



MILESTONE 8

SOLUTION SEEKERS

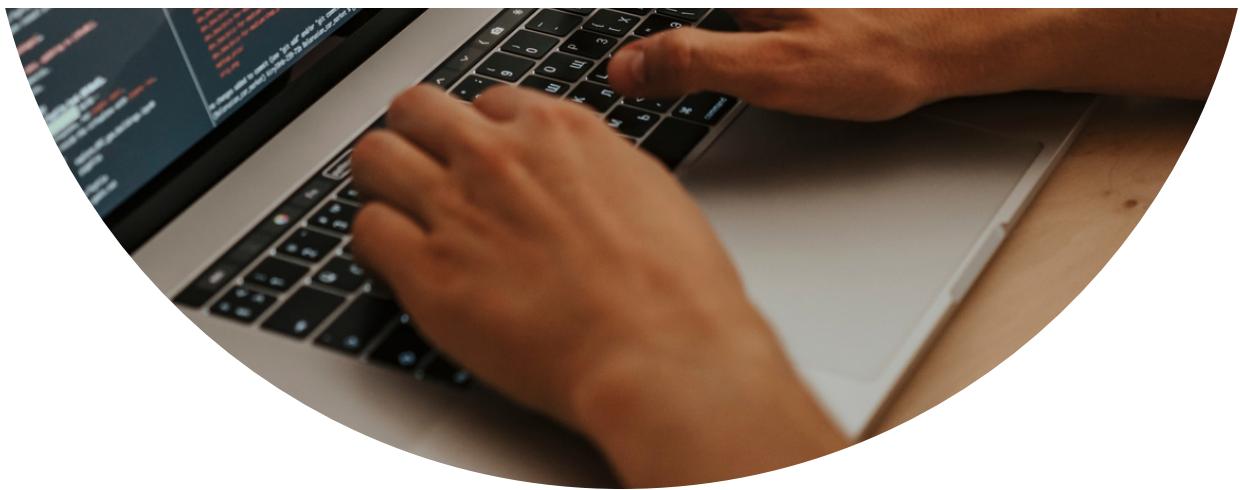


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MEET OUR MEMBERS



BRADLEY PIKE

FRONT END DEVELOPER &
CONTACT REPRESENTATIVE

Bradley Pike serves as our main point of contact between the client and our team. He is responsible for coordinating meetings, as well as building a strong client relationship.

Bradley.Pike@lethbridgecollege.ca



ROBEE LOU DIAZ

BACK END DEVELOPER LEAD

Robee Lou Diaz is responsible for the development of our system. He specializes in programming and coding. Robee guarantees our project concept comes to life.

Robee.Lou.Diaz@lethbridgecollege.ca



IRAH LORETO

HARDWARE SPECIALIST

Irah Lorteo specializes in hardware related tasks. He focuses on the technical side of the system ensuring everything runs smoothly.

Irah.Loreto@lethbridgecollege.ca



NATE LAPOINTE

TEAM LEAD

Nate Lapointe guides the team by ensuring that all members are on track with the client's goals. He is also first to resolve any team conflict.

Nathan.Lapointe@lethbridgecollege.ca



WANATDA PHENGPHONEKEO

DOCUMENTATION LEAD

Wanatda Phengphonekeo handles documentation. She is responsible for project reports, project updates, UX design, and documentation between the client.

Wanatda.Phengphonekeo@lethbridgecollege.ca

Stephen Graham is our client.

He is a long time instructor at the Lethbridge College who teaches courses for the Computer Information Technology program.

More specifically, he is in charge of managing the practicum program for his students in the CIT 2271 – Field Work course.

Stephen's Business involves connecting students with employers for co-op work experiences, managing agreement forms, timesheets, and self evaluations.

Our team, Solution Seekers, have been given the opportunity to work closely with Stephen to develop a practicum tracking system tailored to his business needs.



3000 College Dr. S, Lethbridge, AB T1K 1L6

Stephen.Graham@lethbridgecollege.ca

403-320-3200 ext. 5794

MILESTONE 8 OVERVIEW

Welcome to Milestone 8

This is where our team focused on the Coding & Testing of our clients' system. Meaning we coded out the user interface navigation, connected the database to the system, and divided up work for the front end and back end developers.

Here is a brief overview of some other things you can expect to find throughout this document:

- **Testing Plan:** We will be exploring 3 different types of testing methods: Integration, System, and Acceptance.
- **Expected Results:** Using our Testing Plan to examine our failed results and what was to be expected.
- **Coding Experience:** A shared experience of our groups coding journey.
- **Lessons Learned Update:** Reflection of lessons learned up to this Milestone.

TESTING PLAN TEMPLATE

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
TEST DESCRIPTION	TEST DESIGNED BY	TEST EXECUTED BY	EXECUTION DATE			
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES

During our Testing Plan you will notice that we use this template to help us reference our user testing.

INTEGRATION TEST:

LOGIN PAGE

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
Login Page	High	001	1	02/23/2024		
TEST DESCRIPTION		TEST DESIGNED BY	TEST EXECUTED BY	EXECUTION DATE		
Testing the Login Page to see if all actions performed are working		Robee	Robee	02/25/2024		
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES
1	Entering in the User Credentials and seeing if it will bring you to the right dashboard based on your access	02/23/2024	Putting in the correct credentials will bring you to your respective dashboard	It works. Except all Users have access to all Admin rights	P	Simple fix
2	Testing if the Hidden/Unhidden Password Feature works	02/23/2024	When the User clicks the Password Icon it will show their password or the *** version	The feature worked.	P	Need to fix the height and weight so it matches the field boxes.
3	Forgot Password Feature	02/23/2024	Clicking Forgot Password will send Stephen an email that lets him know to reset a Students Password to default	Doesn't work	F	This still needs to be implemented
4	If a User enters an incorrect email or an incorrect password	02/23/2024	Putting in the incorrect credentials will have an error message pop up	It works.	P	

Here are the UI tests we have done for the Login Page.

INTEGRATION TEST: NAVIGATION BAR

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
Navigation Bar	High	002	2	02/23/2024		
TEST DESCRIPTION	TEST DESIGNED BY	TEST EXECUTED BY	EXECUTION DATE			
Testing the Navigation Side Bar	Wanatda	Bradley	03/01/2024			
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES
1	Checking if the Navigation Bar works	03/01/2024	When a user clicks on one of the pages in the Nav Bar it brings them to the page	It works.	P	Some pages still need to be created/linked to
2	Testing Log Out Feature (1)	03/01/2024	When User Logs Out does it redirect them to the main page	It worked. The User was able to Log Out	P	
3	Testing Log Out Feature (2)	03/01/2024	When a User Logs Out, clicking the back page won't bring them to the dashboard. It will only show the Login Page	Didn't work. When a User Logs Out and presses the back arrow, it redirects them back to the dashboard.	F	This still needs to be implemented
4	Hovering over the Nav Bar to highlight what page you are on	03/01/2024	When hovering over what page you want to access on the Nav, theres a colour indicator	It works.	P	

Here are the UI tests we have done for the Navigation Bar.

