



KEMENTERIAN PENDIDIKAN TINGGI
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI

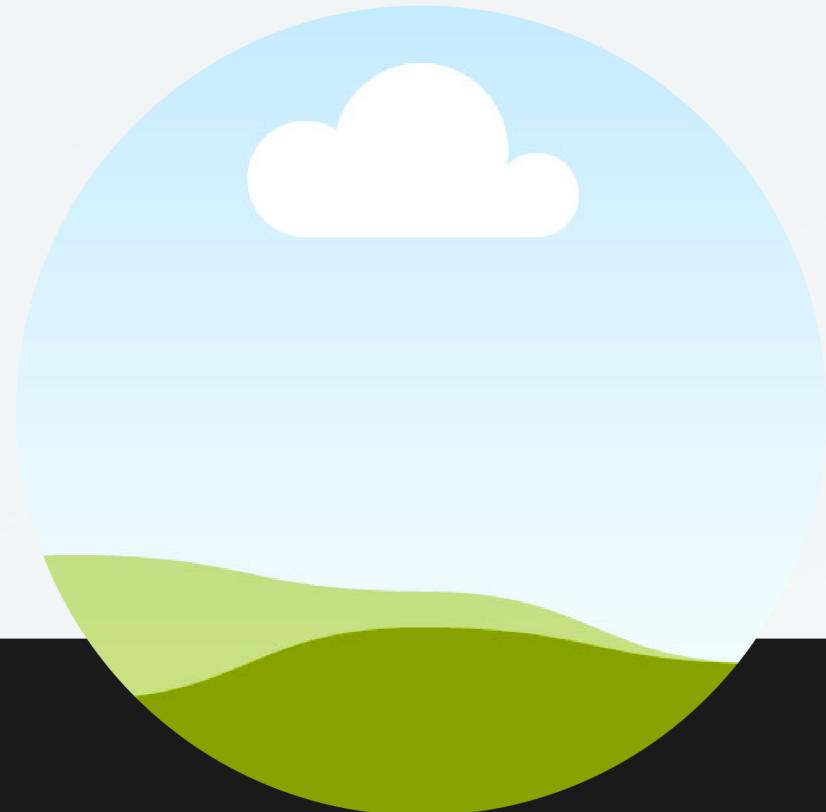


FINAL YEAR PROJECT

OCCUPANCY MANAGEMENT SYSTEM

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TEAM MEMBERS



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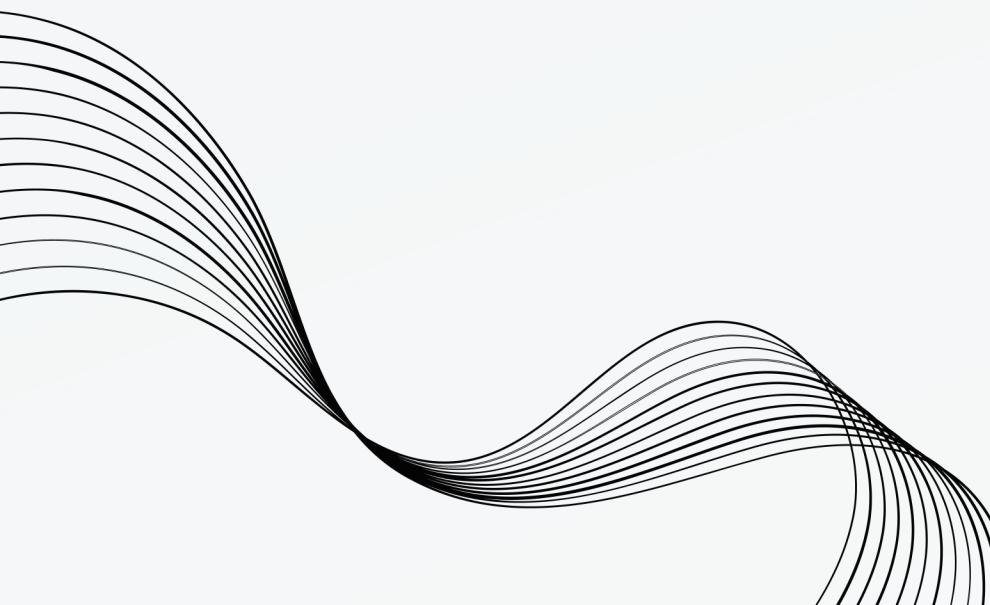
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INTRODUCTION

THAN HSIANG WAN CHING YUAN NURSING HOME, A PLACE OF CARE AND COMFORT FOR OUR CHERISHED ELDERLY RESIDENTS.

