CS106 Group Project Implementation

By Mandeep, Sunny, William

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Project Description

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Our goals and objectives are to create design a software solution that can help people track their vaccine status. To achieve our goals, we must work together as a team. This will include effective communication and excellent time management. For time management we will be using a Trello board to keep track of tasks and when they need to be done.

COVID-19 applications typically aim to provide a range of features, including:

Vaccination Certificate Access: Allow users to download and access their digital vaccination certificates, providing proof of their COVID-19 vaccination status.

Symptom Tracking: Enable users to log and track their symptoms, providing valuable data to health authorities for monitoring and managing the spread of the virus.

Testing Information: Provide information on nearby testing centers, testing availability, and guidance on how and when to get tested for COVID-19.

Health Guidelines and Updates: Disseminate accurate information, guidelines, and updates from health organizations to help users stay informed and follow recommended practices.

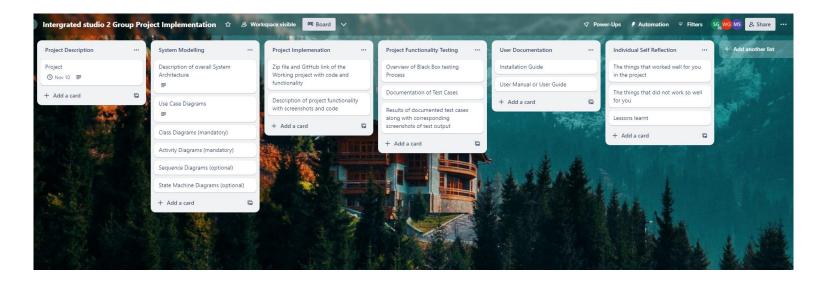
Objective: These objectives collectively contribute to promoting public health, managing the spread of COVID-19, and enhancing user safety during the pandemic.

Timeline and Project Constraints

We want to be fast and accurate with our research. We have strict time management goals to ensure things get done on time.

Our plan for the first week it to have the project description done by 10 November.

We will be using Trello to manage our timeline and will set appropriate date and times to be able to complete our tasks.



 $\frac{\text{https://trello.com/invite/b/ullmvU1K/ATTI3b5df2576ec3463657512f3ab132be20A05063F0/intergrated-studio-2-group-project-implementation}{}$

Team members and responsibilities:

Mandeep	Tools, technologies used	Requirement specification	Lo-fi Wireframes.	Hi-fi prototype	Project implementation	Designing our pages	survey
Sunny	Software process model and justification	Project implementation	System modelling	Coding on xaml.cs file			
William	Timeline	Goals and objectives	Requirement specification	Project implementation	System Modelling	Coding on the xaml.cs file.	Sketches, lo-fi wireframes

Mandeep

- Tools , technologies used.
- Requirement specification
- Lo-fi Wireframes.
- Hi-fi Prototype.
- Project implementation .
- Designing our pages.
- Survey.
- .Xamls framework

Sunny

- Software Process model used and justification.
- Project implementation.
- System Modelling.
- Coding on the xaml.cs file

William

• Goals and objectives.

- Requirement specification.
- · Project implementation
- System Modelling.
- Coding on the xaml.cs file & Main Window.
- Timeline

Software Process Models

Waterfall Method

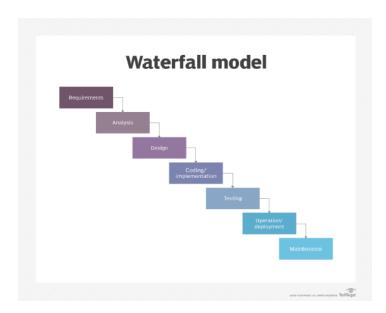
What the waterfall method is a classical model used in the software development life cycle that creates a system in a linear and sequential approach The waterfall method uses a logical progression of the software development lifecycle(SDLC). It is used to set distinct endpoints for each phase of the development. However, each goal cannot be revisited are the completion.

Who still uses the waterfall method project teams and managers uses this method to achieve goals based of their need for business. This model is used in business such as Construction, Manufacturing, IT, and software development.

The advantages that come with using the waterfall method is:

- Enables large or changing teams to move towards a common goal.
- Simplifies understanding, following, and arranging task.

- Clearly define milestones and deadlines.
- Enables early system design and specification changes to be easily done



Agile

What an agile methodology is that it approaches that prioritizes cross functional collaboration. What it does it divides the project into smaller phases an example of this planning, developing, and reviewing.

The benefit of the agile methodology is it is faster, lighter, and more engaged mindset.

Scrum

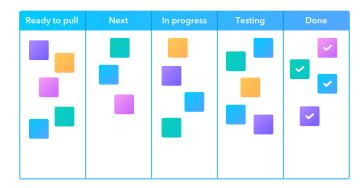
- Scrum breaks down the development phases into sprits.
- The development time of the scrum is maximized and dedicated.
- It is a prioritized wish list.
- Team strive to not make changes to the sprit forecast during the sprint.
- Team roles are defined.

SCRUM TEAMS



Kanban

- Kanban is a visual board.
- This method is used to deliver visual methods for developing and managing projects.
- Shorted time cycle.
- Continues flow.
- Changes can happen any time.
- Kanban are more flexible when regarding tasks and time.

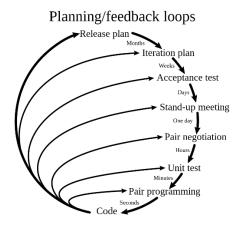


Lean:

• A method that focuses on maximizing value while minimizing waste through continuous improvement and respect people

Extreme Programming(XP):

• Emphasizes close collaboration, frequent feedback, and small, frequent releases to ensure high-quality software development.



Dynamic System Development Method (DSDM):

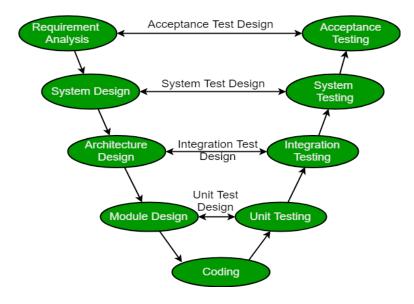
• An Agile framework that prioritizes active user involvement, incremental development, and delivering a product on time and within budget.



V-shape

V-shape also known as verification and validation model it is based on the association of a testing phase for each corresponding development stages.

- Requirements Gathering and Analysis: The first phase of the V-Model is the requirements gathering and analysis phase, where the customer's requirements for the software are gathered and analyzed to determine the scope of the project.
- Design: In the design phase, the software architecture and design are developed, including the high-level design and detailed design.
- Implementation: In the implementation phase, the software is actually built based on the design.
- Testing: In the testing phase, the software is tested to ensure that it meets the customer's requirements and is of high quality.
- Deployment: In the deployment phase, the software is deployed and put into use.
- Maintenance: In the maintenance phase, the software is maintained to ensure that it continues to meet the customer's needs and expectations.
- The V-Model is often used in safety-critical systems, such as aerospace and defense systems, because of its emphasis on thorough testing and its ability to clearly define the steps involved in the software development process.