INTEGRATION TEST: RESPONSIVE DESIGN

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
Layout Design	Medium	003	3	03/09/2023		
TEST DESCRIPTION	TEST DESIGNED BY	TEST EXECUTED BY	EXECUTION DATE			
Testing the layout functionality	Nate	Nate	03/10/2024			
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES
1	Testing the different screen sizes	03/09/2023	If a User views the system on Mobile the pages are automatically scaled	Nav Bar, Dashboard, Students and Employers page do too. Need to fix the Time Sheet, Job Posting, and Documents.	F	
2	Testing the Text Scaling	03/09/2023	Text scales are readable without the need for zooming in.	All text is scalable. No need for zooming because font size is large enough to read.	P	
3	Testing Modals	03/09/2023	All modals are centered to the screen	All modals in the Practicum Forms, Job Posting, Student/Employer, Time Sheet and Documents were centered	P	
4	Testing on different Browsers	03/09/2023	System works on different browsers: Chrome, Firefox, Opera	It works.	P	
5	Testing System Performance	03/09/2023	Loading times were fast, no crashes when accessing multiple pages.	It works. Found nothing wrong.	P	

Here are the UI tests we have done to check if the System is compatible with being a Progressive Web Design. We also tested the Performance and Screen Modals.

INTEGRATION TEST: ERROR HANDLING

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
Error Handling	High	004	4	03/06/2024		
TEST DESCRIPTION		TEST DESIGNED BY	TEST EXECUTED BY	EXECUTION DATE		
Correct error messages		Irah	Irah	03/08/2024		
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES
1	Testing the Feedback Loop	03/08/2024	When deleting something a confirmation message will pop up	Confirmation messages do pop up.	F	
2	Testing mandatory fields	03/08/2024	Fields that are mandatory are marked	In the Student/Employer pages the fields are mandatory but not in the Practicum Forms	F	
3	Character Limits for Field input	03/08/2024	Testing character limits on all areas that have a field input	Works on the Job Postings, Students/Employer pages. But not on the Practicum Form pages	F	

Here are the UI tests we have done for Error Handling.

INTEGRATION TEST: ACCOUNT CREATION

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
Student/Employer Account Creation	High	005	5	02/24/2024		
TEST DESCRIPTION	TEST DESIGNED BY	TEST EXECUTED BY		EXECUTION DATE		
Student and Employer Account Creation Functionality	Robee	Robee		02/25/2024		
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES
1	Testing Student Account Creation	02/24/2024	When the admin creates a Student account will those credentials login to the student dashboard	Yes.	P	
2	Testing Employer Account Creation	02/24/2024	When the admin creates an Employer account will those credentials login to the student dashboard	Yes, the feature worked as expected.	P	
3	Testing delete Student Accounts	02/24/2024	Admin can delete student accounts which deletes their credentials	Feature worked as expected. Admin can successfully delete student accounts.	P	
4	Testing delete Employer Accounts	02/24/2024	Admin can delete Employer accounts which deletes their credentials	Admin can successfully delete Employer accounts.	P	
5	Testing Student and Employer View Pages	02/24/2024	Admin can view the information/profile of Student and Employers	NULL	F	On the Employer View Page only some information is listed not all
6	Testing Student and Employer Update Changes	02/24/2024	Ability to change field input information once submitted	Admin can successfully update/edit any of the fields in the Employer and Student accounts	P	

Here are the UI tests we have done for the Navigation Bar.

INTEGRATION TEST: JOB POSTINGS

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
Job Postings	High	006	6	03/09/2024		
TEST DESCRIPTION	TEST DESIGNED BY	TEST EXECUTED BY	EXECUTION DATE			
Job Posting Functionality	Irah	Irah	03/11/2024			
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES
1	Admin and Employer can CRUD Job Postings	03/09/2024	Admin and Employer can CRUD Job Postings	All CRUD functionality works	P	
2	Employers viewing created Job Postings	03/09/2024	Employers can only view their own Job Postings that they created	Employers can see all Job Postings created	F	
3	Students viewing Job Postings	03/09/2024	Students can view all Job Postings created	Students have the Admin rights and can CRUD Job Postings	F	This still needs to be implemented
4	Testing the Job Posting Apply and Print Button for the Student	03/09/2024	When a Student views a Job Posting they can "apply" or "print" the Job Posting	Students can view a Job Posting but the apply or print button don't work	F	
5	Testing the Archive and Restore Functionality	03/18/2024	Admin can archive and restore Job Postings	Functionality Works	P	
6	Testing Applicants Feature	03/14/2024	Admin can view how many applicants have applied to a Job Posting when clicking the "Apply" button	Feature doesn't work because the Student dashboard isn't set up yet. Currently no applicants have applied.	F	This feature is half-set up. In the database it recognizes that there are no applicants applied - yet.

INTEGRATION TEST: PRACTICUM FORMS

TEST TITLE	PRIORITY	TEST CASE ID	TEST NUMBER	TEST DATE		
Practicum Forms	High	005	5	03/13/2024		
TEST DESCRIPTION	TEST DESIGNED BY	TEST EXECUTED BY		EXECUTION DATE		
Practicum Forms Functionality	Wanatda	Wanatda		03/15/2024		
TEST ID	TEST DESCRIPTION	TEST DATE	EXPECTED RESULTS	ACTUAL RESULTS	PASS/FAIL	NOTES
1	Student Practicum Forms Submit Button	03/15/2024	A student can fill out a practicum form and submit it into the database	Student can fill out a practicum form and the submit button does nothing	F	
2	Storage of Practicum Forms	03/15/2024	Admin can view Student and Employer submitted forms	It's currently hard coded right now but the feature is yet to be implemented	F	
3	Cancel Buttons on Practicum Forms	03/15/2024	Cancel buttons work on all Forms	Cancel buttons work on all Forms	P	
4	Auto-Save of Practicum Form Information	03/15/2024	When filling out a form if a user accidentally clicks cancel, their information is already saved	This feature works on all Forms	P	
5	Correct TAB Order Practicum Forms	03/15/2024	Clicking TAB on all the forms follows the correct order from top-bottom	Clicking TAB on all the forms follows the correct order from top-bottom	P	
6	Auto Populate of Practicum Forms	03/21/2024	Students and Employers can have certain fields in the forms auto-populated	No auto-populate feature implemented as of yet. Just empty fields.	F	On Robee's private branch this feature works but it has yet to be merged

Here are the UI tests we have done for the Navigation Bar.

SYSTEM TESTING: PEER REVIEW FEEDBACK

For our Peer Review Testing we were reviewed by Strong System Solutions.

We gave them a custom template to fill out.

Here is an overview of their comments regarding our system:

STRONG SYSTEM SOLUTIONS

NAME: Auron Emard

1. Did you personally think that the code was well-documented with comments so that it was easy to understand?

- Not many comments from what I could see, but the comments I found were helpful towards what the block of code would do.

2. Is there exception handling for errors and does it cover the more complicated areas of the program?

- user errors like repeating emails and non matching passwords are addressed.
- not much error checking in code

3. Is there proper logging in the system?

- addressed but not yet implemented.

4. Is the code over complicated? Was there too much documentation?

- I would say not enough documentation - code was not overly complex. Even if it is complex, the user is not going to see it.

SYSTEM TESTING: PEER REVIEW FEEDBACK

For our Peer Review Testing we were reviewed by Strong System Solutions.

We gave them a custom template to fill out.

Here is an overview of their comments regarding our system:

5. How is the overall performance of the system? Are there specific features in the program that could be more efficient?

