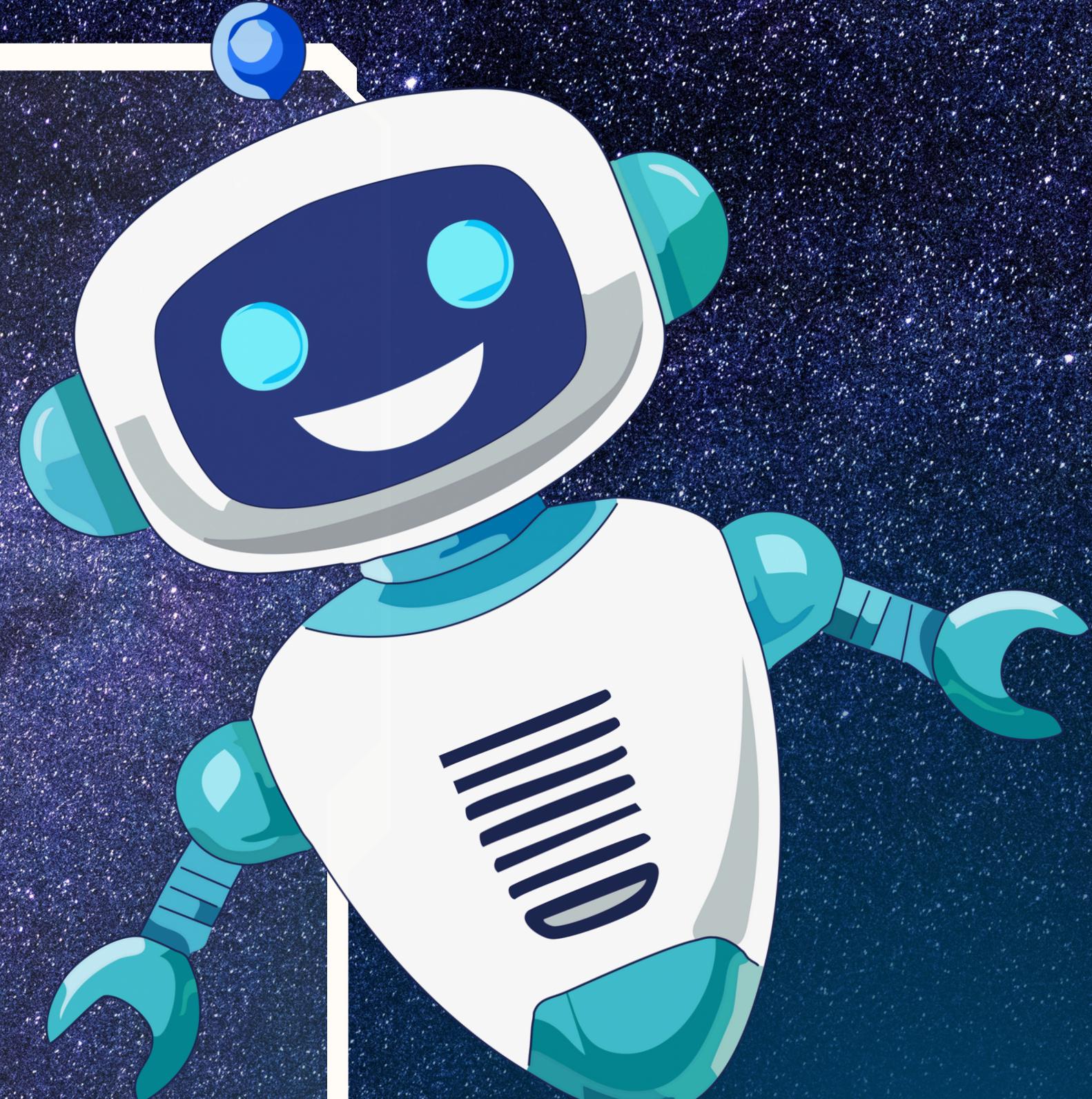


# Turners AI Insurance Chatbot

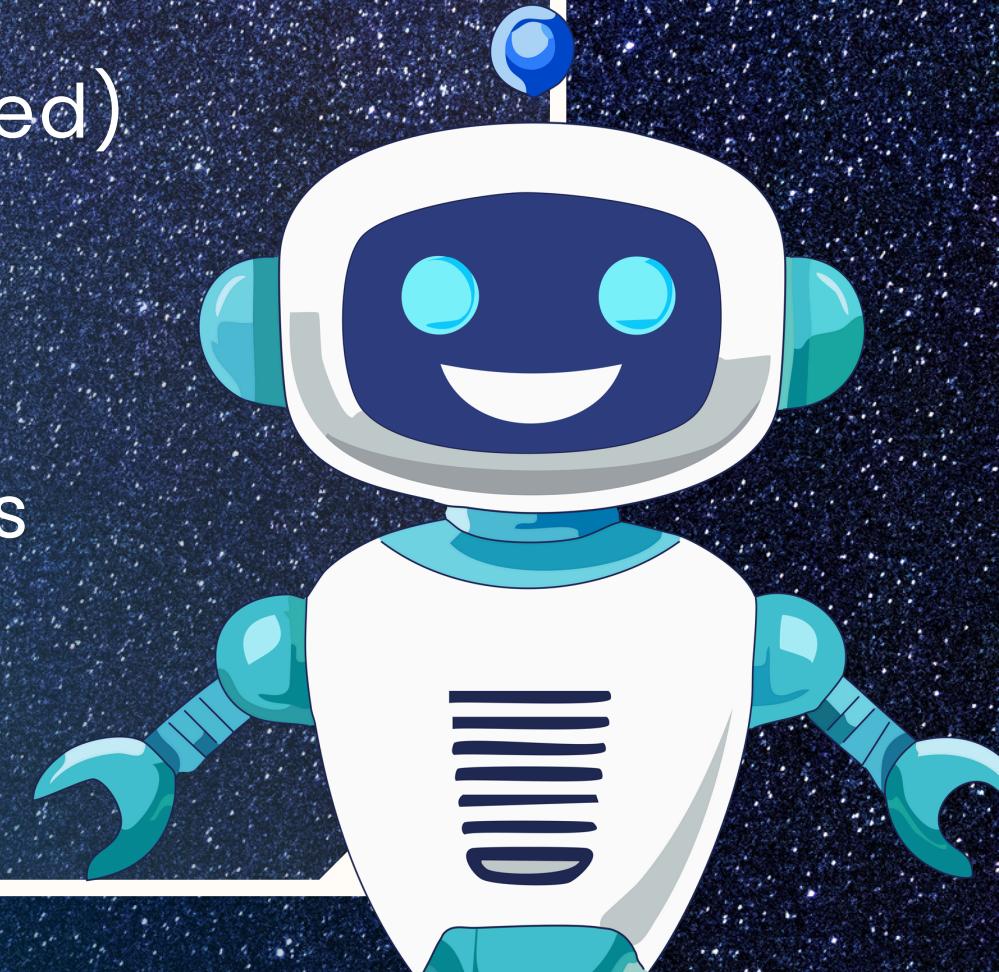
[www.reallygreatsite.com](http://www.reallygreatsite.com)



# Project Goal

Create an interactive insurance recommendation app  
using AI  
The app must:

- Chat with the user
- Ask personalised questions (not hardcoded)
- Follow business rules
- Recommend one of Turners' three policies
- Run fully in Docker containers



# Jira & Stand-up

Spaces  
Mission 4 - Insurance Recommendation App

Summary Timeline Board Calendar List Forms Goals More 5

Search board AP Filter

TO DO 4

- Task 4. Containerise the Application  M4IRA-4
- Task 5. Provide Feedback to UX Designers  M4IRA-9
- Task 6. Present at Show and Tell - Using Story Telling Techniques  M4IRA-10
- Task 7. Submit your work  M4IRA-11

IN PROGRESS 2

- Task 2. Daily Standup  M4IRA-2
- Task 3. Create an Insurance Recommendation Application using Generative AI  M4IRA-3

DONE 1 ✓

- Task 1. Use Jira to Manage Individual Tasks  M4IRA-1

+ Create

04:41

Dialpad Hold Transfer Chat People View Apps More Camera Mic Share Leave

Arjan Petera

Spaces  
Mission 4 - Insurance Recommendation App

Summary Timeline Board Calendar List Forms Goals More 5

Search board AP Filter

TO DO 4

- Task 4. Containerise the Application  M4IRA-4
- Task 5. Provide Feedback to UX Designers  M4IRA-9
- Task 6. Present at Show and Tell - Using Story Telling Techniques  M4IRA-10
- Task 7. Submit your work  M4IRA-11

IN PROGRESS 2

- Task 2. Daily Standup  M4IRA-2
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DONE 1 ✓