Group decision

During our planning as a group, we have decided that the software process model that we will use is the was the waterfall method, why we have chosen this model was that we can enable large or changes we can make towards a common goal.

Tools
Figma for prototyping



Brief overview of the project and its purpose.

Step-by-step guide on creating and utilizing the prototype in Figma.

Visual aids like screenshots to enhance understanding.

Figma for template for creating our application.

GitHub for Code Sharing:



README file outlining project structure, dependencies, and usage instructions.

Collaboration guidelines and effective Git/GitHub usage.

Direct links to relevant code files and repositories.



Visual Studios

We are using Visual studio for code . As all that , Visual Studio is a versatile and user-friendly integrated development environment (IDE) for coding. It offers features like code editing with syntax highlighting, debugging tools, project organization, version control integration, and various project templates. This IDE simplifies the coding process, making it efficient and productive for developers.

Word for documentation

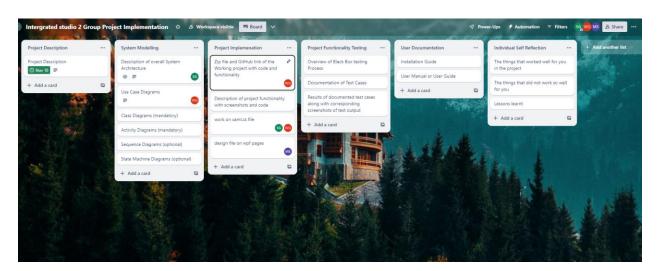


Document outline with clear headings and subheadings.

Comprehensive project description, methodology, and achieved results.

Integration of visuals and diagrams to enhance the document's clarity and appeal.

Trello for Timing and outline:



Project timeline with milestones, deadlines, and task breakdown.

Task categorized and assigned with a visual progress tracker.

Integration of Trello board to GitHub for seamless project management.

System Modelling /SRS

Report: UX/UI Design for COVID19 Application

1.Introduction:

This report presents a comprehensive UX/UI design strategy foe a website dedicated to providing crucial information and resources related to the COVID-19 pandemic's website aims to deliver a seamless and intuitive user experience to effectively disseminate vital details regarding COVID-19, testing Vaccination, & safety guidelines.

2.Purpose:

The purpose of this site is to make accessible and user-friendly platform that saves as a reliable source for COVID-19 information, testing center locations, vaccination resources, other updates of cases. The design intends to guide users in navigating through essential information safety.

3. Purpose Scope:

The project's scope includes designing the website's user interface (UI) and user experience (UX) for web platforms. It encompasses features such as symptom checker, vaccination information, testing center locator, educational resources, contact tracing, and a user-friendly appointment booking system.

4. Overview of document:

This document outlines the essential elements of the UX/UI design project, including the introduction, purpose, project scope, functional requirements, and non-functional requirements. Each section provides insights into the project's goals and specifications.

Simple and Intuitive Navigation:	Implement a straightforward and intuitive navigation system for easy access to essential features.		
	Clear and Concise Information Display:		
	Present important COVID-19 information in a clear and easily digestible format.		
	Use simple language and visual aids to convey critical information.		
User Onboarding and	Provide a seamless onboarding experience to help users understand		
Guidance:	how to use the app effectively.		
	Offer in-app tutorials or guides to explain the app's features and functionalities.		
	Consistent Design Language:		
Integration of Public Health Guidelines:	Incorporate the latest public health guidelines and recommendations directly into the app to keep users informed and updated.		

User Personalization and	Allow users to customize preferences, such as language, region, and
Preferences:	notifications, to tailor the app to their needs.

MVP

MVP

Login / sign up

Initial meeting with client:

Discuss project conventions and brief for what client is wanting.

Outcome: have an understanding and direction for initial project

SRS document

Outlining functional requirements and visualizing convention for how software would be structured.

Negotiation: In the event that the client is wanting extra features to be added. Discussion surrounding more allocated hours will take place. If further hours are unable to be allocated, the project will progress forward as agreed initially.

Design phase

We will create lo-fi design and what the client wants we will then create a hi-fi design.

Development phase

Using C# wpf to create the application

MVP

Administrators view and modify users

Initial meeting with client:

Discuss project conventions and brief for what client is wanting.

Outcome: have an understanding and direction for initial project

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Development phase

Using C# wpf to create the application

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Upload and maintain user information

Initial meeting with client:

Discuss project conventions and brief for what client is wanting.

Outcome: have an understanding and direction for initial project

SRS document

Outlining functional requirements and visualizing convention for how software would be structured.

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Design phase

We will create lo-fi design and what the client wants we will then create a hi-fi design.

Development phase

Using C# wpf to create the application

MVP

After logging in, users should be able to view and record their details in the system.

Initial meeting with client:

Discuss project conventions and brief for what client is wanting.

Outcome: have an understanding and direction for initial project

SRS document

Outlining functional requirements and visualizing convention for how software would be structured.

Negotiation: In the event that the client is wanting extra features to be added. Discussion surrounding more allocated hours will take place. If further hours are unable to be allocated, project will progress forward as agreed initially.

Design phase

We will create lo-fi design and what the client wants we will then create a hi-fi design.

Development phase

MVP

The system should log messages in three different files

- When certificates are uploaded.
- When the test results are uploaded.
- When users report issues. Initial meeting with client:

Discuss project conventions and brief for what client is wanting.

Outcome: have an understanding and direction for initial project

SRS document

Outlining functional requirements and visualizing convention for how software would be structured.

Negotiation: In the event that the client is wanting extra features to be added. Discussion surrounding more allocated hours will take place. If further hours are unable to be allocated, the project will progress forward as agreed initially.

Design phase

We will create lo-fi designs and what the client wants we will then create a hi-fi design.

Development phase

Overall System Architecture

What an overall system architecture is a conceptual model that defines the structure and the behavior of the system. The architecture description is an organized in a way of supporting the reasoning of the structure and behavior of the system. What the system architecture is an overall fundamental structure and vision of the system. The main structure of our application is that the starting point is at the home screen.

Homepage:

What the homepage main functionality if that it allows the user to access other pages for example the user who is on the home page is able to click on other pages such as the appointment, login, and symptoms page.

List of vaccinated people page:

What the list of vaccinated people functionality is that it displays the list of people that is vaccinated.

Login Page:

The login page allow the user to login and access his account by entering his/her email or password or login via google.

QR code page:

This page contains a Qr code that allows the user to scan the Qr code to gain a vaccine certificate this page is linked when you have a mobile device and are able to scan the Qr code.

Certificate page:

After scanning the Qr code via a mobile device you will then receive a vaccine certificate that contains your name and email address and displays the registered address as well as confirming that you have been vaccinated.