- If the passwords don't meet the requirements, it sends you to the previous screen, which can be inconvenient. It should stay on that screen

6. Are there any security concerns? Ex: SQL injection, User information Storage (Passwords+Hashing), etc?

- overflow - allows for a lot of characters when making new users-caused the view to be weird
- student dashboard can add job posting, has been addressed.
- most recent emails are seen on login, could be a security issue
- no deletion or addition of admin users through dashboard.
- any employer can delete any job posting - addressed and not implemented yet.

7. Did you feel that there were too many extra steps to do certain tasks? If so, what things felt inconvenient?

- it does not tell you the requirements for a password and sometimes does not give error messages.

8. Any advice for our system? Any Cosmetic, Operational, or Client Requirements Advice?
criticism is welcomed

- telling the user what's required for a password, or all fields in general, including min-max characters.
- adding more to dashboard, not all data is there yet, use the space!
- not all client requirements are met yet (from what we can see) like student cover letters, timetables, etc.
- overall very good looking project so far! layout and design is nice looking and easily understandable. I look forward to seeing the final product.

SYSTEM TESTING: PEER REVIEW FEEDBACK

For our Peer Review Testing we were reviewed by Strong System Solutions.

We gave them a custom template to fill out.

Here is an overview of their comments regarding our system:

STRONG SYSTEM SOLUTIONS	
NAME:	JoeyGiesbrecht
1. Did you personally think that the code was well-documented with comments so that it was easy to understand?	
Yes code was very well written and spaced out which made it very easy to understand. Did not see a lot of comments on the code but I'm sure that will be added later on.	
2. Is there exception handling for errors and does it cover the more complicated areas of the program?	
There was no error handling for things like having too many characters in certain fields but that is a very easy fix.	
3. Is there proper logging in the system?	
There was no logging.	
4. Is the code over complicated? Was there too much documentation?	
No the code was not over complicated, very easy to understand	

SYSTEM TESTING: PEER REVIEW FEEDBACK

For our Peer Review Testing we were reviewed by Strong System Solutions.

We gave them a custom template to fill out.

Here is an overview of their comments regarding our system:

5. How is the overall performance of the system? Are there specific features in the program that could be more efficient?

Overall the system performed very well, it did what it needs to do and also looks nice so no complaints from me.

6. Are there any security concerns? Ex: SQL injection, User information Storage (Passwords+Hashing), etc?

If you put too many characters the user screen gets really wonky, and also students can create job listings which is something only the admin should be able to do.

7. Did you feel that there were too many extra steps to do certain tasks? If so, what things felt inconvenient?

No i dont think so. Everything was very streamlined and definitely makes things as easy as possible for anyone using it.

8. Any advice for our system? Any Cosmetic, Operational, or Client Requirements Advice?
criticism is welcomed

I really like how the system looks, looks very professional and minimalist. If you just fix some of the issues mentioned in some of the above questions I think it will turn out to be a great solution for this system.

SYSTEM TESTING: PEER REVIEW FEEDBACK

For our Peer Review Testing we were reviewed by Strong System Solutions.

We gave them a custom template to fill out.

Here is an overview of their comments regarding our system:

STRONG SYSTEM SOLUTIONS

NAME: Hailey Park

1. Did you personally think that the code was well-documented with comments so that it was easy to understand?

I would say that the code was well formatted which makes it easy to read and follow. I do think some more comments could be used to help understand some of the more complex areas of code, there was very minimal comments.

2. Is there exception handling for errors and does it cover the more complicated areas of the program?

There is some exception handling such as when they try to insert an email already used, or if the passwords do not match. However there can definitely be more exception handling added such as setting a max number of characters in a field, etc.

3. Is there proper logging in the system?

N/A

4. Is the code over complicated? Was there too much documentation?

I would not say that the code is over complicated, the code that is needed is there and it works. Some code does seem complex so it could use more documentation to help people reading it understand what's happening. However I would say there is not enough documentation and more comments could definitely be added.

SYSTEM TESTING: PEER REVIEW FEEDBACK

For our Peer Review Testing we were reviewed by Strong System Solutions.

We gave them a custom template to fill out.

Here is an overview of their comments regarding our system:

5. How is the overall performance of the system? Are there specific features in the program that could be more efficient?

The system worked efficiently and completed all the tasks it needed to. All tasks that you can do on the site are quick and easy, which makes it efficient because the user will finish the tasks quickly.

6. Are there any security concerns? Ex: SQL injection, User information Storage (Passwords+Hashing), etc?

Student dashboard can add job postings which can be a security concern.

7. Did you feel that there were too many extra steps to do certain tasks? If so, what things felt inconvenient?

The site had very minimal clicking needed which was good. Every click would get you to where you needed to be, you didn't have to click 3-4 times to get to places. It was minimal but provided the necessary information and buttons.

8. Any advice for our system? Any Cosmetic, Operational, or Client Requirements Advice?
criticism is welcomed

Overall a great start to the system, the basic features that are needed are there, it's just finishing them up and fixing the errors and making it professional. Looks wise it is nice, possibly a little more colour as it is quite plain with just black and white, most of the pages are nicely filled but some could use more in for to take up more space, such as the dashboard and practicum forms. Let the user know what they need to enter to have a secure password.

PEER REVIEW FEEDBACK

Here are the frequent comments we noticed during the Peer Review Feedback:

- ↳ Lack of comments in the code.
- ↳ Error handling for character limits in certain fields (Students, Employer, and Job Posting fields)
- ↳ No sign of logging in the system.
- ↳ The Students had access to certain rights that should only be visible to the Admin.
- ↳ There is no error message telling you the requirements for a password.

SYSTEM TESTING: INSTRUCTOR REVIEW

The screenshot shows a Microsoft Word document window. At the top, there's a toolbar with icons for file, font size, bold, italic, underline, align, and other document settings. Below the toolbar, the date and time are displayed as "March 25, 2024 at 10:12 PM". The main content area has a section title "TIMS NOTES" in bold. Below the title is a bulleted list of 13 items, each preceded by a dash. The list includes various suggestions and requirements for system improvement.

TIMS NOTES

- Ability to Auto-Populate Forms
- Integrating a Placement ID into the Database. How are you tracking practicum placements?
- Auto-Save Form Information
- Cancel and Clear Buttons on the Practicum Forms
- Polish Up the UI
- Application Deadline instead of Due Date
- Job Posting gets removed if it's filled
- Radio Buttons of Practicum Forms C&D
- Disregard "Create New Form" Button Feature
- When a Student First Logs In have them enter their New Password, Address, and Phone # *this helps with auto populate*
- Upload Feature for Importing Canvas Files

Here is an overview of the comments our Instructor gave us during our team review with him:

SYSTEM TESTING RESULTS

After carefully reviewing everyone's feedback from the Peer and Instructor Review Meetings, here are the following changes we have implemented:

#1 EMPLOYERS AND STUDENTS HAVE ACCESS TO THEIR RESPECTIVE PAGES

Unfortunately we still have to go in and sort out the privileges that the Employer and Student have access too. But for now, we have it so the pages are shown.

