



UNIVERSITI TEKNOLOGI MALAYSIA

PRACTICAL TRAINING AT PRISMA TECHNOLOGY SDN. BHD.

Presented By: Kristy Yap Jing Wei (A21EC0191)

Course: Computer Science (Graphics and Multimedia Software)

Training Role: Software Developer Intern

Training Duration: 23rd September 2024 – 8th February 2025 (20 Weeks)

Company Supervisor: Mr. Muhammad Dhaifullah Bin Muhamad Ali Cheah

University Supervisor: Dr. Nor Azizah Binti Sa'adon

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01 ORGANIZATION BACKGROUND

02 OBJECTIVES OF PROJECT / TRAINING

03 EXAMPLE OF WORK DONE

04 CONCLUSION

ORGANIZATION BACKGROUND



PRISMA TECHNOLOGY
202301030962 (1524885-A)



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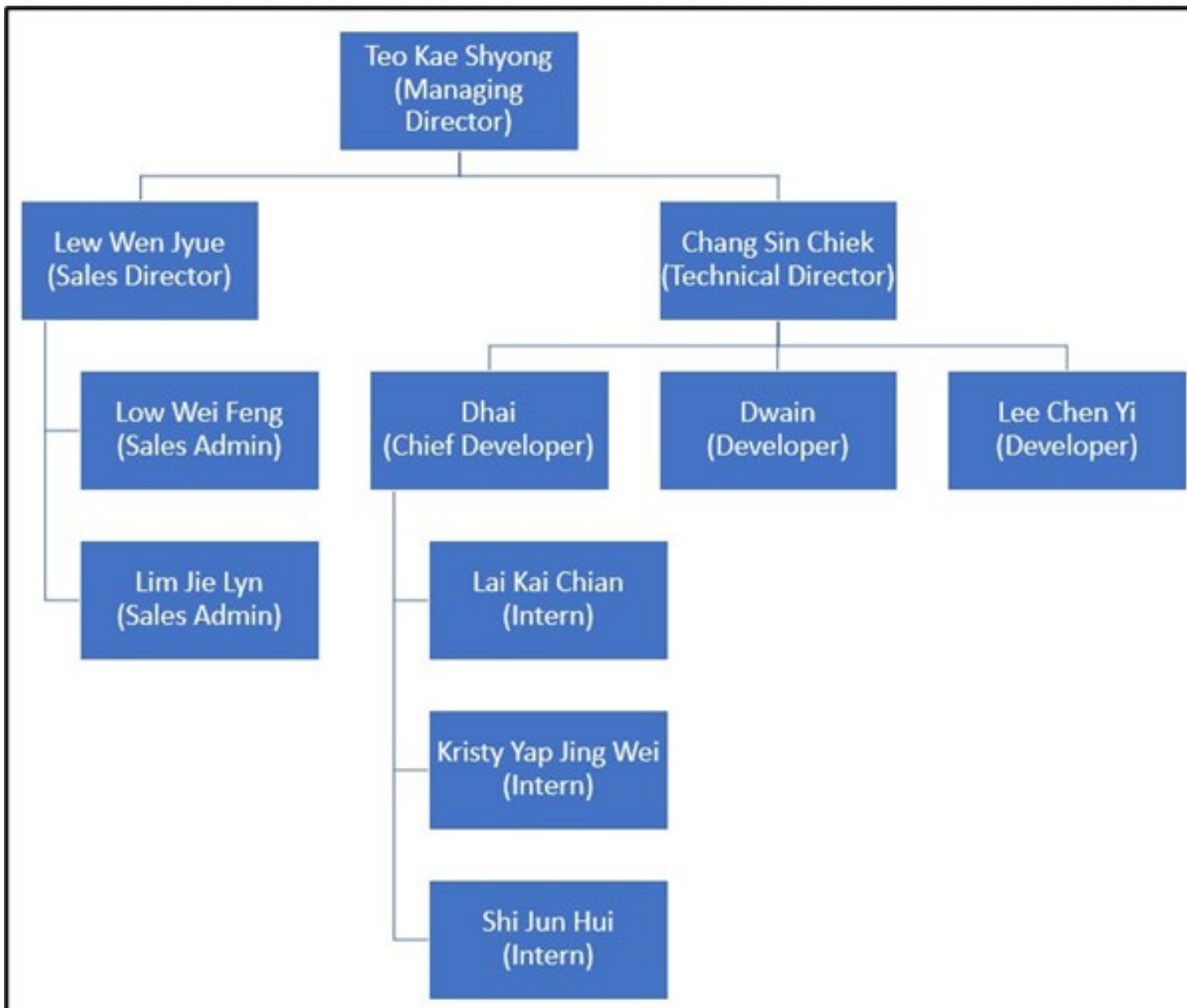
ABOUT PRISMA TECHNOLOGY

A software development and consulting company with a specialized in solutions for the manufacturing sector.

