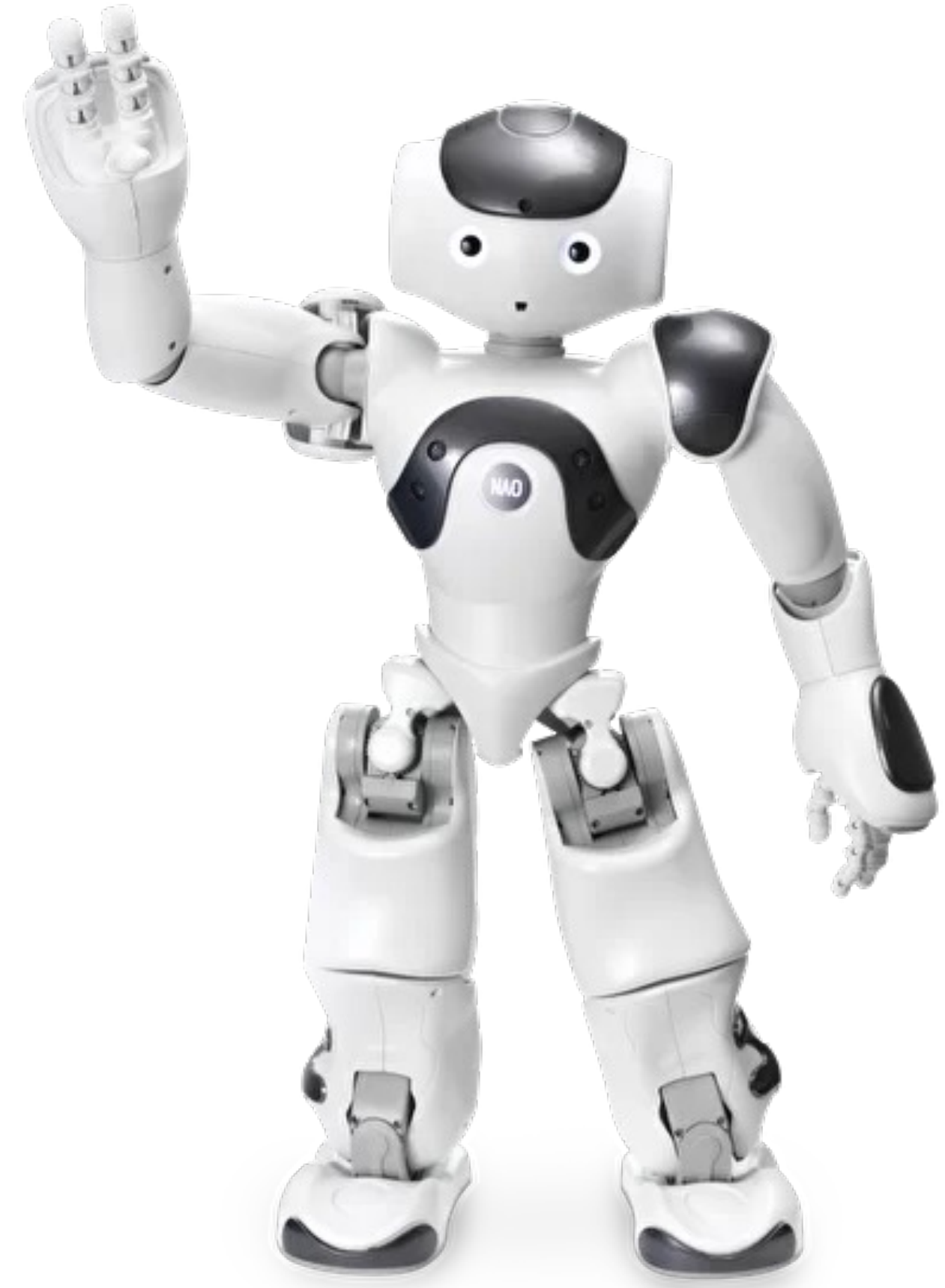


# CHATGPT AND NAO ROBOT

NA-Redback

COMP90082 Software Project



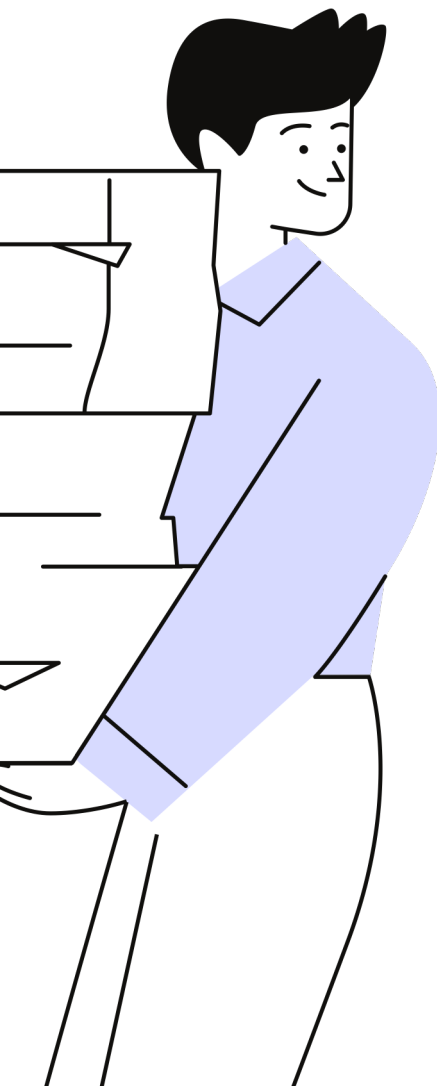
# Team



# Client



<b>Supervisor</b>	Sebastian Bobadilla
<b>Product Owner</b>	Eunji Kim (Rachel)
<b>Scrum Master</b>	Difan Wu
<b>Tech Lead</b>	Aurélien Plaire
<b>Test Lead</b>	Chien-Pu Lin (Jeff)
<b>Quality Lead</b>	Yangchen Shen (Shen)