Appointment page:

This page allows the user to enter in his/her details to book an appointment this page is linked with the confirmation page that confirms an appointment was made.

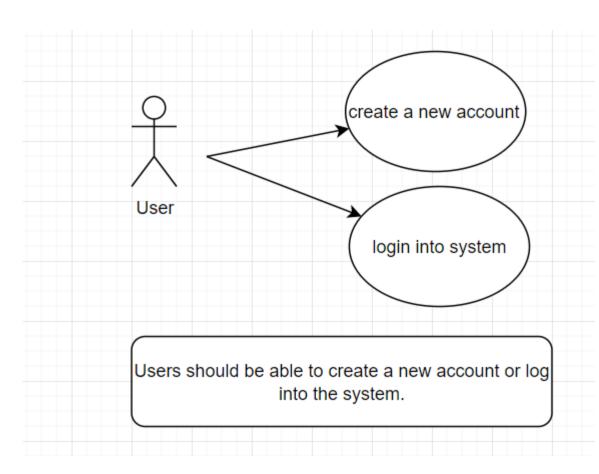
Confirmation page:

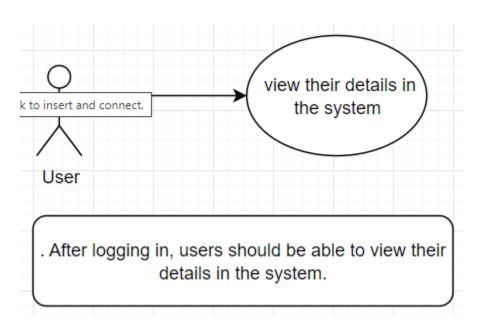
This page displays the user has had booked an appointment at a certain date with a scheduled date and time.

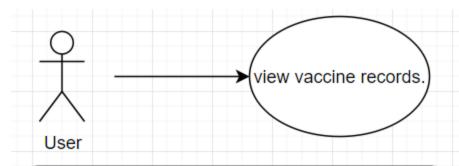
Symptoms page:

The symptoms page displays images about the warning around covid no19 to be able to access the symptoms page it is listed on the homepage.

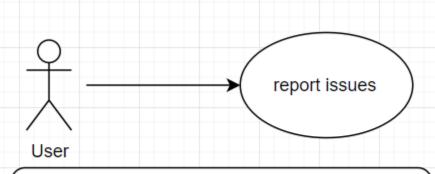
Use case Diagrams



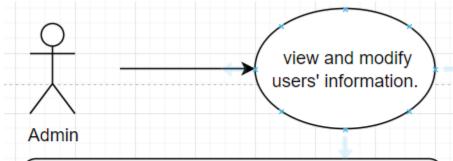




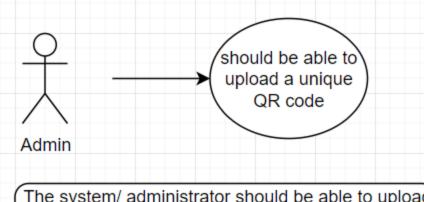
. After logging in, users should be able to view their COVID-19 tests and vaccine records.



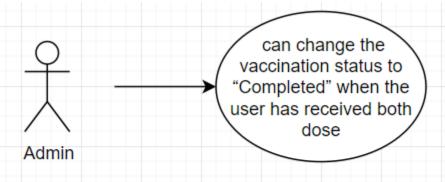
. Users should be able to report issues they would encounter in the system.



The Administrator should be able to view and modify users' information.



The system/ administrator should be able to upload a unique QR code, and logged in users should be able to view their unique QR code for entry requirements.



The Administrator can change the vaccination status to "Completed" when the user has received both doses. The other available status are: "Unvaccinated" (in case if they haven't received even a single dose), "Partial" (if they have received one dose).

Class Diagram

Activity Diagram

Functional and non-functional requirements and assumptions Functional:

Symptom Checker:

Provide a tool for users to assess their symptoms and receive appropriate recommendations.

Vaccination Information:

Display comprehensive details about COVID-19 vaccines, availability, and eligibility criteria.

Testing Center Locator:

Implement a feature to help users find nearby testing centers with information on testing.

Non-functional:

User Experience:

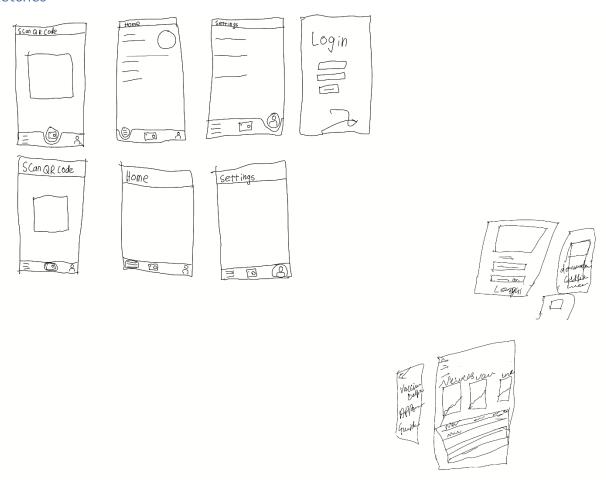
It is a web just for awareness of COVID-19 so, it is no need to appealing design ,optimizing users, minimizing load.

Security:

Same thing in security, we do not need security measures to protect users' personal data and maintain privacy.

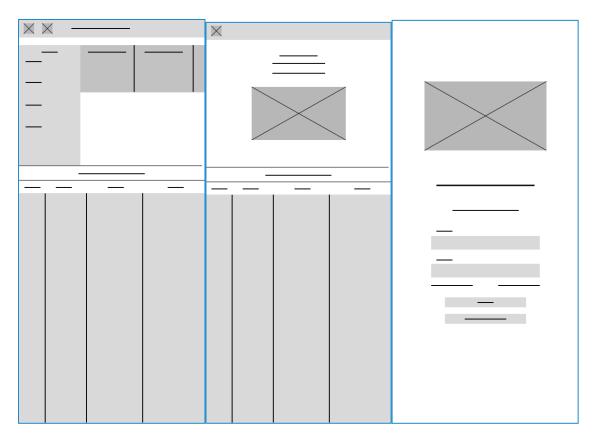
Design

Sketches



UI AND UX

Lo-Fi designs



Lo-fi user testing

Lo-fi questions

What do you like about our lo-fi designs?
What changes would you make to the lo-fi designs?
What don't you like about the lo-fi designs?
What aspects from our lo-fi would you like to see improved on?

User 1:

Users said the design was pretty simple, the user had said he had never used a covid application, effective use of wide space, alignment out of place, confirmation page is wonky, user had said that the changes he would make is to fix the alignment, user had identified the alignment being a real issue

User 2:

Alignment of the boxes needs improvement, search boxes is confusing, the Circle image on confirmation is confusing, the login page has so much information and the user said the login should not have a lot of text, symptoms is interesting but the user would like to see in the homepage to view which place are

safe and dangerous, confirmation is a good idea, the user confirmed she like to have a homepage with lots of images.