OUR NURSING HOME FACES CHALLENGES, LIKE KEEPING TRACK OF RESIDENT NUMBERS, ALLOCATING RESOURCES EFFECTIVELY, AND MANAGING RESIDENT INFORMATION ACCURATELY. THESE HURDLES CAN BE OVERCOME WITH THE OCCUPANCY MANAGEMENT SYSTEM.

OUR PROPOSAL IS TAILORED TO THAN HSIANG WAN CHING YUAN NURSING HOME'S UNIQUE NEEDS. BY EMBRACING THIS TECHNOLOGY, WE'RE NOT JUST STREAMLINING OUR WORK; WE'RE ALSO ELEVATING THE CARE WE PROVIDE.

THIS PROPOSAL OUTLINES HOW WE PLAN TO MAKE THIS SYSTEM WORK FOR US, DETAILING ITS FEATURES, HOW WE'LL PUT IT IN PLACE, WHEN IT WILL HAPPEN, AND WHAT WE NEED TO MAKE IT A SUCCESS.

PROBLEM STATEMENT

- Than Hsiang Wan Ching Yuan Nursing Home faces challenges with varying resident numbers, making it challenging to allocate resources effectively and plan staffing.
- The current manual tracking of resident information and resource allocation is error-prone and time-consuming, leading to inefficiencies and potential risks to resident care.
- Without a systematic occupancy management system, the nursing home may struggle to provide consistent and high-quality care to all residents, compromising its core mission.
- Inefficient resource allocation during periods of low occupancy leads to underutilized resources, impacting cost-effectiveness.
- Staff members often face increased workloads during high occupancy periods, affecting their well-being and potentially affecting the quality of care they can provide.

PROJECT SCOPE

User Scope:

- Administrators will have access to the system for overall management and oversight. They can view occupancy reports and allocate resources.
- Staff will use the system for updating resident information and managing daily schedules.
- Limited access for residents and families to check bed availability and care plans.
- Access for maintenance and IT teams to ensure system operation.

System Scope:

- Real-time records of admissions, discharges, and room assignments.
- Facilitates allocation of staffing and resources based on occupancy.
- Records resident data including care plans and medical history.
- Generates staff schedules based on availability and skills.
- Allows residents and families to check bed availability and care plans.
- Prioritizes data security and compliance with healthcare regulations.
- Provides comprehensive reports for data-driven decisions.

PROJECT OBJECTIVES

- Implement a system to efficiently manage resident admissions, discharges, and room assignments.
- Allocate staffing and resources based on real-time occupancy to prevent waste and shortages.
- Ensure reliable recording and management of resident data, improving care quality and safety.
- Generate balanced staff schedules considering availability and skills.
- Provide easy access to bed availability, admission status, and care plans.
- Prioritize data security and adhere to healthcare regulations.
- Offer detailed reports for informed decision-making.

PROJECT SIGNIFICANCE

- The system empowers caregivers to provide personalized care, meeting residents' unique needs promptly.
- Optimizes staffing and resources, reducing costs and preventing shortages.
- Simplifies complex manual tasks, allowing staff to focus on care instead of administrative work.
- Safeguards sensitive resident data, ensuring privacy and legal requirements.
- Balances workloads, promoting staff well-being and job satisfaction.
- Upholds the nursing home's mission of providing high-quality care consistently.
- Showcases modernization and innovation, attracting residents and families seeking exceptional care

LITERATURE REVIEW

1.Homage

Homage is an award-winning personal care solution that combines curated and trained care professionals with smart technology to manage and provide on-demand holistic home and community-based caregiving to seniors and adults, allowing them to age and recover with grace, control and dignity.