- Task 1. Use Jira to Manage Individual Tasks  M4IRA-1

+ Create

Spaces  
Mission 4 - Insurance Recommendation App

Summary Timeline Board Calendar List Forms Goals More 5

Search board AP Filter

TO DO 3

- Task 5. Provide Feedback to UX Designers  M4IRA-9
- Task 6. Present at Show and Tell - Using Story Telling Techniques  M4IRA-10
- Task 7. Submit your work  M4IRA-11

IN PROGRESS 2

- Task 2. Daily Standup  M4IRA-2
- Task 4. Containerise the Application  M4IRA-4

DONE 2 ✓

- Task 1. Use Jira to Manage Individual Tasks  M4IRA-1
- Task 3. Create an Insurance Recommendation Application using Generative AI  M4IRA-5

+ Create

Rithvik Sharma 01:11:21

Dialpad Hold Transfer Chat People View Apps More Camera Mic Share Leave

Rithvik Sharma



Spaces  
Mission 4 - Insurance Recommendation App

Summary Timeline Board Calendar List Forms Goals More 4

Search AP Filter

TO DO 1

- Task 7. Submit your work  M4IRA-11

IN PROGRESS 2

- Task 2. Daily Standup  M4IRA-2

DONE 4 ✓

- Task 1. Use Jira to Manage Individual Tasks  M4IRA-1
- Task 3. Create an Insurance Recommendation Application using Generative AI  M4IRA-3
- Task 4. Containerise the Application  M4IRA-4
- Task 5. Provide Feedback to UX Designers  M4IRA-9