Offer business consultation, customized software development and advanced technological solutions to streamline manufacturing operations.

Develops custom software for Manufacturing Execution System (MES), payroll system and AI-driven live chat, empowering manufactures to achieve strategic goals.





Prisma's Organization Chart

OBJECTIVES OF PROJECT / TRAINING

01

To contribute to the design and development of the interactive live chat system for clients.

02

To gain experience in full-stack development using C#, React with TypeScript and so on.

03

To improve problem-solving skills through real-world debugging, testing and integration tasks.

04

To collaborate with the technical team and apply practical knowledge to meet project goals.

EXAMPLE OF WORK DONE

Ai-Livechat Project Background

- An AI-driven live chat system for real-time business-client communication
- Frontend Development: use React with TypeScript
- Backend Development: use C# with ASP.NET Core
- Database: use SQL Server Management Studio
- Collaboration: Git

Full-stack Development of Ai-Livechat Functionalities



Chatbot
Customizations



AI Enhance
Knowledge
Base Text



Email
Notifications

Chatbot Customizations

Task Objective:

- To enhance chatbot personalization by allowing users to configure greeting messages, prompts, language, tone and AI model to better align with their brand and communication style.

Execution:

Frontend: Design and develop UI for the chatbot settings page

Backend:

- Update chatbot database table to store the settings
- Retrieve and pass the chatbot settings to AI server through backend service
- Incorporate the chatbot settings into AI prompt to ensure the responses will align with user preferences.

User Workflow:

- Users enter the greeting text and prompt or select the options for language, tone and model through the Settings page.

Task Outcome

Greeting

Hi Welcome! How can I assist you today?

39/250

Prompt

☐ Use default prompt

☒ Use custom prompt

Enter your custom prompt here

0/1000

Language

🌐 All Languages

▼

Tone

🗪 Default

▼

Model

🌀 GPT-3.5

▼

Chatbot Settings Page

AI Enhance Text

Task Objective:

- To help users to organize the knowledge base text to improve readability of text.

Execution:

Frontend:

- Implement an AI-enhanced text box to show the organized text from AI server to the users.

Backend:

- Pass the knowledge base text to AI backend endpoint Supabase.
- Provide prompt template for AI to reorganize the provided text.

User Workflow:

- Users provide the knowledge base text then click the AI enhance button to generate the organized text, they can choose whether they want to accept the enhanced text.

Suggested Text



Hotel Knowledge Base 1. General Information: - Hotel Name: Grand Serenity Hotel - Location: 123 Paradise Lane, Serenity City, Country - Contact Information: - Phone: 1555-123-4567 - Email: info@grandserenity.com - Website: www.grandserenity.com 2. Amenities: - Rooms: - Standard Room: Single or double beds, free Wi-Fi, flat-screen TV - Deluxe Room: King-size bed, city view, mini-bar - Suite: Luxury suite with living area, kitchenette, and premium services - Dining: - On-site restaurant serving international cuisine - 24/7 room service available - Recreation: - Swimming pool - Fitness center - Spa services - Other Amenities: - Free parking - Airport shuttle (on request) - Conference rooms for events 3. Policies - Check-In/Check-Out: - Check-in time: 2:00 PM - Check-out time: 12:00 PM - Cancellation Policy: - Free cancellation up to 24 hours before check-in - No-shows are charged one night's stay - Pets: - Pets are not allowed - Smoking: - Smoking is prohibited in all rooms; designated smoking areas available 4. Frequently Asked Questions (FAQs) - What is the nearest airport? - Serenity International Airport is 15 miles away - Do you offer free Wi-Fi? - Yes, Wi-Fi is complimentary in all rooms and public areas - Can I request a late check-out? - Late check-out is subject to availability and may incur an additional fee - Are there vegetarian or vegan options in the restaurant? - Yes, we have a variety of vegetarian and vegan dishes - Is there a nearby shopping area? - Paradise Mall is located 2 miles from the hotel 5. Emergency Information - Medical Assistance: - Serenity General Hospital, 5 miles away (1555-987-6543) - Fire or Police: - Call 911 - Hotel Security: - Dial extension 9 from your room phone