The screenshot shows the homepage of the Homage website. The header features the Homage logo (a house with a heart inside) and navigation links for "Get Care Now", "EN", and "Malaysia". Below the header, there's a main banner with the text "Book Elder Care Services in Malaysia, Available 24/7" and a subtext about booking services from 1-hour onwards. A "Get Care Now" button is visible. To the right of the text is a circular image of a smiling elderly woman in a wheelchair being assisted by a caregiver in a blue shirt. At the bottom of the page, there's a section titled "Why we need elder care services" with a paragraph about common health issues like insomnia and sleep apnea among seniors. A weather widget shows "29°C Mostly sunny". The footer includes a live chat window with a representative named Hana, and standard browser navigation icons.

METHODOLOGY

Agile Methodology for Implementing we used Agile methodology to develop our project

i. Planning

- In the planning stage, we'll set clear project objectives and goals to guide our implementation efforts.

ii. Design

- During the design phase, we'll collaborate with stakeholders to refine feature requirements and create visual designs for the Occupancy Management System.

iii. Develop

- In the development phase, we'll form development teams, assign tasks, and utilize Agile methodologies like Scrum or Kanban for effective workload management.

iv. Test

- Continuous testing of features will be conducted to ensure functionality, and we'll actively gather usability feedback from stakeholders.

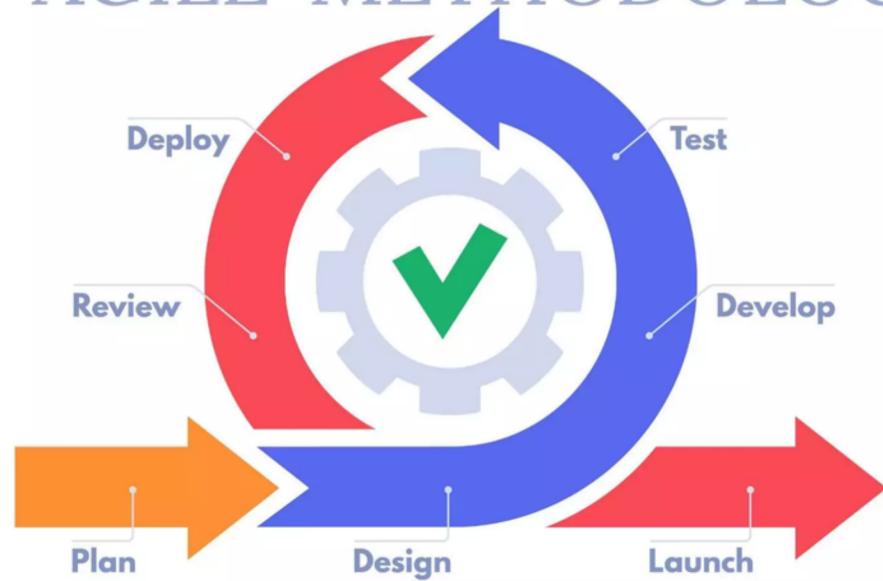
v. Deploy

- During deployment, we'll incrementally release features to user groups, closely monitor user adoption, and collect continuous feedback to drive improvements.

vi. Review

- We'll regularly conduct sprint reviews to showcase completed features, hold retrospectives to assess team performance and processes, and prioritize improvements based on feedback received.

