NEED to login to book an appointment?
 17. Should there be a text and/or email confirmation after booking an appointment?
 18. How do you currently keep track of clients, expenses, etc.
 19. Should we add an allergy warning since Madeleine has three cats?

Questionnaire Answers

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1. Booking system; Making of an account for customers; Model (Reference photos); History of booking; Directly showcase what color swatches there are. The same price is upheld even if the client decides to bring in another nail polish.
 2. Make it easier for clients to book appointments.
 3. There needs to be a parking section. There should be a get to know me page of the owner.
 4. No, what was shown was good
 5. A list of colors in the inventory. Admins should be able to add and remove colors. Should be able to select a color at booking time.
 6. Payment, in person, after the service. Maybe a deposit system
 7. Popup with steps
 8. Edit the images for reviews
 9. Admins should be able to upload reference photos. Should be able to edit reviews.
 10. Admins, owner and clients.
 11. Book; Client is able to bring in their own nail polish in case they have specific swatch in mind;
 12. Contact us page
 13. Yes. Guiding the client; Answering simple questions; Rerouting question to owner if complicated question pops up
 14. Yes
 15. Clients should add their birthday when creating an account. Creation of discounts by the owner. No fidelity points. Advertisements on insta.
 16. A client login process
 - a. Yes
 - b. Keep track of booking history
 - c. No. Even without a login client can book.
 17. Yes. Both options to clients.
 18. Paper
 19. Make the client know of a warning for cat allergies. Booking process included.

Narrative description of the future system/Prototype

The future prototype will have 3 primary roles, being **owner/admin**, **registered client** and **unregistered client**. **Unregistered clients** will be able to view the gallery, see information on the owner and her information and book appointments on the website. The main difference between a registered client and someone who hasn't yet is that a registered client can view and access their history of booking to facilitate booking again. An unregistered client is also given the option of booking an appointment at their home, **if** it is in the 20km radius of the owner's home. Next is the role of the **registered client** who has the ability to do everything an unregistered client can do, write reviews and view their booking history. The client will be able to get a discount if it's their birthday as a benefit of registering. The client is able to bring their own nail polish if they would like, but as there is a limit of three different colored nail polish, their home brought nail polish would count as one of three. The last main role is the **owner/admin**, which in this case would be our current chosen client (Madeleine Snook). Other than all the freedom a registered user has, an owner is able to manipulate the whole website's system, including being able to upload reference photos, edit reviews and upload new swatches to the website. The owner can also add, edit or remove prices of the services. To help with encouraging registering, the owner will upload discounts depending on a client's birthday. Other types of discounts are also possible; E.g. holidays, special events. All users including the owner and registered client must login successfully to access or interact with the system. To successfully login a user must enter an email and password matching the one found in the database. In the case that the user wants to change their password at a later time, they will have to use their current credentials (email). In the separate case of the user having forgotten their password, they will go through almost the same process.

Appendix 1-2

To obtain the user stories, we will have a meeting with the client to ask the questions on the questionnaire as well as some open questions to clarify certain things. Trevor will be leading the conversation as the meeting leader. Janna, Max and Sen will be working together and alternating to take down the minutes, questionnaire answers and arbitrary notes of the meeting. We will optionally be recording the meeting if the client is okay with that. Then with the meeting questionnaire answers and notes we will make the user stories.

User Stories

Unregistered client

Register	
As a	Unregistered client
I want to	Be able to create an account
So that	I can have account benefits
Test criteria	Given that a first name, last name, valid email and valid password are given When the client fills in the form, and then clicks register Then the client is signed in and is redirected to their account page

Login	
As a	Unregistered client
I want to	Be able to login to my account
So that	I can access my account benefits
Test criteria	Given the client is not already logged in and that the email and password match an account When the client puts their email and password, and then clicks login Then the client is signed in and is redirected to their account page

Registered or unregistered client

Booking Date	
As a	Registered or unregistered client
I want to	Be able to select a booking date
So that	I can schedule an appointment
Test criteria	Given when there are no other bookings at that time When the client selects a date and time, and then clicks next Then the client is redirected to the service page of the booking process