The screenshot shows a web application interface for employers. At the top left is the Lethbridge College logo with the text "CIT Practicum". Below the logo is a navigation bar with five items: "Dashboard" (selected), "Job Postings", "Practicum Forms", and "Time Sheets". At the bottom of the navigation bar is a "Settings" button. The main content area displays the message "This is the dashboard Page" and "Hello Employer". The background of the main content area has a green-to-white gradient.

SYSTEM TESTING RESULTS

#2 FIXING THE CHARACTER LIMITS

We took the feedback from our Peer Review and fixed the character limit fields for creating a Student, Employer, and Job Posting.

The screenshot shows the CIT Practicum Students page. On the left is a sidebar with icons for Dashboard, Students (selected), Employers, Job Postings, Practicum Forms, Time Sheets, and Documents. The main area has a header 'Students' and a '+ Add Student' button. A table lists one student: Name (WatnadaWatnadaWatnadaWatnadaWatnadaWatnadaWatnadaW Pheng...), Username (Watnada), Email (watnada@lethbridgecollege.ca), and Student Id (s0000000). Actions buttons for View, Edit, and Delete are shown. The URL in the browser is [http://127.0.0.1:8000/students](#).

The screenshot shows the CIT Practicum Job Postings page. The sidebar includes icons for Dashboard, Students, Employers, Job Postings (selected), Practicum Forms, Time Sheets, and Documents. The main area has a header 'Job Posts' and an 'Archived Posts' tab, with a '+ Create Job Posting' button. A detailed job posting is displayed: Job Title (Software Engineer), Job Description (As a Software Engineer, you will be responsible for developing software solutions by studying information needs, confering with users, studying systems flow, data usage, and work processes. You will follow the software development lifecycle to plan...), Company (Alphabet), Location (Silicon Valley), Application Deadline (2024-03-30), Payment Category (Paid), and More Info (<https://www.google.com/>). Action buttons for View, Edit, Delete, and Archive are at the bottom. The URL in the browser is [http://127.0.0.1:8000/job_posts](#).

SYSTEM TESTING RESULTS

#4 IMPLEMENT A CANCEL BUTTON TO THE PRACTICUM FORMS

We took the feedback from our Instructor Review and added a functional Cancel button to the Practicum Forms.

The screenshot shows a modal window titled "Exit Interview". In the top left corner is the Lethbridge College logo. The top right corner has a close button (X). The main content area contains several text input fields and questions:

- A large text area for "What was some of the information that was not covered in the program, which would have made you more competent during your placement?"
- A large text area for "What would your placement supervisor say was your strength?"
- A large text area for "What would your placement supervisor say was a weakness in the CIT program? (An area where you were not as competent as you could have been)"
- A question "Would you recommend this employer for future field work placements? YES NO" followed by a text area for "If YES, what type of student would best succeed with this employer?"
- At the bottom right are two buttons: a red "Cancel" button and a green "Submit" button.

#5 AUTO-SAVE PRACTICUM FORM INFORMATION

When a User is filling out their Practicum Form Information and accidentally exits the modal, the information will be auto-saved. This feature may be something you need to test in our system as it is difficult to show you through the document.

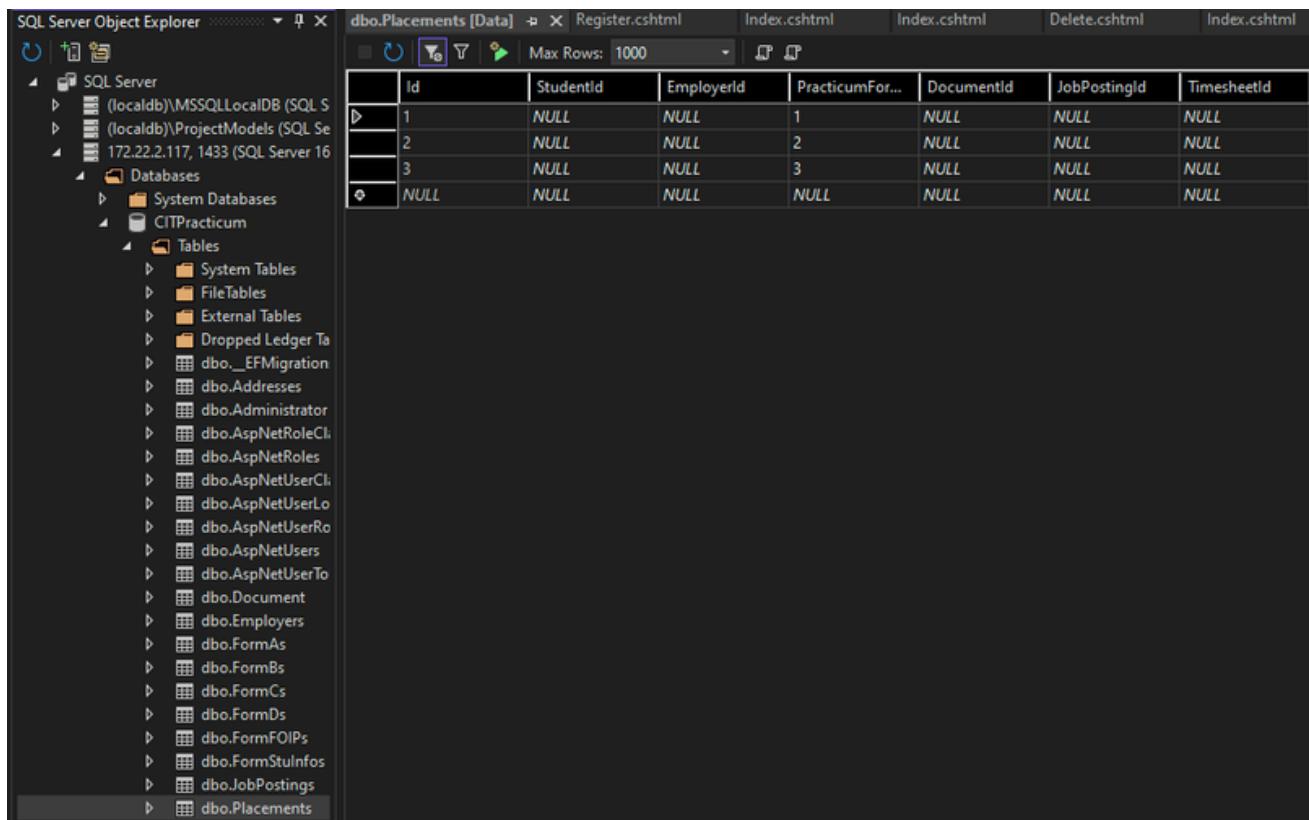
SYSTEM TESTING RESULTS

#6 AUTO-POPULATE PRACTICUM FORM INFORMATION

When a Student is filling out their Practicum Form, information that has been entered by the student during their registration process will be auto populated into the Practicum Forms. This feature may be something you need to test in our system as it is difficult to show you through the document.

#7 IMPLEMENT A PLACEMENTID INTO THE DATABASE

We have added a PlacementID into our database to help track the Job Placements of the Students.



The screenshot shows the SQL Server Object Explorer interface. On the left, the tree view shows the database structure, including the CITPracticum database and its tables. The right pane displays the contents of the dbo.Placements table. The table has columns: Id, StudentId, EmployerId, PracticumFor..., DocumentId, JobPostingId, and TimesheetId. There are five rows of data, all with NULL values in the first four columns and 1, 2, 3, and NULL respectively in the last three columns.