AGILE METHODOLOGY



GANTT CHAT

N O	PHASE	TASK	Duration (Days)	Start (dd/mm/yyyy)	Finish (dd/mm/yyyy)	Resources name
1.	Phase 1-Planning		7 days	28/8/2023	3/9/2023	
2.		Define Problem	1days	28/8/2023	28/8/2023	
3.		Scope and objective	1days	29/8/2023	29/8/2023	
4.		Literature Study	3days	30/8/2023	1/9/2023	
5.		Software and Hardware	2days	2/9/2023	3/9/2023	
6.	Phase 2 -Analysis		12 days	4/9/2023	15/9/2023	
7.		Finding	2days	4/9/2023	5/9/2023	
8.		Feasibility Study	4days	6/9/2023	9 /9/2023	
9.		Estimated Cost	3days	10/9/2023	12/9/2023	
10.		Presentation and Report	3days	13/9/2023	15/9/2023	
11.	Phase 3 -Design		8days	16/9/2023	23/9/2023	
12.		Interface design	2days	16/9/2023	17/9/2023	
13.		Output design	2days	18/8/2023	19/9/2023	
14.		Database design	3days	20/9/2023	22/9/2023	
15.		Presentation design	1days	23/9/2023	23/9/2023	
16.	Phase 4 -Develop		50days	25/9/2023	13/11/2023	
17.		Code development	22days	25/9/2023	16/10/2023	
18.		Database implementation	1days	17/10/2023	17/10/2023	
19.		integration	11days	18/10/2023	28/10/2023	
20.		Code reviews and testing	1days	29/10/2023	29/10/2023	
21.		Coding and improvise	7days	30/10/2023	5/11/2023	
22.		Testing	1days	6/11/2023	6/11/2023	
23.		Finalize Coding	6days	7/11/2023	12/11/2023	
24.		Presentation Report	1days	13/11/2023	13/11/2023	
25.	Phase 5 -Support		6 days	14/11/2023	19/11/2023	
26.		Installation of the system	1days	14/11/2023	14/11/2023	
27.		User Manual	2days	15/11/2023	16/11/2023	
28.		Training	2days	17/11/2023	18/11/2023	
29.		Presentation and report	1days	19/11/2023	19/11/2023	
30.	Phase 6 - presentation	Final presentation	1days	20/11/2023	20/11/2023	

GANTT CHAT

COST PLANNING

Software		
Name	Usage	Cost
WPS Office	To do project document	Free Application
Canva	To create presentation slide	Web-based Application
Mysql	To create database	Open source
Xammp	To create local web server	Open source
Instagantt	To create Gantt chart	Open source
Wix	To design website	Open source
Visual Studio Code	To design website	Open source
Microsoft Visual Studio	To design website	Open source
Total cost:		RM0

Hardware		
Name	Usage	Specification
Lenovo IdeaPad Gaming 3 15 Gen 5	Use to develop project	Processor : AMD Ryzen 5 4600H Processor Gpu : NVIDIA GeForce GTX 1650Ti 4GB GDDR6 RAM : 8.0GB DDR4-3200 DDR4 SODIMM 3200MHz Ssd 256GB SSD OS:Windows 10 Home Single Language 64
DESKTOP-KF3UEVH	For project development (backup)	Processor : Intel(R) Core(TM) i5-10300H CPU @ 2.50GHz 2.50 GHz RAM : 16.0 GB (15.8 GB usable) OS:Edition Windows 11 Home Single Language

REFERENCES

WEBSITE:

- I. [HTTPS://MIRO.COM/APP/BOARD/UXJVMKAERJO=?
SHARE_LINK_ID=749781548839](https://miro.com/app/board/uxjvmkaerjo/?share_link_id=749781548839)
- II. [HTTPS://WWW.HOMAGE.COM.MY/ABOUT/](https://www.homage.com.my/about/)
- III. [HTTPS://WWW.AVIGILON.COM/OCCUPANCY-MANAGEMENT](https://www.avigilon.com/occupancy-management)
- IV. [BEST OCCUPANCY MANAGEMENT SYSTEM FOR SMART SPACES |
HELIXSENSE](#)
- V. [HTTPS://WWW.OCUCON.COM/PRODUCTS/OCCUPI-OCCUPANCY-
CONTROL-MANAGEMENT-SYSTEM](https://www.ocucon.com/products/occupi-occupancy-control-management-system)

CONCLUSION

In conclusion, We hope that our Occupancy Management system can help the staff at "Than Hsiang Wan Ching Yuan" Nursing Home in every way and they will use our system for a long time as this system will solve a lot of struggles for them.