Booking Service	
As a	Registered or unregistered client
I want to	Be able to select a service(s)
So that	I can choose what type of service I want for my appointment
Test criteria	Given that the client selected the “At Home” service When the client selected their service(s), and then clicks next Then the client will be redirected to the address page of the booking process Given that the client did not select the “At Home” service When the client selected their service(s), and then clicks next Then the client is redirected to the nail color page of the booking process

Booking Address	
As a	Registered or unregistered client
I want to	Be able to select my home address
So that	I can have an appointment at my own house
Test criteria	Given that the client filled in a valid address and that the address is less than 20 minutes away from the owner’s house When the client entered their address, and then clicked next Then the client is redirected to the nail color page of the booking process

Booking Nail Color	
As a	Registered or unregistered client
I want to	Be able to select color(s)
So that	I can choose the color(s) of my nails for my appointment
Test criteria	Given that the client selects between 1 and 3 colors and that they are available in the database When the client selects color(s) and clicks next Then the client is redirected to the deposit page of the booking process.

Booking Deposit	
As a	Registered or unregistered client
I want to	Pay the \$10 deposit
So that	I can complete my appointment
Test criteria	Given that the client has a valid date, time, service(s) and color(s) When the client clicks Pay Then the client is redirected to the square page to pay the \$10 booking fee and then is redirected to the confirmation page of the booking process

Booking Confirmation	
As a	Registered or unregistered client
I want to	Confirm my appointment
So that	I can receive reminders
Test criteria	Given that the client paid the \$10 deposit, entered a valid email and/or phone number When the client enters their email and/or phone number Then the client's appointment will be saved, they will receive a confirmation by email and/or phone number and the owner will be notified by email and text message of the new appointment

AI Chat Bot	
As a	Registered or unregistered client
I want to	Be able to chat with an AI chatbot
So that	I can be directed through the website easily
Test criteria	Given that the AI can answer the question When a client enters a question, and then clicks enter Then the chatbot will respond to the client's question

Contact Us	
As a	Registered or unregistered client
I want to	Send email to the admin
So that	I can email the owner for questions
Test criteria	Given that a message, email, first name and last name are given and that the given email is valid When they fill the form, and then clicks send Then the email will be sent to the owner and a confirmation popup will appear.

Registered client

Appointment History	
As a	Registered client
I want to	See my booking history and pictures of each appointment
So that	I can use it as reference in case I want the same thing again
Test criteria	Given that the client has appointments previous or future When the client goes to their appointment history page Then the client can view a list of their appointments

Receiving Birthday coupon	
As a	Registered client
I want to	Have a birthday discount
So that	I can pay less on my birthday
Test criteria	Given that the current date is less than a week away from the client's birthday When the client is booking an appointment Then the client and owner will be notified of the birthday discount

Leaving a Review	
As a	Registered client
I want to	Be able to leave a review
So that	I can share my experience
Test criteria	Given that the client has had a previous appointment When the client enters a review and optionally a picture, and then clicks Submit Then the review will be posted on the website

Update Password	
As a	Registered client
I want to	Be able to update my password
So that	I can secure my account
Test criteria	Given that the new password is valid When the client enters their current and new password, and then clicks update Then the password will be updated in the database

Forgot Password	
As a	Registered client
I want to	Be able to update my password if I forgot it
So that	I can access my account
Test criteria	Given that user forgets their password When the client clicks on the email link they will be redirected to create a new password Then the password will be updated in the database

Update Email	
As a	Registered client
I want to	Be able to update my email
So that	I can update important credentials
Test criteria	Given that the new email is valid When the client enters their current and new email, and then clicks update Then the email will be updated in the database

Logout	
As a	Registered client
I want to	Be able to logout of my account
So that	No one else can use my account
Test criteria	Given the client is already logged in When the client clicks logout Then the client is logged out and gets redirected to the home page

Delete Account	
As a	Registered client
I want to	Be able to delete my account
So that	I have no connections with the client
Test criteria	Given when the client wants to delete their account When the user selects delete my account and enters their password to confirm and it matches the one in the database Then the clients account is deleted from the database