	Id	StudentId	EmployerId	PracticumFor...	DocumentId	JobPostingId	TimesheetId
▶	1	NULL	NULL	1	NULL	NULL	NULL
▶	2	NULL	NULL	2	NULL	NULL	NULL
▶	3	NULL	NULL	3	NULL	NULL	NULL
✖	NULL	NULL	NULL	NULL	NULL	NULL	NULL

ACCEPTANCE TESTS: SCENARIO TEST

We only reached out to one Student in our class ([Auron Emard](#)) and asked him to perform a Scenario Test.

The purpose of this test was for us to gain insight on how user-friendly our system's navigation is from a user's perspective.



SCENARIO TEST REVIEW:

We had asked Auron to create an Employer account and perform CRUD actions on a Job Posting.

During his Scenario Test we had noted some comments:

- “Making an employer account is very straight forward.”
- “It would be nice to see the ‘previous’ and ‘next’ button on the Job Posting be functional.”
- “I like the minimal UI design of the Job Postings.”

CODING EXPERIENCE

LEARNING CURVE

At first we relied on the assistance of our Programming Specialist (Robee) to help get the basis of our system working. Once Robee had set up the initial part of the project, the rest of us found it to be challenging to work on GitHub - specifically, the pushing and merging of code without errors.

SCOPE

As a group it felt like we were continuously adding in features that we had thought were complete. Ex: Cancel buttons, Auto-populate of Forms.

SUPPORTIVE

This Milestone has really shown how supportive our group dynamic is. We are leaning on each other more than ever to try and make this system functional and pleasing to our client.

SUCCESS & ACHIEVEMENTS

Although we are not as organized as some groups, we do well with setting goals and meeting deadlines that we plan during our team meetings.

THANK YOU

March 25, 2024

Dear Mr. Stephen Graham,

On behalf of Solution Seekers we thank you for choosing our team to represent you and your business needs.

We are so thrilled to embark on this 6 month long journey with you to transform this project into reality!

To acknowledge your understanding of the contents in this document, please sign below.

We look forward to working closely with you to ensure a successful project.

X

Stephen Graham

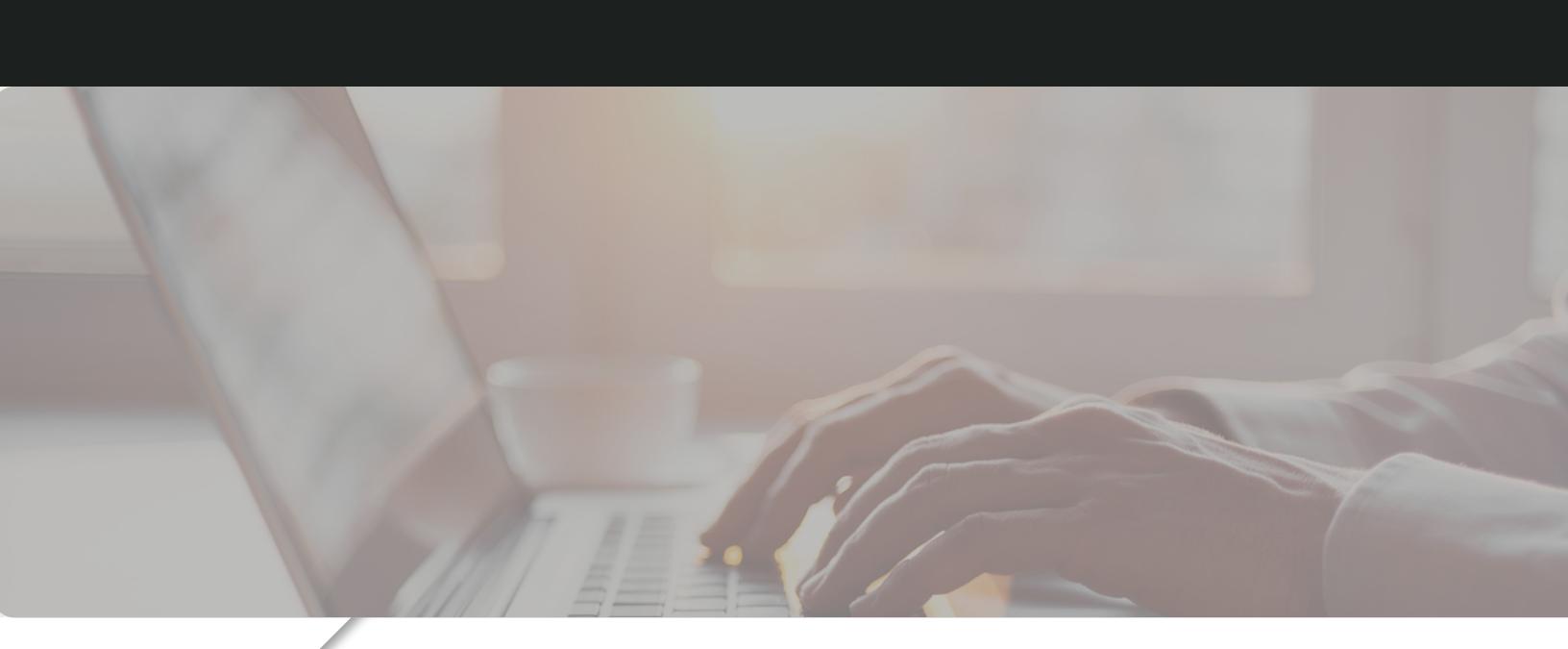
SOLUTION SEEKERS

LESSONS LEARNED

SOLUTION SEEKERS 

PREPARED BY

Wanatda Phengphonekeo, Robee Lou Diaz,
Bradley Pike, Nate Lapointe, Irah Loreto



INTRODUCTION

CANVA

For our documentation we have chosen to use Canva to record all of our Lessons Learned.

Each member will be sent a shared link, from there they will be able to contribute to the document.

Every team member is encouraged to participate.