APPENDIX

Expected Project Design

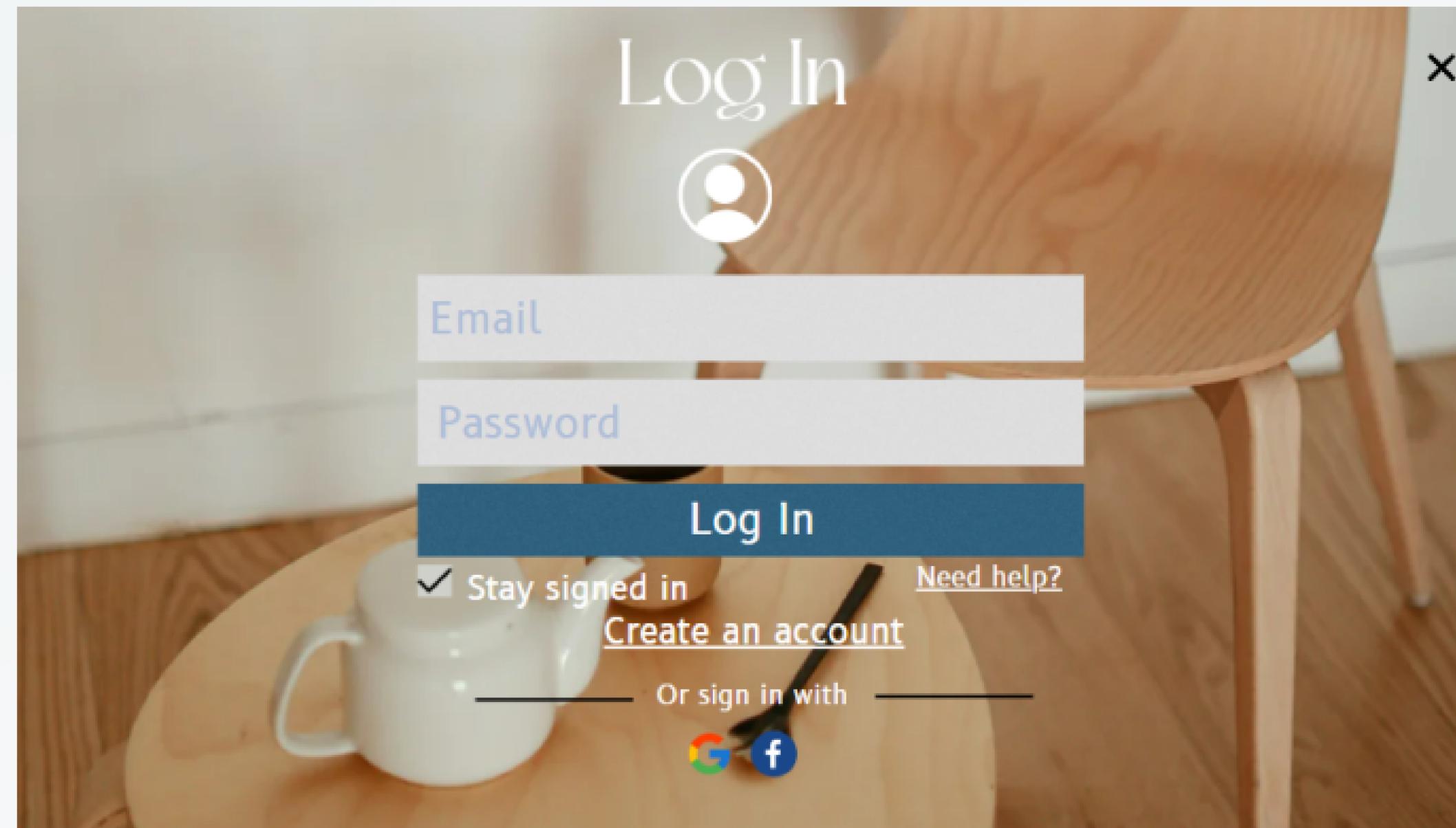
User Interface / Main Interface with explanation:

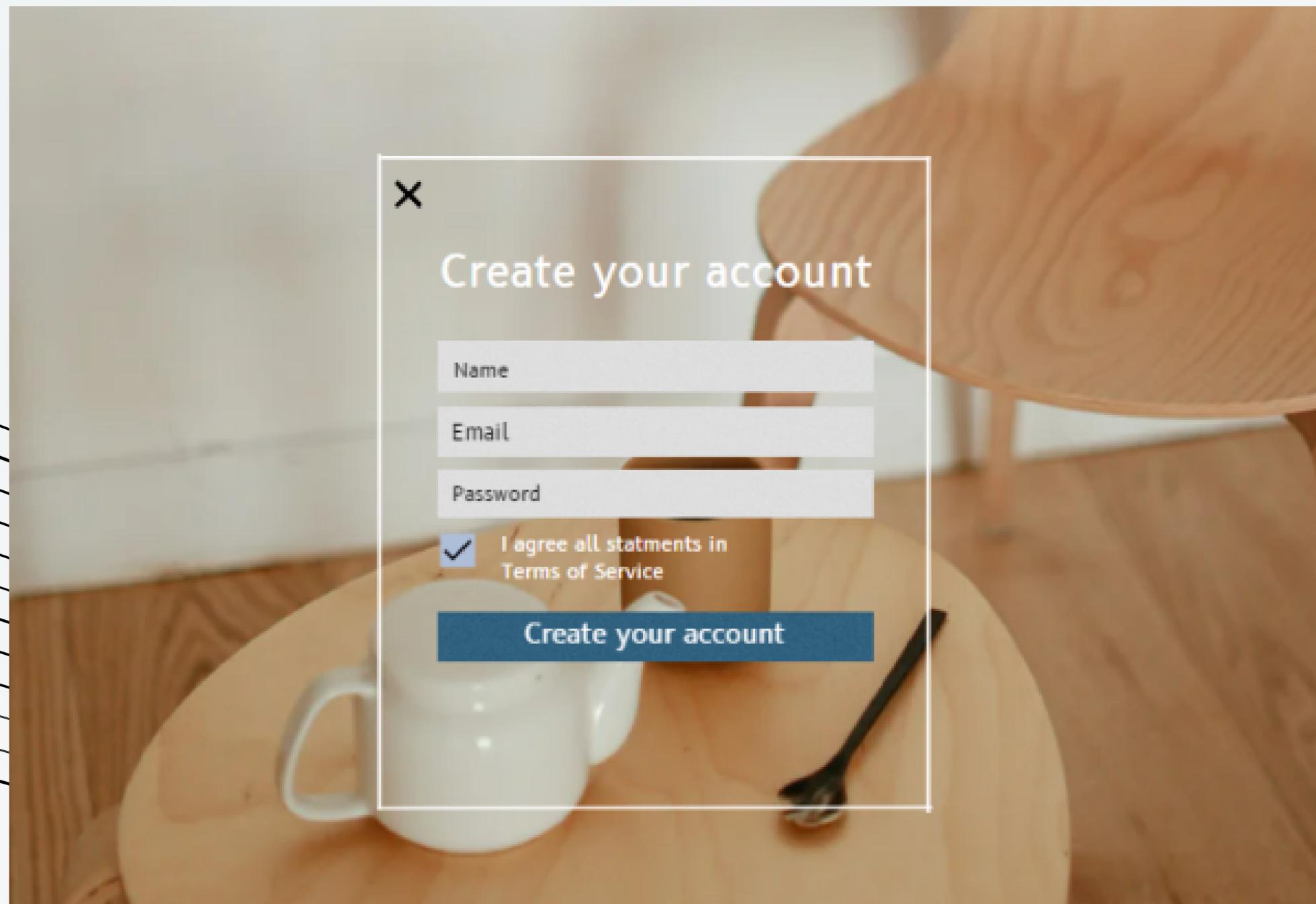


The main interface of the website will be viewed in such. The main interface contains a few different menus for admins to select based on their preferences. This interface has a button "Get care now" for admin to log in into website. The interface also have a message icon for admin to seek help during an emergency situation. The main interface also can let admin change the language by click on the flag icon on the top right.

Input Design with explanation:

This is the login interface for users, where they are required to enter their email and password to login to the website. Users can log in using google account or facebook account. User can create a account by clicking 'Create an account' link, which will take them to the account registration interface.





This is a new account creation for register interface where users are required to enter their name, email and password to register a new account.



**THANKS
FOR
LISTENING!**