User 3:

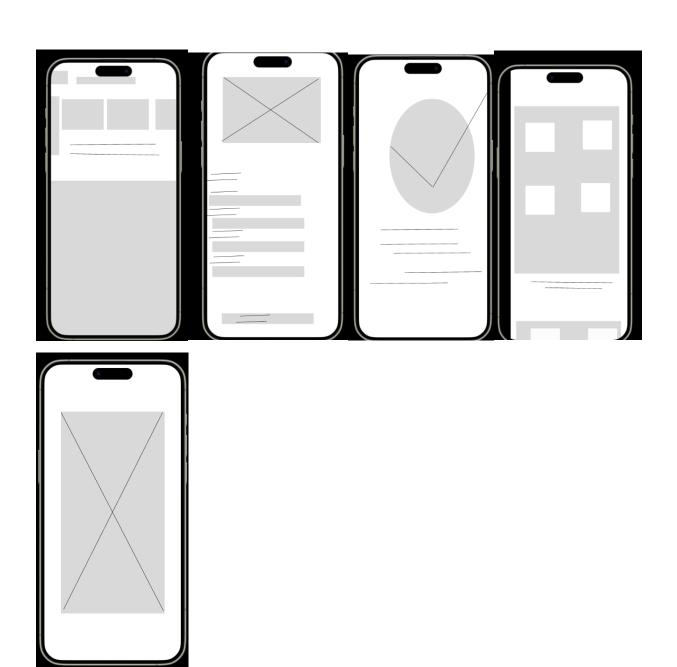
The spacing is good on the login and Qr page, the design is nice and simple the user had said the spacing for the symptoms needs to line up better the same goes for the boxes and the button, the user had said the design is consistent, the circle needs to be centered. The circle should not be there, move the text above and move the circle below, the sizing of the images should be bigger, the button on the login page, the confirmation page and the symptoms is good as well as the text, the text seems redundant, remove the background on the symptoms page, what the user had said have scrollable features for the images on the home page. The user had said there are aspects of the lo-fi that he had liked but has said there should be changes made to make our hi-fi better.

User 4:

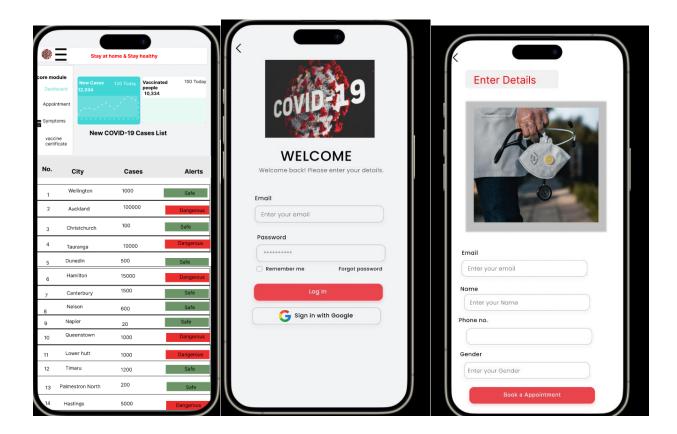
This user had said he liked the content on the homepage, did not like the alignment that is on all the pages maybe space out the images and text, did not quite understand what the circle was meant to be. Would like to see more text, good idea of having a confirmation and symptoms page have scrollable features for the homepage, the design is consistent within all our design.

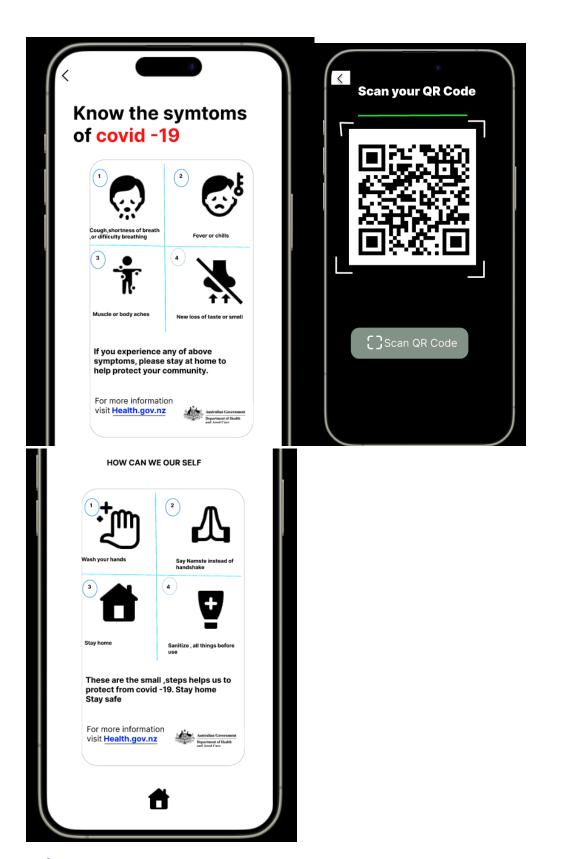
User 5:

This user said she had liked the amount of content for the homepage and symptoms page, would like to see more text on the homepage, would like to see scrollable features. The circle is too big would like to see it smaller, login page has too much information. The design is consistent across all lo-fi design.



Hi-Fi designs





Hi-fi user testing

Hi-fi questions

What do you like about our hi-fi designs?
What don't you like about our hi-fi designs?
What changes would you make to the hi-fi designs?
What aspects from our hi-fi would you like to see improved on?

User 1:

The user had said to modify the screen size so everything can fit, the user liked the design he thinks the colors that we had used were very modern he likes the login page and the Qr code scanner, the scorable features on the homepage is good, the user had said he did not like the use of grey and red text as well as the image on the enter details above a grey color background, wants to see improvement on alignment on the homepage. Wants to see the login button is a bit off, and the user said that the home button only appears on one page wants a bit off consistency on all pages, likes the core module wants it one all the pages the changes the user had said was stated above as a list of improvements

User 2:

This user had said the concept of the covid application was nice it was similar to other good application, the user liked the use of colors on the homepage, he didn't mind the alignment, he had wanted the dropdown menu to be bigger and wanted the icons sizes to be bigger as well, he had wanted the text to be bigger as well, wants navigation at the bottom off all pages, likes the details page only thing he would like to see improve on is the alignment and size of text on the Qr pages, increase the font size as well as the wide space, the user also wanted to fix the alignment on the confirmation page, while on the homepage increase the size of new cases and vaccinated/unvaccinated people. The user also didn't like the text changing on the Qr code with the transition.