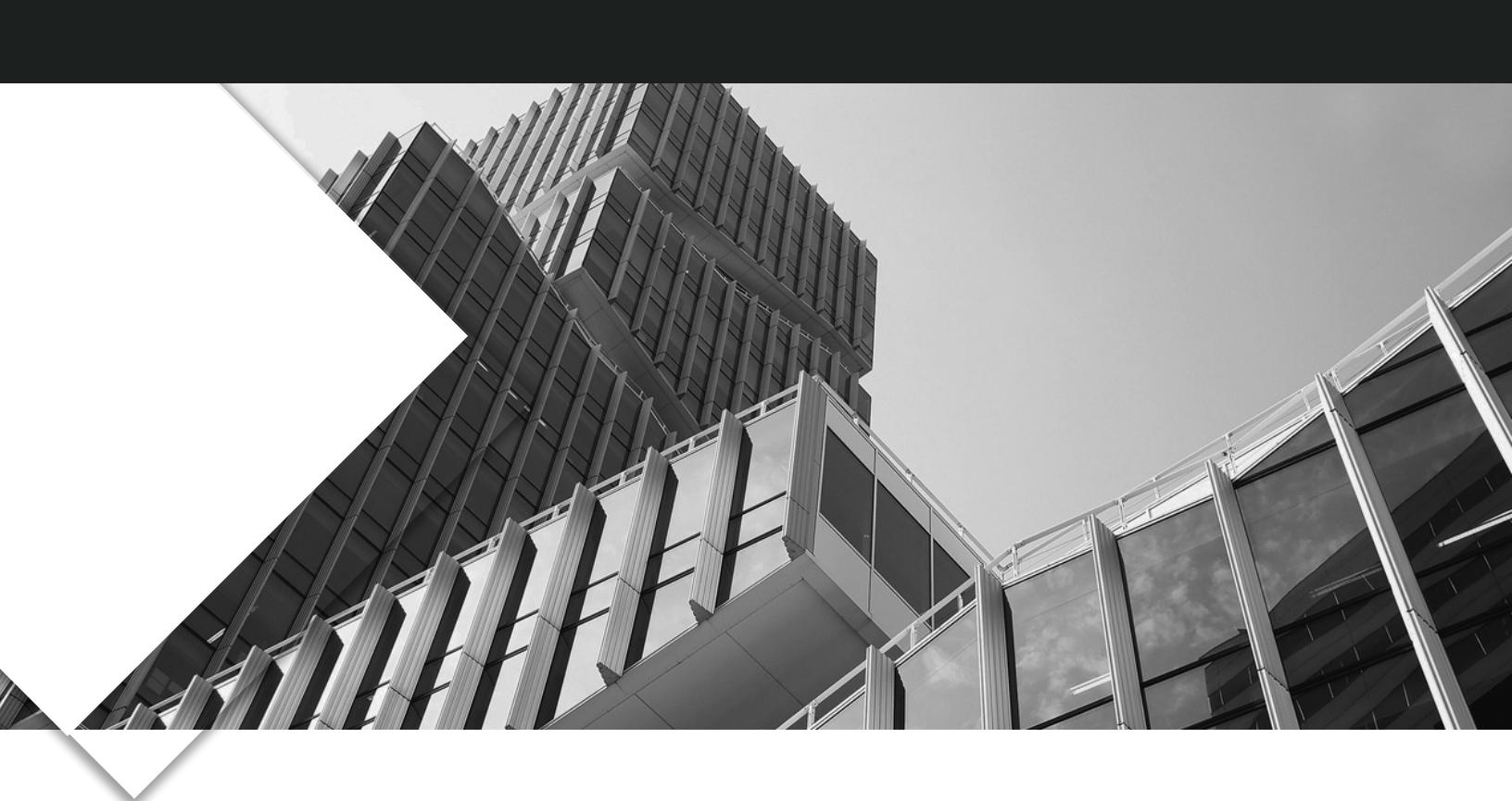


WELCOME

At Solution Seekers, we invite you to view our Lessons Learned document. This document is a reflection of our team's experiences throughout the semester.

Lessons Learned will allow us to identify what went well, and what challenges we faced throughout our project. Ideally we want to avoid repeating mistakes, identify successful practices, as well as improve our overall team work skills.

We realize it's important to collectively learn from our successes and mistakes to ensure a healthy teamwork environment, and serve as a self reflection.



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TEAM MEMBERS 2023

STAFF



1

Wanatda Phengphonekeo

Documentation Lead
wanatda.phengphonekeo@lethbridgecollege.ca

2

Robee Lou Diaz

Programming Specialist
robee_lou.diaz@lethbridgecollege.ca

3

Bradley Pike

Front End Developer
Contact Representation Lead
bradley.pike@lethbridgecollege.ca

4

Nate Lapointe

Team Lead
nate.lapointe@lethbridgecollege.ca

5

Irah Loreto

Hardware Specialist
irah.loreto@lethbridgecollege.ca

KEY TAKEAWAYS

**For reference, below is a brief and visual description of what the Lessons Learned document will consist of.*



DATE

Each member must enter the date starting in order from DD/MM/YY



ENTERED BY

Enter the name of the group member submitting their Lesson.



MILESTONE

Indicate the Milestone number that the Lesson centres around.



LESSON

Include a brief description of the lesson that was learned in that specific Milestone

KEY TAKEAWAYS

LESSON TYPE



Imply whether the lesson was an academic, personal, or technical issue. Be sure to keep it short and concise when deciding on the lesson type.

IMPACT



Discuss the impact of the Lesson that was submitted. What was the impact on your team? How has it impacted your personal experience? Feel free to elaborate.



RECOMMENDATION / COMMENTS

Record any key areas that may need to be improved on. Express any growth or achievements. Or perhaps suggest any changes that need to be addressed.

Date DDMMYYYY	Entered By:	Milestone	Lesson	Lesson Type	Impact	Recommendation / Comments
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* Template for reference



AVOID REPEATED EXPERIENCES

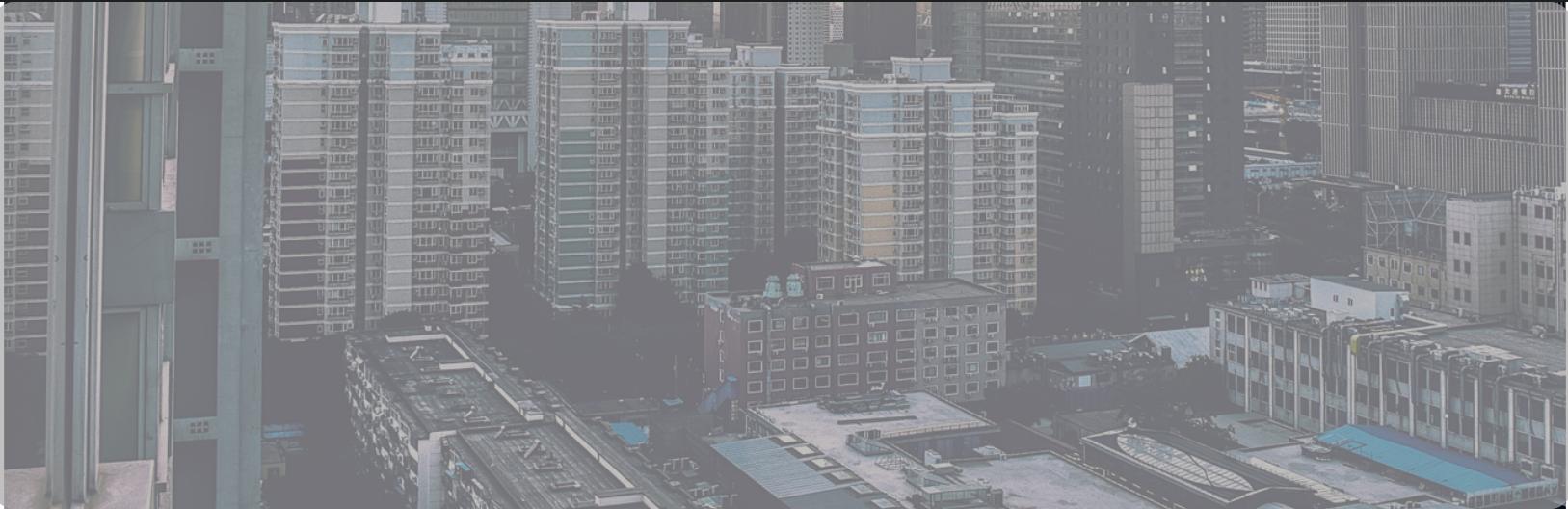
When a team member describes their experience, here are a few topics to consider to help avoid repetition. Each lesson should be a unique experience of itself.