Owner

Add and remove nail colors	
As a	Admin
I want to	Be able to remove/add nail colors
So that	Clients can pick what is in the inventory

Test criteria	<p>Given that the color is not already in the list of colors When the owner adds the color, and then clicks Submit Then the color will be added to the list of colors</p> <p>Given that the color is already in the list of colors When the owner removed the color, and then clicks Submit Then the color will be removed from the list of colors</p>
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Changing the photo uploaded by the client	
As a	Admin
I want to	Be able to change the review photo uploaded by the client
So that	So that a better photo is shown to the public
Test criteria	<p>Given that a photo is not already uploaded by the client When the owner uploads a new photo, and then clicks submit Then the photo will be set</p> <p>Given that a photo is already uploaded by the client When the owner uploads a new photo, and then clicks submit Then the photo will be replaced</p>

Bibliography

Lapolla, B. (2023, July 21). From gel to acrylic: Here's your official guide to every type of manicure. *PureWow*. <https://www.purewow.com/beauty/manicure-guide>

Penrose, N. (2023, February 28). A Very Detailed Guide to Every Type of Manicure. *Elle*. <https://www.elle.com/beauty/a28855339/manicures-types/>

Project Plan

ID	Task Name	Duration	Start	End	Primary Resource Names
1	System Development Orange Team	52 days	Mon 1/17/24	Fri 4/26/24	
2	Deliverable 1: Planning	5 days	Fri 1/20/24	Fri 1/26/24	
3	Team assessment	1.5 hours	Fri 1/20/24	Fri 1/20/24	Jenna,Max,Sen,Trevor
4	Meet a client	20 minutes	Fri 1/20/24	Fri 1/20/24	3 Trevor
5	Discuss with client	1 hr	Fri 1/20/24	Fri 1/20/24	4 Trevor
6	Outline Deliverable 1	1 hrs	Fri 1/20/24	Fri 1/20/24	5 Max,Sen,Jenna,Trevor
7	Team Leader duties	1 hr	Fri 1/20/24	Fri 1/20/24	6 Trevor
8	Develop Deliverable 1 plan	1 hr	Fri 1/20/24	Fri 1/20/24	7 Jenna,Max,Sen,Trevor
9	Delivery Time and Work Progress	1.5 days	Fri 1/20/24	Thu 1/26/24	
10	Deliverable 2: Client and business	5 days?	Fri 1/20/24	Fri 1/26/24	2
11	Prepare New Questions	2 hrs	Fri 1/20/24	Fri 1/20/24	Trevor,Max,Sen
12	Create Interface Protocols	1 day?	Fri 1/20/24	Mon 1/22/24	14 Jenna
13	Meet Client	1 hr	Fri 1/20/24	Fri 1/20/24	14 Jenna,Anna,Max,Sen
14	Organize Notes and Deliver	2 hrs	Fri 1/20/24	Fri 1/20/24	13 Max,Sen
15	Finalize Deliverable 2	3 hrs	Fri 1/20/24	Fri 1/20/24	14 Sen,Trevor
16	Team Leader duties	3 hrs	Fri 1/20/24	Fri 1/20/24	15 Anna,Sen
17	Develop Deliverable 2 plan	1 hr	Fri 1/20/24	Fri 1/20/24	16 Jenna,Max,Sen,Trevor
18	Delivery Time and Work Progress	4 days	Fri 1/20/24	Fri 1/26/24	17
19	Deliverable 3: User Stories	5 days	Fri 1/20/24	Fri 1/26/24	18