Accept

Hotel Knowledge Base



1. General Information: Hotel Name: Grand Serenity Hotel, Location: 123 Paradise Lane, Serenity City, Country, Contact Information: Phone: +1555-123-4567, Email: info@grandserenity.com, Website: www.grandserenity.com

2. Amenities:

Rooms:

Standard Room: Single or double beds, free Wi-Fi, flat-screen TV.

Deluxe Room: King-size bed, city view, mini-bar.

Suite: Luxury suite with living area, kitchenette, and premium services.

Dining: On-site restaurant serving international cuisine.

24/7 room service available.

Recreation: Swimming pool, Fitness center, Spa services.

Other Amenities: Free parking, Airport shuttle (on request), Conference rooms for events.

3. Policies

Check-In/Check-Out: Check-in time: 2:00 PM, Check-out time: 12:00 PM

Cancellation Policy: Free cancellation up to 24 hours before check-in, No-shows are charged one night's stay.

Pets: Pets are not allowed.

Smoking: Smoking is prohibited in all rooms; designated smoking areas available.

4. Frequently Asked Questions (FAQs)

What is the nearest airport? Serenity International Airport is 15 miles away.

Do you offer free Wi-Fi? Yes, Wi-Fi is complimentary in all rooms and public areas.

Can I request a late check-out? Late check-out is subject to availability and may incur an additional fee.

Are there vegetarian or vegan options in the restaurant? Yes, we have a variety of vegetarian and vegan dishes.

Task Outcome

AI Enhance
Knowledge
Base Text UI

Hotel Knowledge Base

1. General Information:

- Hotel Name: Grand Serenity Hotel
- Location: 123 Paradise Lane, Serenity City, Country
- Contact Information:
 - Phone: 1555-123-4567
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 - Swimming pool
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- Other Amenities:
 - Free parking
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3. Policies

- Check-In/Check-Out:
 - Check-in time: 2:00 PM
 - Check-out time: 12:00 PM

Task Outcome

AI Enhance
Knowledge
Base Text UI

Email Notifications

Task Objective:

- To remind users and encourage timely actions or responses when necessary.

Execution:

Frontend:

- Develop email content using HTML code.