Spaces  
Mission 4 - Insurance Recommendation App

Summary Timeline Board Calendar List Forms Goals All work More 4

Search AP Filter

TO DO 1

- Task 7. Submit your work  M4IRA-11

IN PROGRESS 2

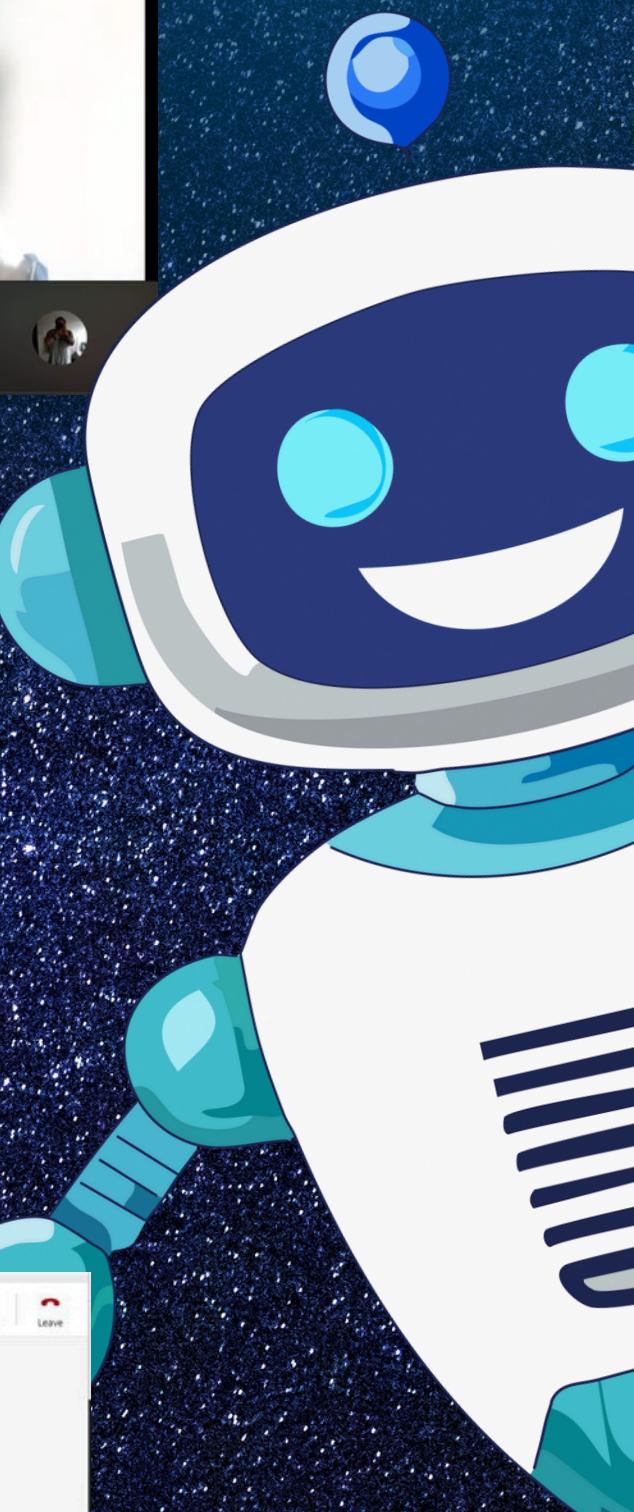
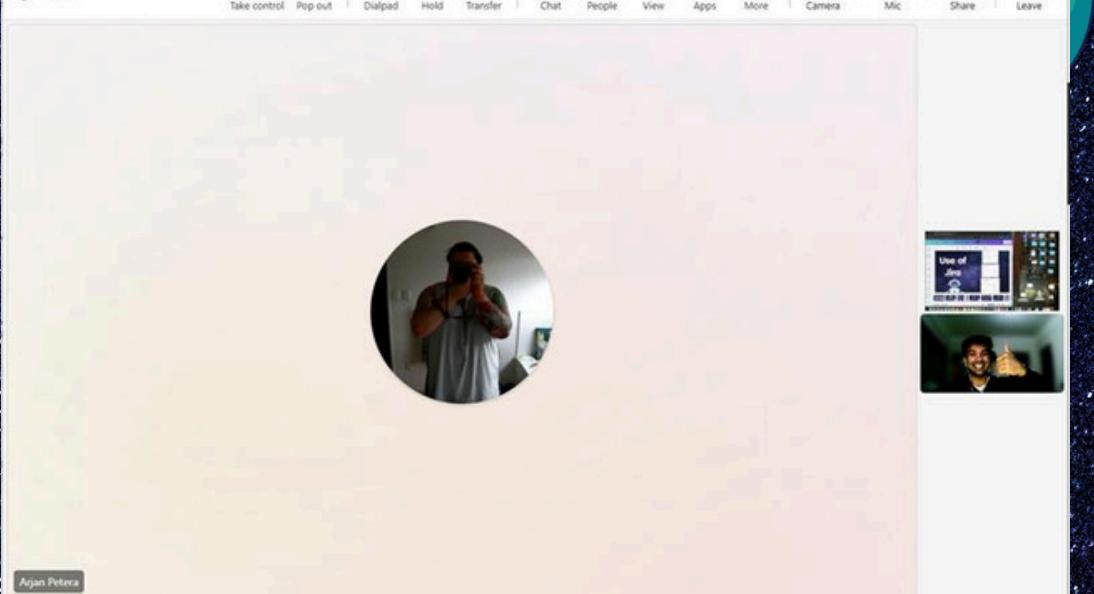
- Task 2. Daily Standup  M4IRA-2

DONE 4 ✓

- Task 1. Use Jira to Manage Individual Tasks  M4IRA-1
- Task 3. Create an Insurance Recommendation Application using Generative AI  M4IRA-3
- Task 4. Containerise the Application  M4IRA-4
- Task 5. Provide Feedback to UX Designers  M4IRA-9

18:02 Take control Pop out Dialpad Hold Transfer Chat People View Apps More Camera Mic Share Leave

Arjan Petera



# System Architecture

## Frontend (Vite + JS)

- Build → served by Nginx
- Sends requests from the browser → backend using:
- `http://localhost:3000/api/tina/chat`

## Backend (Node + Express)

- API endpoint `/api/tina/chat`
- Handles conversation state
- Calls Gemini 2.5 Flash
- Applies insurance rules

## Docker Compose

- Two containers
- Frontend → port 4000
- Backend → port 3000
- No internal Docker networking needed because browser localhost works

### Tina Insurance Chat

Tina: Hi there! 🙌 What kind of vehicle are you looking to insure today?

You: 1998 Skyline Gtr

Tina: Got it! A 1998 Skyline GTR, nice! 🚗💨 Just a heads up, Comprehensive coverage isn't available for vehicles over 10 years old. Are you planning to use it for racing or track events? This helps me determine all your options. Based on its age, Third Party Car Insurance is definitely available. We can look into Mechanical Breakdown Insurance (MBI) depending on its use!