20	Prepare New Questions	1 hr	Fri 1/20/24	Fri 1/20/24	Trevor
21	Organize Features and Deliver	2 hrs	Fri 1/20/24	Fri 1/20/24	20 Jenna,Max,Sen,Trevor
22	Listing of User Stories	1 hr	Fri 1/20/24	Fri 1/20/24	21 Max
23	Finalize Deliverable 3	2 hrs	Fri 1/20/24	Fri 1/20/24	22 Jenna,Max,Sen,Trevor
24	Team Leader duties	1 hr	Fri 1/20/24	Fri 1/20/24	23 Anna,Sen
25	Develop Deliverable 4 plan	1 hr	Fri 1/20/24	Fri 1/20/24	24 Jenna,Max,Sen,Trevor
26	Delivery Time	4 days	Fri 1/20/24	Fri 1/26/24	25
27	Deliverable 4: Use Cases and UML Diagrams	15 days	Fri 1/20/24	Mon 1/27/24	19
28	Use Cases	1 hr	Fri 1/21/24	Fri 1/21/24	Jenna,Trevor
29	Design Diagrams	3 hrs	Fri 1/21/24	Fri 1/21/24	36 Max,Sen
30	Finalize Deliverable 4	2 hrs	Fri 1/21/24	Fri 1/21/24	39 Jenna,Max,Sen,Trevor
31	Team Leader duties	3 hrs	Fri 1/21/24	Fri 1/21/24	39 Sen
32	Develop Deliverable 5 plan	2 hrs	Fri 1/21/24	Fri 1/21/24	33 Jenna,Max,Sen,Trevor
33	Delivery Time	1.5 days	Fri 1/21/24	Mon 1/27/24	34
34	Deliverable 5: Database Design	10 days	Fri 1/24/24	Fri 1/24/24	27
35	ER Diagram	2 hrs	Fri 1/24/24	Fri 1/24/24	41 Max,Trevor
36	Design Database	4 hrs	Fri 1/24/24	Fri 1/24/24	35 Anna,Sen
37	Finalize Deliverable 5	2 hrs	Fri 1/24/24	Fri 1/24/24	36 Jenna,Max,Sen,Trevor
38	Team Leader duties	1 hr	Fri 1/24/24	Fri 1/24/24	37 Max
39	Develop Deliverable 6 plan	2 hrs	Fri 1/24/24	Fri 1/24/24	48 Jenna,Max,Sen,Trevor
40	Delivery Time	10 days	Fri 1/24/24	Mon 1/27/24	49
41	Deliverable 6: Prototype UI and Client Comments	5 days	Fri 1/24/24	Mon 1/27/24	28
42	Design Prototype Interface	5 hrs	Fri 1/25/24	Fri 1/25/24	Jenna,Max,Sen,Trevor
43	Meet Client	2 hrs	Fri 1/25/24	Fri 1/25/24	42 Trevor
44	Review Prototype Interface	3 hrs	Fri 1/25/24	Fri 1/25/24	43 Anna,Sen
45	Outline Deliverable 6	2 hrs	Fri 1/25/24	Fri 1/25/24	44 Jenna,Max,Sen,Trevor
46	Team Leader duties	1 hr	Fri 1/25/24	Fri 1/25/24	45 Trevor
47	Develop Deliverable 7 plan	2 hrs	Fri 1/25/24	Fri 1/25/24	46 Jenna,Max,Sen,Trevor
48	Delivery Time	3 days	Fri 1/25/24	Mon 1/27/24	47
49	Deliverable 7: Implementation and Client Comments	15 days	Fri 1/26/24	Mon 1/27/24	51
50	Program Project	6 hrs	Fri 1/26/24	Fri 1/26/24	Jenna,Max,Sen,Trevor
51	Test and Debug	2 hrs	Fri 1/26/24	Fri 1/26/24	50 Anna,Sen
52	Meet Client	2 hrs	Fri 1/26/24	Fri 1/26/24	51 Trevor
53	Implement Changes and Refactor	6 hrs	Fri 1/26/24	Fri 1/26/24	52 Anna,Max,Sen,Trevor
54	Test and Debug	2 hrs	Fri 1/26/24	Fri 1/26/24	53 Max,Trevor
55	Design Documentation	1 hr	Fri 1/26/24	Fri 1/26/24	54 Anna,Sen
56	Deploy	8 hrs	Fri 1/26/24	Fri 1/26/24	55 Max,Trevor
57	Finalize Deliverable 7	2 hrs	Fri 1/26/24	Fri 1/26/24	56 Anna,Max,Sen,Trevor
58	Team Leader duties	1 hr	Fri 1/26/24	Fri 1/26/24	57 Trevor
59	Delivery Time	1.5 days	Fri 1/26/24	Mon 1/27/24	58