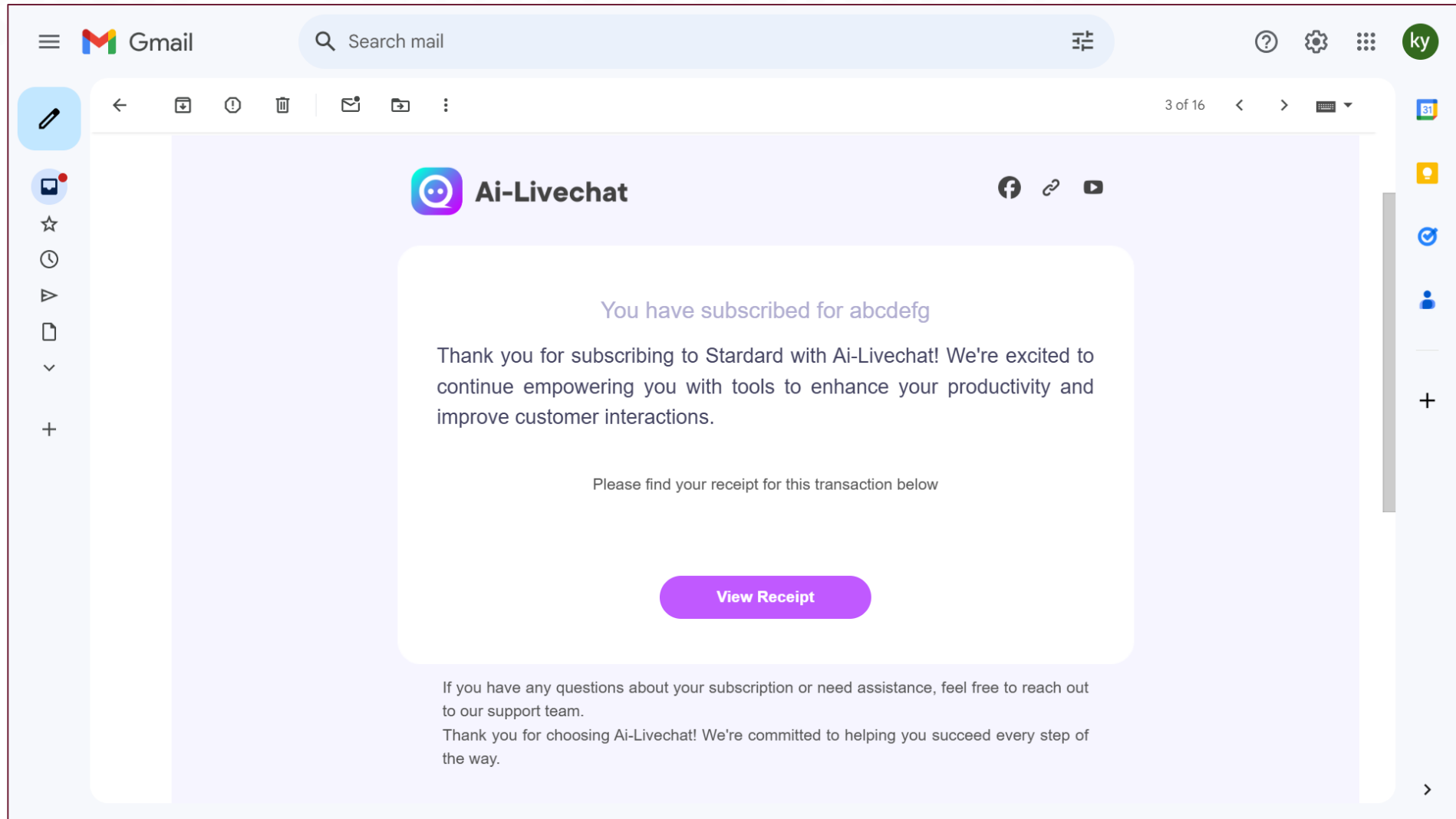
Backend:

- Develop a backend service to monitor dates or situations that require email notifications.
- Use RabbitMQ to enqueue email requests, then send the email content to user email.

User Workflow:

- Every time users pay for new subscription or their plans are about to end, they will receive an email notifications.

Task Outcome



Email Notifications for New Subscription Made

Innovating Solutions

Hardware Used

Hardware	Specification
Processor	11th Gen Intel(R) Core (TM) i5-1135G7 @ 2.40GHz 2.42 GHz
RAM	8GB
Input Medium	Mouse, keyboard
Output Medium	Laptop Screen
Server	Prisma's in-house servers for backend deployment and testing.

Software Used

Software	Justification
Visual Studio Code	Frontend IDE
Microsoft Visual Studio 2022	Backend IDE
Swagger	API testing and interaction tool
SQL Server Management Studio (SSMS)	Manage and queries SQL Server databases
Git	Version control system for collaborative development
Draw.io	Tool for creating system diagrams and flowcharts
Microsoft Word	Document creation for project deliverables
Canva	Tool for creating monthly presentation slides and videos
Slack	Platform for team communication

Problems faced during task execution & Solutions

Problems Faced

- Face bugs and struggled with unfamiliar technologies

Approaches Taken

- Research and experiment on my own before asking for help.
- Consult teammates when I could not figure things out and receive their supports.
- Use online resources like tutorials and forums to work through challenges.

CONCLUSION

Achievements

- Built robust features using React (frontend) and C# with ASP.NET Core (backend), integrating UI elements and server-side logic.
- Gained hands-on experience in UI/UX design, database table creation, and AI server connections, ensuring seamless interactions across frontend and backend.
- Strengthened collaboration skills through active teamwork, peer reviews, and continuous feedback loops.
- Delivered monthly presentations, enhancing public speaking confidence and refining communication strategies.
- Became more proactive and confident in solving problems independently.
- Get guidance from mentor to improve coding practices and technical skills.

THANK YOU



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