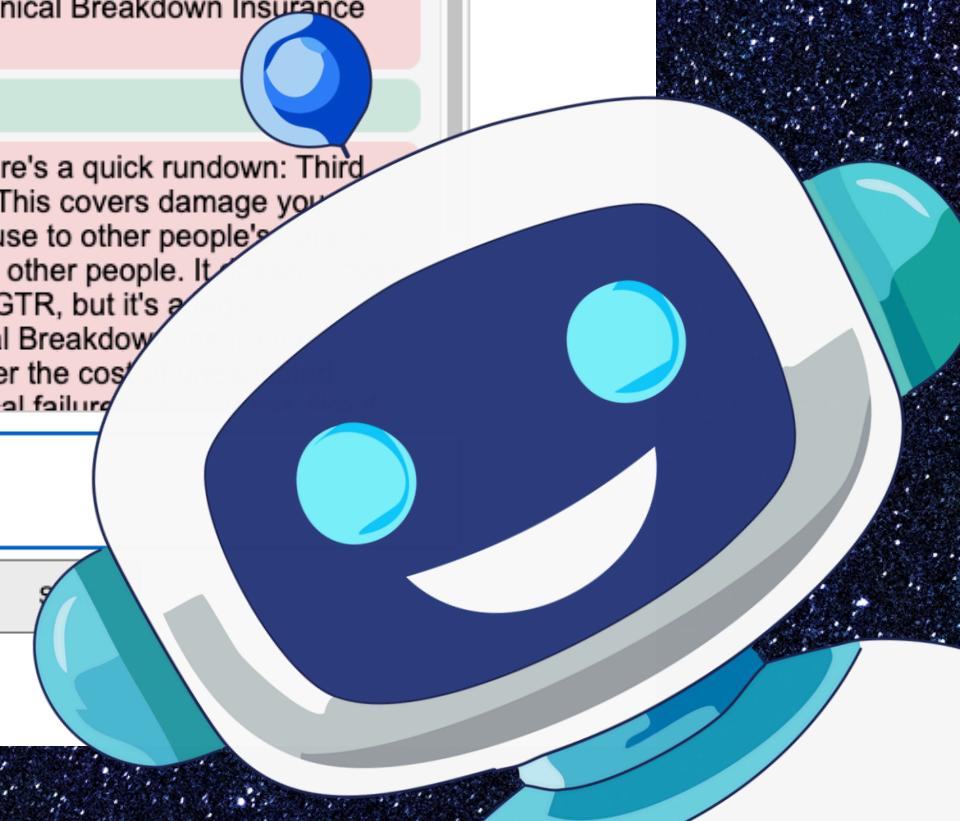
You: i will be using it for car meets only no racing

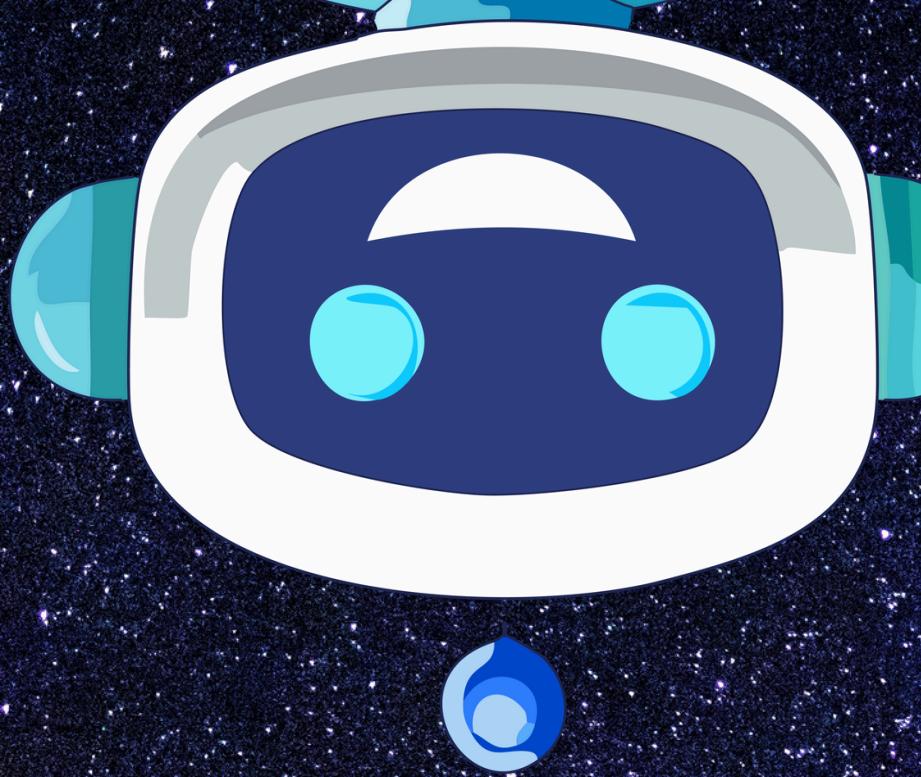
Tina: Okay, good to know it's for car meets only! No racing means MBI could be an option for you. So, for your 1998 Skyline GTR being used for car meets, we can definitely look into Third Party Car Insurance and Mechanical Breakdown Insurance (MBI).