User 3:

This user had stated the text on all the pages is wonky, the user said the buttons are all off center the user said she liked the details page but had stated that everything is off center, what she would like to see is improvement on the alignment cause the current alignment is not great, enjoys the symptoms page but the text is slightly off, and the comma is off and is cut off a little bit, the user had said the spacing was good. The login page was good, but the user wanted rounded edge on this page, likes how the Qr code is but finds that it moves very quickly. The main improvements the user would like to see is better alignment and spacing.

User 4:

This user said that the design looks good, and the colors are easy to see, likes a lot of the images wants more balanced text, the appointment section should go further like many other applications the alignment needs work as well as the spacing but regardless the information is great and there is a lot of it.

User 5:

What this user had said about the designs was the he had found the text hard to read and had seen on all pages that some of the text wasn't alligned properly, what the user liked was the color on all the screen he had stated that they were modern, what the user didn't like was the enter details the main thing he didn't like was the grey color behind the Image. The user had felt the functionallity of the application such as scroll features was really well done. Another thing he didn't like the speed on the qr code and how the text changes on the qr code transtion.

General Feedback from hi-fi testing:

The main feedback from all of our hi-fi testing was that the users had like the basic concept of our design the main things they want improved on was alignment of the text and images, the features that are users had enjoyed was the use of modern colors, another thing the users liked was the spacing on our pages but some said on other pages that the spacing needs work on as well as the alignment.

Report of hi-fi wireframes and explanation of each function:

In response to the ongoing COVID-19 panademic, this report presents the User Experience(UX)and user interface(UI) for a covid 19 application. The purpose of this this appplication to aware the people with Covid-19 and also make the things easier. Apart from that, purpose of this application is to provide users with essential information related to COVID-19, such as the safety status of different states, vaccination certificate management, appointment scheduling, symptom tracking, and QR code scanning for vaccination certificates.

Design Features:

1. Home Screen:

The home screen serves as the central hub for the application. Displays a Charts which depicts the new cases, vaccinated people, unvaccinated people, or list view indicating how many states are safe to visit and how many are in the dangerous zone, with a color-coded system (green for safe and red for dangerous).

2. Vaccination Certificate:

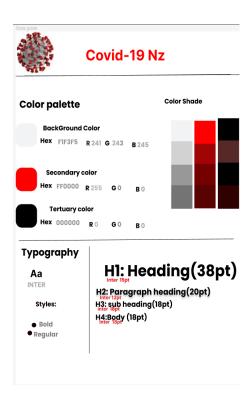
Users can access their vaccination certificates through this feature. To access the certificate, users need to log in for security and privacy. Once logged in, users can view the Qr code to scan after scan the code User can download their vaccination certificate in a digital format.

3.Appointment:

Users can schedule COVID-19 vaccination appointments through the application.

The feature allows users to select their preferred location, date, and time for vaccination.

STYLE GUIDE:



Survey:

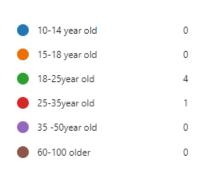
1. Enter your name

5 Responses

ID ↑	Name	Responses
1	Jacob Rosner	Jacob
2	Liam Anthony	Liam
3	Zane Oldridge	Zane
4	Stephen Prosser	Stephen Prosser
5	Sunny Gandhi	Sunny

2. Choose your age

More Details

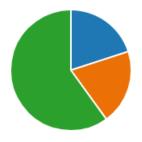




3. What type of area do you live

More Details





4. When do you looking for healthcare(like covid19) website and application what you are looking for

ID ↑ Name Responses

1	Jacob Rosner	Info such as side effects and when to take
2	Liam Anthony	Government certification
3	Zane Oldridge	Trusteed agency's linked to the website
4	Sunny Gandhi	links to healthcare

5. What kind of degsin do you want

More Details

Lots of colors	0
Less color's	2
Light color	0
Dark color	3
	Light color

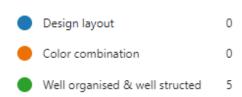


- 6. When looking for Items on a Website How do you find what you are looking for
- 5 Responses

ID ↑	Name	Responses
1	Jacob Rosner	Search and filters
2	Liam Anthony	Search bar or navigation options
3	Zane Oldridge	Using a search bar
4	Stephen Prosser	If I'm looking for something specifically, I'll search it up using the in-built search function if provided
5	Sunny Gandhi	links ,login and signup

7. What are things you need to keep influence using any application?

More Details





- 8. What is your expectations related to COVID19 website
- 5 Responses

ID ↑	Name	Responses
1	Jacob Rosner	Have a section to learn about covid
2	Liam Anthony	Up front relevant information
3	Zane Oldridge	having easy understanding of where to get infomation im looking for
4	Stephen Prosser	It provides everything you need to know about COVID-19 itself as well as additional healthcare information
5	Sunny Gandhi	nothing

9. When User Testing has started do you like to become a part of user testing for this application?







10. Any suggestion you want to give us?

3 Responses

ID ↑	Name	Responses
1	Jacob Rosner	Not really
2	Stephen Prosser	Nope, all is good
3	Sunny Gandhi	N/A

Project Process Report

Milestones

Week 1

- Project description.
- Home screen and login screen.

Week 2

- List of vaccinated people page and appointment.
- Overall system architecture.
- Database.
- System modelling.
 - Use case diagram (add any changes if needed).
 - o Class diagrams.
 - o Activity diagrams.

Week 3

- Confirmation page.
- Qr code page.
- Home page.
- Project functionality testing.
- Project process report.
- System modelling.

- Use case diagram (add any changes if needed).
- o Class diagrams.
- Activity diagrams.

Week 4

- Self-reflection (this must be done individually).
- System modelling.
 - Use case diagram (add any changes if needed).
 - o Class diagrams.
 - o Activity diagrams.
- User Guide/ installation guide.
- Presentation (work on presentation).

Week 5

- Any remaining task that isn't finished must be completed by the end of 4/12/2023 for hand in.
- Presentation (present our project).

Completed task

- All design page our nearing completion.
- Project description is completed added the ones we did in assessment 1.
- Description of overall system architecture completed.
- Use case diagrams completed.
- Login page functionality created the usernames our called test and test2 the password for test is 12345 and the password for test2 is 4321.
- Homepage. Xaml is completed only working on xaml.cs.