- Communication
- Time Management
- Client Needs
- Quality Assurance
- Decision-Making
- Adaptability

IMPROVE TEAM PERFORMANCE

As a team, we are committed to incorporating all experiences into our project. This is an ongoing learning experience, and we plan to improve our team performance using methods such as:

- Additional Training: Spending the time to improve any skills in areas that our team needs.
- Time Management: Understanding the importance of deadlines and work contribution.
- Problem-Solving: Addressing concerns in our project early on in order to resolve solutions quickly.
- Effective Communication: Each member showing up and participating with frequent check-ins.



CONCLUSION

Each Milestone will have all team members contributing to the Lessons Learned document.

It's important to follow the template layout for proper procedure. Everyone's experience must be unique, and not a repeat of previous lessons.

Milestones will have new experiences that members may not be familiar with. These could be learning new software, coding languages, or working with unfamiliar charts and graphs.

Altogether we plan to review our lessons and share solutions on issues that need improvement, or achievements that deserve recognition.

We welcome you to follow along on our Lessons Learned journey!



LESSONS LEARNED

Date	Entered By:	Milestone	Lesson	Lesson Type	Impact	Recommendation / Comments
03/22/2024	Wanatda	7	I learned how easy it is to let scope creep get the best of our system. Even now I feel like we're adding in features and may have to cut some out. Since I focus on the front end I never realized how large of a scale Stephen's project. I'm really proud of my teams progress and I love seeing us achieve our milestones within the system.	Personal	<ul style="list-style-type: none"> • Communicating to Stephen ahead of time if there are features we have to cut. • 	
03/22/2024	Irah	7	Really getting into the meet and the bones of this project showed me wow, this is a big project. Teaching me some things are not possible within the scope and really problem solve some issues when coding.	Academic	I learned more on how this project will work. Including the controllers, learning more front end and seeing on how to fix problems. I also learned more on how to use git branches and drilled the git cmd commands into my brain.	
03/24/2024	Robee	7	This was one of the most interesting milestone for me. I have learned a lot in C#, ASP.NET, MSSQL Database that I can use as credentials for future developer applications. Every past lessons on coding, entity relationship diagram made more sense and clearer. Github, git and branching was very useful	Academic	<ul style="list-style-type: none"> • Plan Database connection properly. • Never be afraid to try and break the app. It can get fixed but make sure to use git/github. 	
03/24/2024	Nate	7	With the front end development learning some ways to make the styling easier by not typing all the same number for the colours instead naming them and calling in the name which i thought is much easier.	Academic	Leaning new ways to style, format and just new things in the front end is my biggest impact i will take from this milestone	
03/24/2024	Brad	7	Learned that the UI can't just look good, it needs to work. I had to make a couple versions of the dashboard UI and it was a timely mistake on my end. I also need to communicate better with my team about technical issues before it's too late.	Academic	Continue to find bootstrap UI options that are functional.	

LESSONS LEARNED

Date	Entered By:	Milestone	Lesson	Lesson Type	Impact	Recommendation / Comments
02/16/24	Wanatda	7	My lesson I learned this Milestone is I don't like creating physical DFD's. It's not my strongest suite. I really don't like the tiny details you have to think of when making a physical DFD. However, I found that structure charts were a lot more easier to understand.	Academic/Personal	Made a LOT of revisions. I spent time with Stephen and Tim to go over my DFD scraps. It definitely paid off because I have a really good understanding of the system and how big the project scope truly is.	
02/16/24	Robee	7	Creating a physical architecture is new for me. Knowing every part of the system is essential for any I.T. fields so this is really valuable. Using the proper software, hardware, architecture and required storage size seems easy but it is not. These are really important for the development.	Academic	Spent more time understanding the terms. Researching via google and details in the book.	
02/16/24	Nate	7	I learned a lot about the structure charts and how what is really supposed to go into them. I feel a lot more confident about them after the presenting them and also listening to the other groups about theirs.	Academic	presenting and listening to the other groups present helped me to understand the structure charts more, working on them for hours with my group helped a lot as well. Restarting and doing them over and over again gave me a more clear understanding.	
02/16/24	Irah	7	In creation of making the pseudo code I learned that there is a lot more to it in breaking stuff into parts. Is a certain action will be in one or should I split it into two. Creating pseudo code really help me understand the process of buttons and features way more.	Academic	I did changes every often when someone would make changes to the charts because my pseudo code is word form charts. I learned how to break a feature down into outputs and inputs. I also learned more from my team as I had to over there charts and compare learning about there parts such as structure charts and dfds.	
02/17/24	Brad	7	I learnt that I need to be more attentive to team messaging and working with the team to create achievable deadlines.	Academic	I found that my commitments hurt the teams progress in completing milestone 7 in a timely manner.	I need to set realistic deadlines and if I require "time off" I need to hold up my portion of the team workload

LESSONS LEARNED

Date	Entered By:	Milestone	Lesson	Lesson Type	Impact	Recommendation / Comments
01/29/2024	Wanatda	6	I learned that I didn't dedicate enough time into understanding the material associated with this Milestone.	Academic	Felt like my lack of understanding was impactful during our presentation on Friday.	Going to put more time and preparation for our next in-class presentation.
0/29/2024	Bradley	6	I learnt that we need to have meetings more regularly with our team so we're on the same page.	Academic	It reflected in our presentation grade and our overall knowledge of the project.	

LESSONS LEARNED

Date DD/MM/YYYY	Entered By:	Milestone	Lesson	Lesson Type	Impact	Recommendation / Comments
07/12/2023	Wanatda	5	I know we lightly dived into feasibility in Milestone 1, but Milestone 5 felt pretty comprehensive. There was lots of information that needed to be considered when coming up with the details. I feel like I have a good enough understanding of feasibility than what I did beforehand. But with our project being a college one, it was difficult to navigate what our organizational & economic feasibility consists of.	Academic	Deeper understanding of the system in terms of getting our hosting situated and learning about our software and hardware, security, and long term sustainability with the project.	
8/12/2023	Nate	5	In milestone 5 I learned a little more about build vs buy comparisons. Feasibility is also something I learnt a little more of, really breaking down our own project doing it for ourselves helped me understand a lot more.	Academic	Having an idea of feasibility and build vs buy gives me a better understanding on our own project.	
8/12/2023	Irah	5	In milestone 5 I have learned and improved my power point presentation skills a lot. I always used Canva, learned how to do power point animations and really learned how to use small features and mechanics. In regards of work load I've really learned to spread work delegations more suited for my load of productivity.	Academic	I learned a more of how our system will work and what features, programs we will use on our project in order to work. Learned about what scope we will be working in as its mostly going to be ran internally and used internally after we manage to finish the project. Basically understanding the build of our project and things that will be implemented in order for it to work and be used for futures endeavours.	
8/12/2023	Robee	5	I learned a lot with comparing the differences of acquiring the system. Researching about off-the-shelf and outsourcing options, how to calculate which one is the best based on values and Weighted Alternative Matrix. Finally, creating recommendation based on these findings to propose the best solution.	Academic	It is definitely a must-know in developing system request. Reminded me that there are other options to build the system, based on time, resources and budget.	
08/12/2023	Bradley	5	In milestone 5 I was working on the budgeting part of the deliverable. Talking with ITS made me realize we missed some details like server costs and web certificate costs. Even things like licensing and consulting fees were costs I had to compare, which I have never done. Our project is limited to using Microsoft licensed software so that was something I had to work around.	Academic	I learned how challenging it can be when you have limitations to only use certain software and hardware. It felt like a real job situation having to deal with specific rules and limits. This project really impacted me and showed me how to manage these kinds of real-world challenges.	