You: tell me more

Tina: No problem! Here's a quick rundown: Third Party Car Insurance: This covers damage you might accidentally cause to other people's property, or injuries to other people. It's a musthave! Mechanical Breakdown Insurance (MBI): This helps cover the cost of mechanical or electrical failure.

Type your message...





# Tina the Insurance Consultant

## Tina must:

- ✓ Introduce herself
- ✓ Ask for user consent
- ✓ Ask questions dynamically (not pre-coded)
- ✓ Follow business rules:
  - ✗ MBI not for trucks or racing cars
  - ✗ Comprehensive is only for cars < 10 years old
  - ✓ Recommend 1–3 products with reasons

# Challenges

- 🔥 1. CORS problems

Frontend → Backend failed due to missing headers.

- 🔥 2. Docker networking

Vite needed a two-stage build using Node → Nginx.

- 🔥 3. AI responses too long / cut off

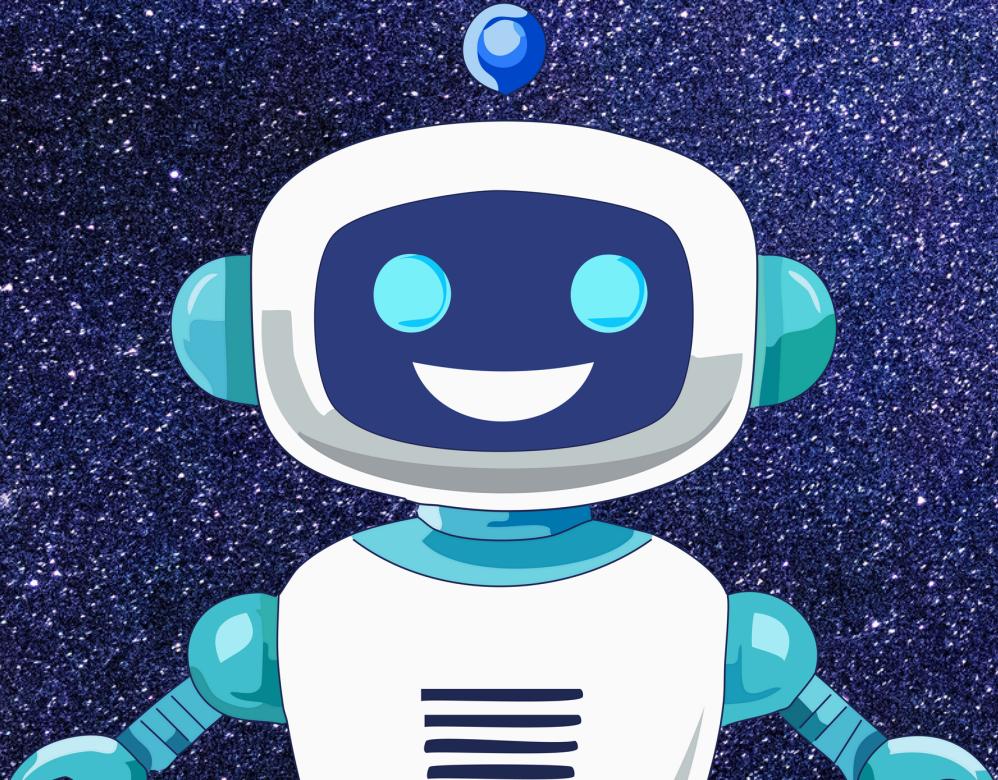
Had to tune prompt engineering.

- 🔥 5. Frontend only worked with npm run dev

Because dev mode uses a local proxy – needed proper Docker build.



# How I Solved Them



- ✓ Added correct CORS headers in Express
- ✓ Updated frontend API URL
- ✓ Confirmed browser-to-backend communication works
- ✓ Rebuilt Vite app correctly in Docker
- ✓ Fixed docker-compose to connect both
- ✓ Improved prompt for short, interview-style questions

Thank you