Roles

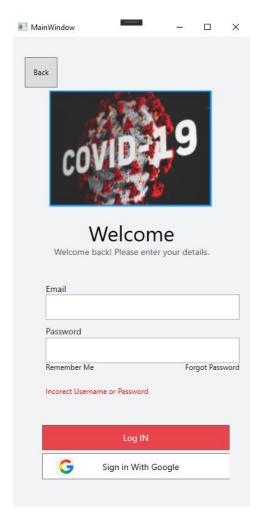
Mandeep	Tools, technologies used	Requirement specification	Lo-fi Wireframes.	Hi-fi prototype	Project implementation	Designing our pages	survey
Sunny	Software process model and justification	Project implementation	System modelling	Coding on xaml.cs file			
William	Timeline	Goals and objectives	Requirement specification	Project implementation	System Modelling	Coding on the xaml.cs file.	Sketches, lo-fi wireframes

Description of project functionality with screenshots and code

```
Susing System; [2] using System.ID; [2] using System.Linq; [3] using System.Linq; [4] using System.Linq; [5] using System.Linq; [6] using System.Threading.Tasks; [7] using System.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threading.Threa
```



Login page



Login page with error message

```
using Dapper;
 using System;
using System.Collections.Generic;
 using System.Data;
using System.Data.SQLite;
using System.IO;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows;
using System.Windows.Controls;
 using System.Windows.Data;
using System.Windows.Documents;
using System.Windows.Media;
 using System.Windows.Media.Imaging;
 using System.Windows.Navigation;
using System.Windows.Shapes;
□ namespace Group_Project_106._2
     /// <summary>
/// Interaction logic for Loginpage.xaml
/// </summary>
      public delegate void LoginPageEvent();
      public partial class Loginpage : UserControl
           public event LoginPageEvent Destoryed;
```

```
if (!loginSuccess) {
    globals.globalUser = null;
    loginStatusText.Foreground = Brushes.Red;
    loginStatusText.Text = "Incorect Username or Password";
}
int stop = 0;
}
```



Appointment page if appointment login is filled in then it will take you to the confirmation page and establishing that the appointment was successful.



Appointment page with error message

Appointment xaml.cs code

```
using System;
using System.Collections.Generic;
  using System.Linq;
using System.Text;
 using System.Threading.Tasks;
using System.Windows;
  using System.Windows.Controls;
  using System.Windows.Data;
using System.Windows.Documents;
  using System.Windows.Media;
  using System.Windows.Media.Imaging;
 using System.Windows.Navigation;
using System.Windows.Shapes;
⊟namespace Group_Project_106._2
      public delegate void appointmentPageEvent();
      3 references public partial class Appointment : UserControl
           public event appointmentPageEvent Destoryed;
           public event appointmentPageEvent Booked;
           preference
public Appointment()
                InitializeComponent();
           private void BackBtn(object sender, RoutedEventArgs e)
                Destoryed?.Invoke();
```

```
private void BookedBtn(object sender, RoutedEventArgs e)
    String appoitmentEmailStr = appoitmentEmail.Text;
    String appoitmentNameStr = appoitmentName.Text;
String appoitmentPhoneStr = appoitmentPhone.Text;
    String appoitmentGenderStr = appoitmentGender.Text;
   List<string> errors = new List<string>();
    if (appoitmentEmailStr == null || appoitmentEmailStr == "")
        errors.Add("Please enter a email");
    if(appoitmentNameStr == null || appoitmentNameStr == "")
        errors.Add("Please enter your name");
    if (appointmentPhoneStr == null \mid \mid appointmentPhoneStr == "")
        errors.Add("Please enter your phone number");
    if (appoitmentGenderStr == null || appoitmentGenderStr == "")
        errors.Add("Please enter your gender");
    appoitmentErrorBox.Text = "";
    foreach (String error in errors)
        appoitmentErrorBox.Text += error + ".\n";
    if(errors.Count == 0) {
   Booked?.Invoke();
```



Confirmation page

Code for confirmation page xaml.cs

Appointment. Xaml designer page

```
| Section | Sect
```

Confirmation. Xaml code

```
UserControl

| SubserControl |
```

QR code

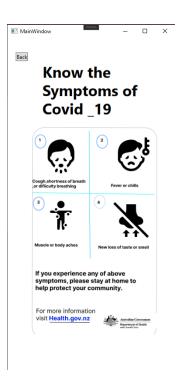


Or code.xaml.CS

```
| Section | Sect
```

QR. Xaml code

Symptoms



Symptoms page before

Symptoms xaml.cs

```
ausing System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;
using System.Windows;
using System.Windows.Controls;
using System.Windows.Documents;
using System.Windows.Documents;
using System.Windows.Documents;
using System.Windows.Documents;
using System.Windows.Modia;
using System.Windows.Media;
using System.Windows.Mavigation;
using System.Windows.Navigation;
using System.Windows.Shapes;

anamespace Group_Project_106._2

/// <summary>
/// Interaction logic for Symptoms.xaml
/// </summary>
/// public delegate void symptomsPageEvent();

public delegate void symptomsPageEvent();

public event symptomsPageEvent Destoryed;

insferences
public Symptoms()
{
    InitializeComponent();

    Destoryed?.Invoke();
}

Destoryed?.Invoke();

}
```



Know the Symptoms of Covid _19



How can we safe our self



Symptoms xaml page

```
UserControl x:Class="Group_Project_106._2.Symptoms"
             xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
             xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
             xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
            xmlns:local="clr-namespace:Group_Project_106._2
mc:Ignorable="d"
             d:DesignHeight="1465" d:DesignWidth="400" Background=" #FFFFFF">
    <Grid>
        <ScrollViewer>
        <StackPanel Margin="19,0,0,50">
                <TextBlock Foreground=■"#000000"
                       FontFamily="Inter"
                       FontWeight="Bd TextBlock.FontFamily "Wrap" Margin="10,60,10,20">
                    Know the Symptoms of <TextBlock Foreground=■"#ff0000" >Covid _19</TextBlock>
                </TextBlock>
                <Image Source="images/s.png" Height="622" Width="326"/>
<TextBlock Foreground=□"#000000"</pre>
                       FontSize="15"
                       FontFamily="Inter"
FontWeight="Bold" Text="How can we safe our self" Height="23" TextAlignment="Center"/>
                <Image Source="images/ss.png" Height="524" Width="309"/>
                </StackPanel>
        </ScrollViewer>
    </Grid>
</UserControl>
```

Homepage



NO.	City	Cases	Alerts
1	Wellington	1000	Safe
2	Auckland	1000	Dangerous
3	Christchurch	100	Safe
4	Tauranga	10000	Dangerous
5	Dunedin	500	Safe
6	Hamilton	15000	Dangerous



New Covid-19 Cases List

NO.	City	Cases	Alerts
1	Wellington	1000	Safe
2	Auckland	1000	Dangerous
3	Christchurch	100	Safe
4	Tauranga	100000	Dangerous
5	Dunedin	500	Safe
6	Hamilton	100000	Dangerous
7	Canterbury	1500	Safe
8	Nelson	600	Safe
9	Napier	20	Safe
10	Queenstown	1000	Dangerous
11	Lower hutt	1000	Dangerous
12	Timaru	1200	Safe
13	Palmeston North	200	Safe
14	Hastings	5000	Dangerous
15	Poriua	120	Safe