Dr

**Wafa Johal**

ARC Decra Fellow

Computing and Information Systems

# Agenda

PROJECT BACKGROUND

ACHIEVEMENTS

PROJECT REFLECTION

TECH STACKS

LIVE DEMO

FUTURE DEVELOPMENT PLANS



## Project Background

### The CoWriter Project

- Children to teach handwriting to a social robot (NAO)
- “Learning by teaching”

### Users

- Children (5-10 years old)
- Parents
- Researchers



Image source: [https://github.com/CHRI-Lab/cowriter\\_letter\\_learning](https://github.com/CHRI-Lab/cowriter_letter_learning)



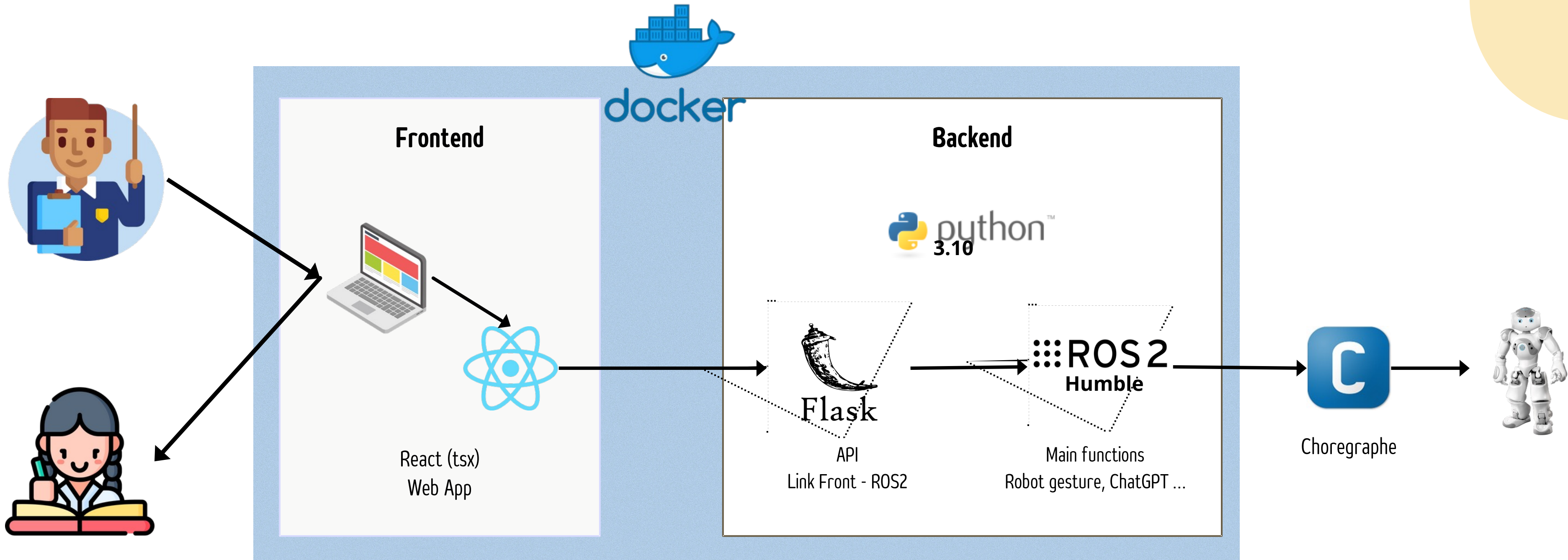
## Achievements

1. Integration of 3 previous projects
2. UI upgrade
  - Migration from PyQt to web
  - AI-powered image generation
3. Enhancement of robot interaction using ChatGPT
  - Moderation filter
  - Motions/gestures
4. Refinement of learning experience
  - Identification of child's struggling letter
  - Personalised words generation in line with kid's interest





# Tech Stack



## Live Demo - Scenario 1

Scenario 1: A 9-year-old kid with ADHD and would not be interested in learning things outside of his interest



## Live Demo - Scenario 2

Scenario 2: A 5-year-old kid is struggling with writing a letter "o"





# Project Reflection

## Challenges & Obstacles

- Teams unfamiliar with ROS
- Workload underestimation for the integration
- Maintenance downtime of NAO

## Lessons learned

- Exposure to ROS and working with a robot
- Experience with Docker



## Future Development Plans



- Implement logging & annotation modules
- Explore the possibility of having a cross-platform UI
- Generate code for customised motions using ChatGPT

?

**Any Questions?**

**Thank you!**