LESSONS LEARNED

Date DD/MM/YYYY	Entered By:	Milestone	Lesson	Lesson Type	Impact	Recommendation / Comments
14/11/2023	Wanatda	4	Wednesday after class I talked to Tim about our ERD. Initially I had created one, and just wanted his input on it. But after talking with Tim, we worked together to improve the ERD for our system. We ended up restructuring the ERD completely, and in the end I had a better understanding of our improved ERD than I had going in. This was so helpful because throughout this Milestone I really struggled with this.	Academic	I feel like our improved ERD is more fluid. The diagram is 10x easier to explain to others, and you can follow it very smoothly. If I had not gone to Tim for advice on our ERD, I think it would have impacted our understanding of our client's ERD.	
20/11/2023	Nate	4	I learnt a lot more about the business' rules, looking at the ERD and figuring out the business' rules defiantly took time and hearing what Tim had to say about them after the presentation helped a lot	Academic	Made a lot more sense with the whole project figuring all that out, with time explaining everything as well gave me a better understanding of everything	
20/11/2023	Bradley	4	Since the last milestone I'm staying a lot more accountable for my own work and making sure I'm prepared for the presentations.	Accountability	I've made a major improvement on clarity and general understanding of the project	
20/11/2023	Irah	4	I learned more on how to become design things better on PowerPoints and become more creative. Learned about ERD more in depth's through my group members and others as well. I became more consistent in my work and have improved my skill as well to benefit the group projects.	Academic	Our new chart is way easier to explain now. Thanks to Tim's advice, it's much clearer, and you can understand it way better. Plus, this taught me that getting feedback from others is important. I'm also trying to get better at making PowerPoint slides so I can explain things even more clearly in the future. Improving my skills for sure and will have better results creating and designing for the group.	
20/11/2023	Robee	4	The most notable lesson that I had on this milestone is creating a Data Dictionary. I tried creating a database before but I learned that having a well-organized and planned Data Dictionary makes the task a lot easier. I also discovered on how to improve wordings for Business rules that will match the Entities involved.	Academic	This will serve as our cornerstone for creating the application and database since we have an idea of information that we need and the metadata and limitations for each attribute.	

LESSONS LEARNED

Date DD/MM/YYYY	Entered By:	Milest one	Lesson	Lesson Type	Impact	Recommendation / Comments
27/10/2023	Wanatda	3	I learned how to make use cases! This was pretty simple to learn in class when we did examples, but when it came to actually integrating them into our project it took me awhile to figure out. Mostly because you have to go through every single step and determine "is it a feature? or is it a valid use case? what is considered pre/post condition?"	Academic	Understanding how to make Use Cases is really important for our team because I had to take into consideration stuff that I might not have accounted for. Not only for documentation sake, but also for when we start coding.	Spending the time to understand what the client wants before making a use case. Also ask for help.
29/10/2023	Robee	3	Review format of documents properly. Be more mindful on the details of deliverables. Communicate better with the team.	Personal	Missed out some specific formatting and properties of data flow diagram. Initiate team discussion for deliverables made for current milestone.	
30/10/2023	Bradley	3	Become more engaged with the project and get clarification when needed. I found myself less engaged due to a busy schedule however when I had free time I found myself focused on the wrong things. I found that creating the deliverables I didn't have a great understanding of the project and should've asked for clarification before the presentation.	Engagement	I found myself not being able to have as much perceived knowledge on the project as I stumbled on words and generally didn't have a great understanding of my portion of the presentation	Ask for help when needed
30/10/2023	Nate	3	During milestone 3 i learnt how taxing this whole process really is. There is a lot of work still ahead and i found having to remind myself to get my work done and to be on track with everything. Also learnt that asking questions to get out the right information and to do the work correct the first time.	Personal	The impact of having to remind myself to get my work done is big because that's time that i could have spent making the project better or brainstorming new ideas, things like that.	Understand the importance of everyday that we work on the project.
30/10/2023	Irah	3	I was in charge of working on the informal presentation. About a half our into it, my computer crashed and I forgot to save my progress. This really sucked because I had most of the slides done with animations and themes sorted out.	Technical	Lost a good portion of our groups presentation. Thankfully I was working on it a couple days before it was due, so I was able to recover most of it. All in all it just delayed me for a couple hours from completing it.	Always save your progress, or at least turn on the auto-save function.

LESSONS LEARNED

Date DD/MM/YYYY	Entered By:	Milestones	Lesson	Lesson Type	Impact	Recommendation / Comments
08/10/2023	Wanatda	2	During the 1st Milestone I felt very rushed into completing all the deliverables. But since going into this 2nd one, I've been slowly adapting to the pace of the milestones. I have been trying to get deliverables done as far in advance and I can, but surprisingly I have not been feeling rushed like I did in the 1st Milestone.	Personal Achievement	I realize it's all about time management, which is something I am not necessarily bad at, but when it comes to GROUP time management, I've found ways to manage it a little bit better so that I'm not stressed. It's different when it's a group project and you have to rely on others for their part, as well as deliver yours in a timely matter.	Adopting better time management skills. Staying on track of Milestone deadlines.
10/10/2023	Brad	2	Throughout milestone one I found it very valuable to schedule group meetings all the time and just get working. It doesn't matter how much time your group mates have, as long as the work is getting done and we all understand the material that's all that matters. Work just needs to get done and I'd much rather be ahead of other groups then waiting for everyone to be available.	Delegation & Meeting Length	Within our 4th meeting we did double the work completed in the 3 meetings prior. This was a result of delegating tasks and meeting for longer periods of time and having group members come and go.	
10/10/2023	Robee	2	For milestone 2, I learned how to use MS Project for managing tasks and deliverables. Additional effort was needed to read the documentation and search the web on how to navigate and use it properly. Before, I thought Agile is just Scrum and Kanban but understanding other Agile methodologies to decide which one to use for our project was essential.	Technical	I am optimistic that our team can make improved recommendations. Become more organized individually and as a team with our project management with these tools and knowledge at hand.	Read documentations. Spend time to learn how to navigate new tools.
10/10/2023	Nate	2	During milestone one i shortly realized that having a schedule and organized plan with everyone in the group was a must and it made it a lot easier to keep track of everything and know what everyone is working on and completed.	Technical	Having a clear schedule and plan helps the group work better together and get things done faster. It also makes sure everyone knows their job and does it well.	Have a calendar and a list for to dos and priorities list for tasks.
10/10/2023	Irah	2	Lesson learned for Milestone 2 on what I have learned is that scheduling my working times to finish projects and assignments is very important. Same goes for Milestone 1. There was some days cramming in work for 10 hours made it easier if I just spread it out and did some things at better times. As well I got to understand more in depth on what my group is good at and what I can contribute to continuing our work.	Technical & Planning	The importance of effective time management and spreading out work over time to reduce stress and improve productivity. Additionally, gaining a better understanding of individual strengths within the group has enhanced collaboration and project contributions.	