Homepage Xaml

```
| Subsr-Ontrol x:Clbss-"Group Project 186. 2.Hompage" | xellss-"Interference | xellss-"Inte
```

```
<TextBlock FontWeight="Bold" Margin="10,329,376,454">2</TextBlock>
         <TextBlock FontWeight="Bold" Margin="68,329,266,437">Auckland</TextBlock>
<TextBlock FontWeight="Bold" Margin="199,329,157,454">1000</TextBlock>
         <TextBlock FontWeight="Bold" Margin="323,329,10,454" Foreground= Red" Text="Dangerous"/>
         <TextBlock FontWeight="Bold" Margin="10,368,376,400">3</TextBlock>
<TextBlock FontWeight="Bold" Margin="68,368,235,409" RenderTransformOrigin="0.399,0.493">Christchurch</TextBlock>
<TextBlock FontWeight="Bold" Margin="199,368,157,416">100</TextBlock>
         <TextBlock FontWeight="Bold" Margin="323,449,10,324" Foreground==="#689467">Safe</TextBlock>
         <TextBlock FontWeight="Bold" Margin="10,412,376,356">4</TextBlock>
<TextBlock FontWeight="Bold" Margin="60,412,238,358">Tauranga</TextBlock>
         <TextBlock FontWeight="Bold" Margin="199,412,152,358">10000</TextBlock>
         <TextBlock FontWeight="Bold" Margin="323,412,10,372" Foreground=="Red">Dangerous</TextBlock>
         <TextBlock FontWeight="Bold" Margin="10,447,376,329">5</TextBlock>
<TextBlock FontWeight="Bold" Margin="62,449,252,329">Dunedin</TextBlock>
         <TextBlock FontWeight="Bold" Margin="199,447,157,329">500</TextBlock>
         <TextBlock FontWeight="Bold" Margin="323,368,8,416" Foreground=\\"#6B9467">Safe</TextBlock>
        <TextBlock FontWeight="Bold" Margin="10,476,376,307">6</TextBlock>
<TextBlock FontWeight="Bold" Margin="62,476,241,290">Hamilton</TextBlock>
<TextBlock FontWeight="Bold" Margin="197,474,157,307">15000</TextBlock>
         <TextBlock FontWeight="Bold" Margin="323,476,-1,307" Foreground=□"Red">Dangerous</TextBlock>
         <Button Click="backBtn" VerticalAlignment="Top" Margin="321,15,8,0" Height="28" Content="back"/>
    </Grid>
/UserControl>
```

Xaml.cs

```
ireference
private void Home_page_qr(object sender, RoutedEventArgs e)
{
    _qr?.Invoke();
}

ireference
private void Home_page_confermation(object sender, RoutedEventArgs e)
{
    _confermation?.Invoke();
}

ireference
private void Home_page_symptons(object sender, RoutedEventArgs e)
{
    _symptons?.Invoke();
}
```

```
</Grid.ColumnDefinitions>
     Grid.RowDefinitions
                     RowDefinition Height="1*" />
<RowDefinition Height="1*" />
<RowDefinition Height="1*" />
<RowDefinition Height="1*" />
<RowDefinition Height="1*" />
                        <RowDefinition Height="1*" /:</pre>
                     <RowDefinition Height="1*" />
<RowDefinition Height="1*" />
                       <RowDefinition Height="1*" /
                       <RowDefinition Height="1*"</pre>
                        <RowDefinition Height="1*" /
                     <RowDefinition Height="1*" />
                   <RowDefinition Height="1*" />

<TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Column="0" FontSize="15">NO.</TextBlock>
<TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Column="2" FontSize="15">Sitys/TextBlock>
<TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Column="2" FontSize="15">Scases</TextBlock>
<TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Column="3" FontSize="15">Alerts</TextBlock>
<TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Row="0" Grid.Row="0" Grid.Row="15">Alerts</TextBlock>
<TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Row="0" Grid.Row="0" Grid.Row="15">Alerts</TextBlock>
<TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Row="0" Grid.Row="15">Alerts</TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" Grid.Row="0" Grid.Row="0" Grid.Row="0" Grid.Row="15">Alerts</TextBlock FontFamily="Inter" FontWeight="Bold" Grid.Row="0" FontSize="15">Alerts</TextBlock>
<TextBlock FontSize="15">Alerts</TextBlock>
<TextBlock FontSize="15">Alerts</TextBl
<TextBlock FontWeight="Bold" Grid.Row="1" Grid.Column="0">1</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="1" Grid.Column="1">wellington</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="1" Grid.Column="2">1090</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="1" Grid.Column="3" Foreground=="#689467">>safe</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="2" Grid.Column="0">2</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="2" Grid.Column="1">Auckland</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="2" Grid.Column="2">1000</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="2" Grid.Column="3" Foreground="Red" Text="Dangerous"/></textBlock FontWeight="Bold" Grid.Row="2" Grid.Column="3" Foreground="Red" Text="Dangerous"/>
<TextBlock FontWeight="Bold" Grid.Row="3" Grid.Column="0">3</TextBlock>

<TextBlock FontWeight="Bold" Grid.Row="3" Grid.Column="1">christchurch</TextBlock>

<TextBlock FontWeight="Bold" Grid.Row="3" Grid.Column="2">100</TextBlock>

<TextBlock FontWeight="Bold" Grid.Row="3" Grid.Column="3" Foreground=■"#689467">Safe</TextBlock>
 <TextBlock FontWeight="Bold" Grid.Row="4" Grid.Column="0">4</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="4" Grid.Column="1">Tauranga</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="4" Grid.Column="2">1000000</TextBlock>
<TextBlock FontWeight="Bold" Grid.Row="4" Grid.Column="3" Foreground="Red" Text="Dangerous"/></TextBlock FontWeight="Bold" Grid.Row="4" Grid.Column="3" Foreground="Red" Text="Dangerous"/>
```

Admin page



Admin Page

Logout

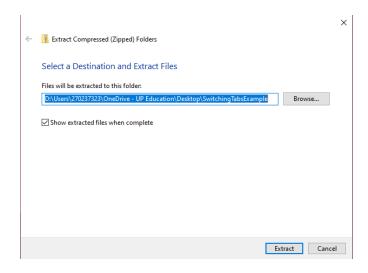
```
| SetUserControl x:Class="Group_Project_106._2.adminPage" xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation" xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml" xmlns:x="http://schemas.ompxmformats.org/markup-compatibility/2006" xmlns:d="http://schemas.ompxmformats.org/markup-compatibility/2006" xmlns:d="http://schemas.ompxmformats.org/markup-compatibility/2006" xmlns:d="http://schemas.ompxmformats.org/markup-compatibility/2006" xmlns:d="http://schemas.ompxmformats.org/markup-compatibility/2006" xmlns:d="http://schemas.ompxmformats.org/markup-compatibility/2006" xmlns:d="http://schemas.ompxmformats.org/markup-comptability/2006" xmlns:d="http://schemas.org/markup-compatibility/2006" xmlns:d="http://schemas.org/markup-compatibility/2006" xmlns:d="http://schemas.org/markup-comptability/2006" xmlns:d="http://schemas.org/markup-compt
```

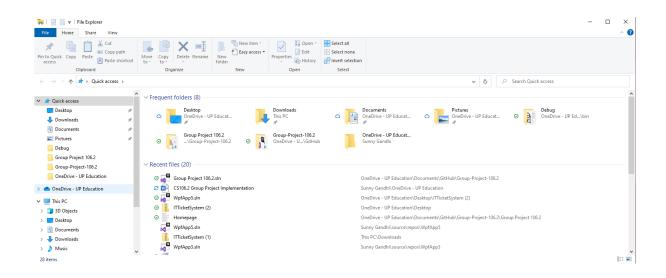
```
⊟using System;
 using System.Collections.Generic;
 using System.Linq;
 using System.Text;
 using System.Threading.Tasks;
 using System.Windows;
 using System.Windows.Controls;
 using System.Windows.Data;
 using System.Windows.Documents;
 using System.Windows.Input;
 using System.Windows.Media;
 using System.Windows.Media.Imaging;
 using System.Windows.Navigation;
using System.Windows.Shapes;
⊟namespace Group_Project_106._2
     public delegate void adminPageEvent();
     public partial class adminPage : UserControl
         public event adminPageEvent Logout;
         public adminPage()
             InitializeComponent();
         }
         private void logoutBtn_Click(object sender, RoutedEventArgs e)
         {
             Logout?.Invoke();
}
```

User documentation

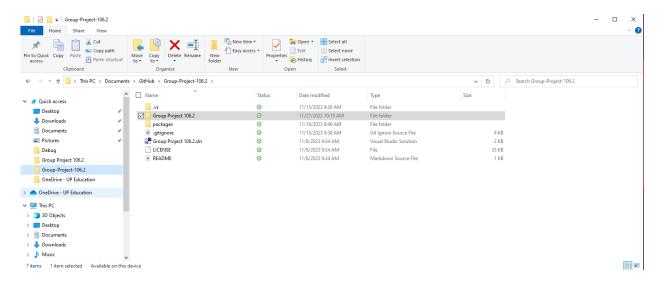
User Installation

To download the file, you must first extract the file to your pc.

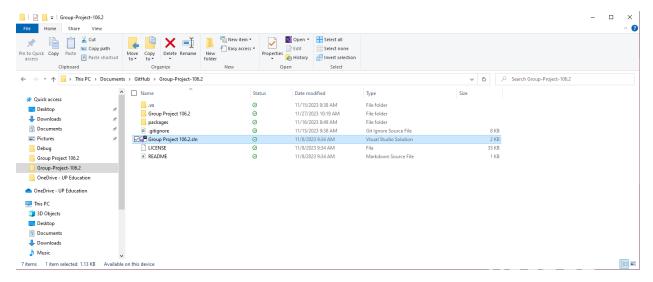




How the user can install our program they first have to have a pc with a working compressed zip file, this will the make a mini online packet that the user can extract and put onto his pc, once you have extracted the folder (the folder name is Group-Project-106.2) you must click on the file called Group Project 106.2sIn this will then allow the user to open up the application for the user to use.



If you double, click on group project 106.2 sln it will then open up the application.



User Guide

What user can expect from the guide, is to explain the process of how to use our application, what our application is intended for a user to access his/hers covid information what it will display and the areas that are safe and dangerous.

- 1. Make sure visual studios have C# and wpf.
- 2. Extract the zip file to a pc.
- 3. Download the file.
- 4. Click on the extracted folder.

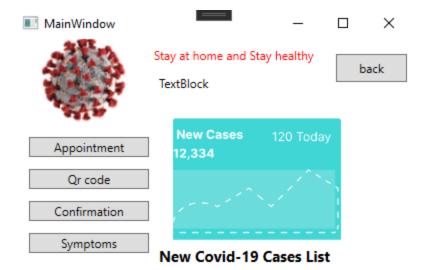
- 5. Click on the folder to extract all of the files anywhere on the pc.
- 6. To access the application, click on the extracted folder and find the solution file (the file is listed as sln file).
- 7. Click on the sln to open up the application.

How to use the application

- 1. Open up the sln file the file will be located in a folder the folder will be called group project 106.2.
- 2. To run the program press F5 on visual studio.
- 3. Once you press F5 the first page you will see is the login page enter the login details.



If details are entered corrected, then it will take you to the homepage

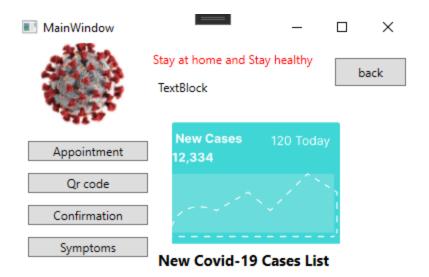


NO.	City	Cases	Alerts
1	Wellington	1000	Safe
2	Auckland	1000	Dangerous
3	Christchurch	100	Safe
4	Tauranga	10000	Dangerous
5	Dunedin	500	Safe
6	Hamilton	15000	Dangerous



If login details are incorrect then this screen will appear

- 4. This will take you to a homepage.
- 5. On the homepage it give an option to pick from appointment, QR code, Confirmation, and Symptoms.



NO.	City	Cases	Alerts
1	Wellington	1000	Safe
2	Auckland	1000	Dangerous
3	Christchurch	100	Safe
4	Tauranga	10000	Dangerous
5	Dunedin	500	Safe
6	Hamilton	15000	Dangerous

^{6.} If you choose Appointment, then enter the details on the appointment page.



7. If you enter in the details correctly then your appointment has been booked and a confirmation page will display, then you will be allowed to return to the home screen at the bottom.



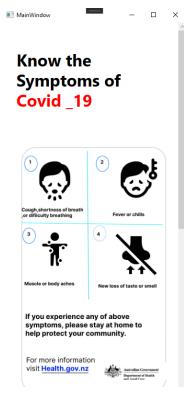
If entered incorrectly then this screen will appear

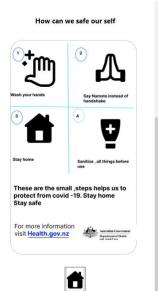


8. If you choose the Qr code, it will take you to a Qr code page



9. If you then return to the homepage another page is called symptoms and the button at the bottom of the symptoms page will return you to the homepage





Self-Reflection

The things that worked well for you in the project

Team management worked well in terms of our skills such as Splitting up tasks in such a way that we were able to achieve the best outcome. However, this could have been improved because we had some situations where we were waiting for other team members to do one thing and the rest were unable to do anything. Overall, the lessons learnt were to produce a timeline and stick to it to make sure we can work as efficiently as possible.

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