

# **Personal AI Programming Tutor**

**Team #7 / 2023.03.31**

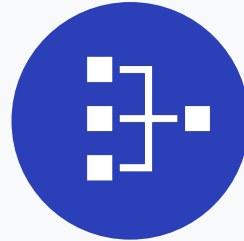
# Contents

**01**



**Motivation**

**02**



**Goal & System**

**03**



**Role & Plan**

# Motivation

## How to utilize AI for programming education?



**ChatGPT**

ChatGPT is a natural language processing model based on the GPT (Generative Pre-training Transformer) architecture developed by OpenAI. It is a deep learning model that has been trained on a massive amount of text data to generate coherent and natural language responses to user input.

# Motivation



A loop in Python is a control structure that allows the repeated execution of a block of code. There are two types of loops in Python: the `for` loop and the `while` loop. 👍 👎

Here's an example of a `for` loop that prints the numbers from 0 to 4:

python 📄 Copy code

```
for i in range(5):  
    print(i)
```

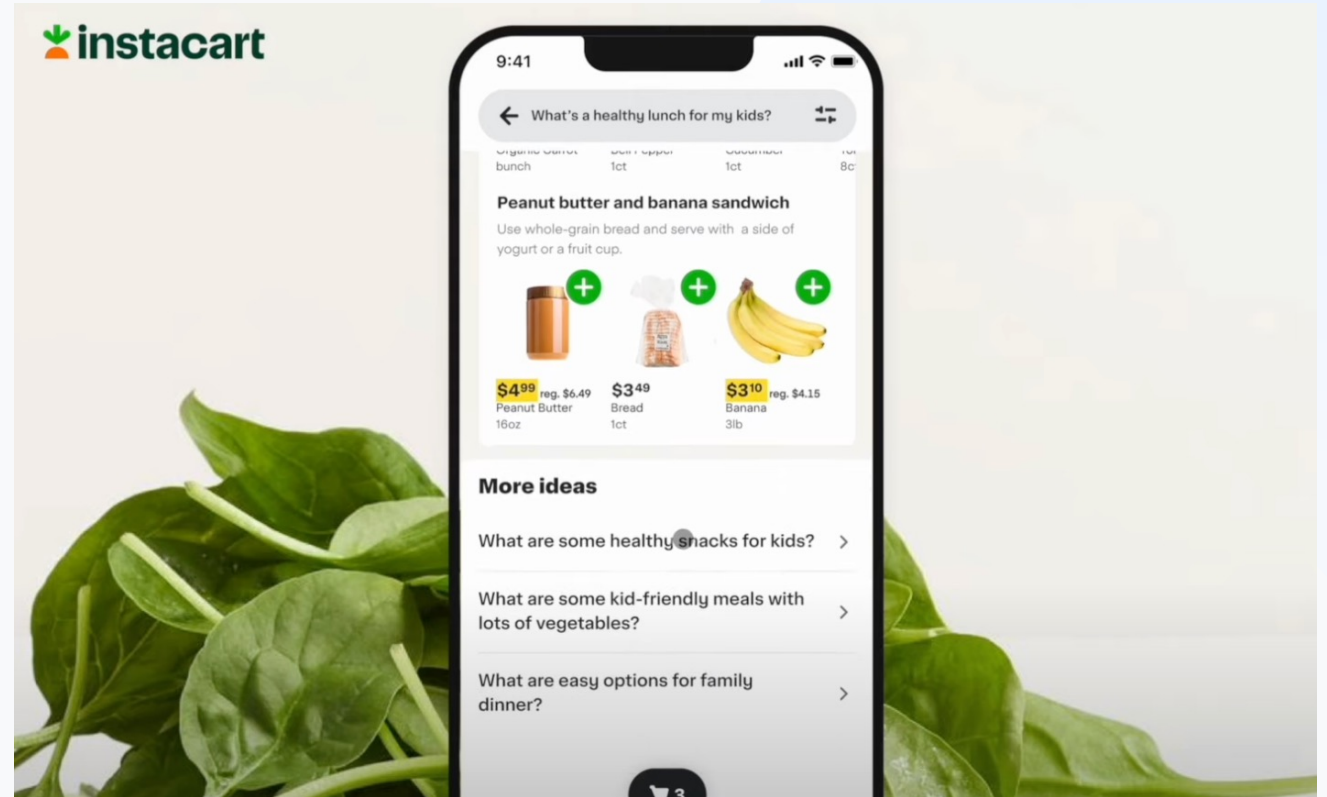
Output:

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```
0  
1  
2  
3  
4
```

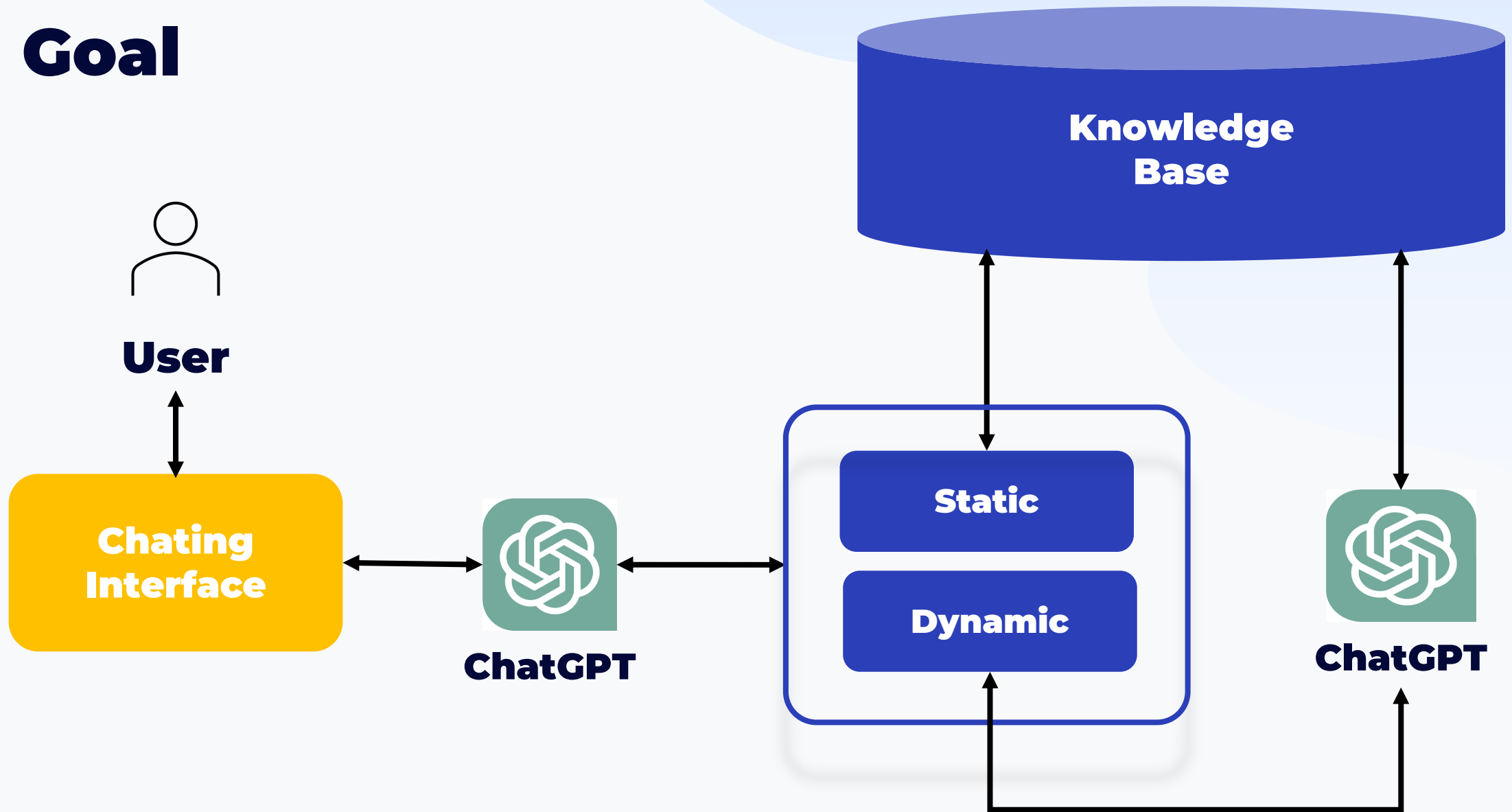
In this example, the `for` loop iterates over the sequence of numbers generated by the `range()` function, which starts at 0 and ends at 4 (inclusive). The `print()` function is called in each iteration of the loop, and it prints the current value of the loop variable `i`.

# Motivation



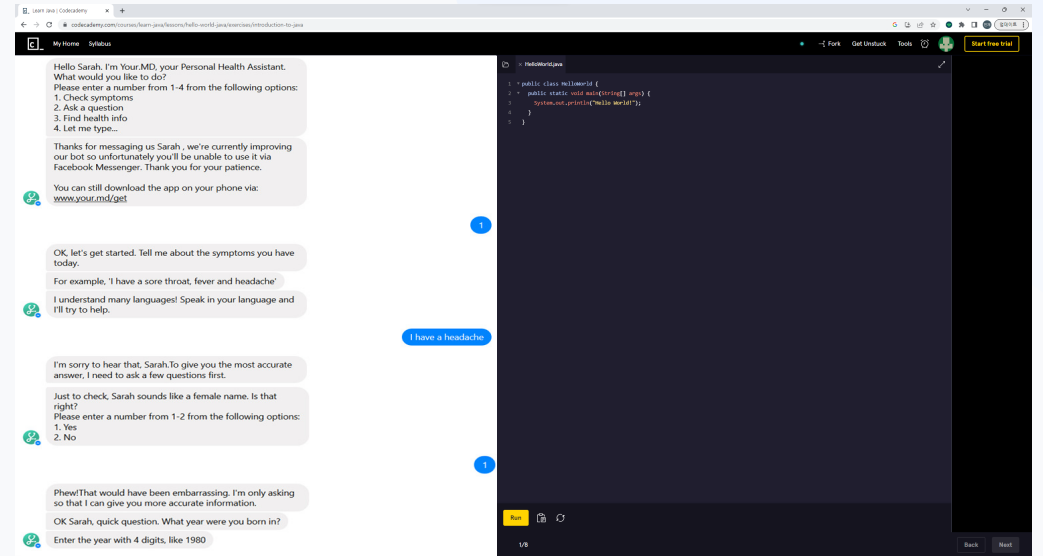
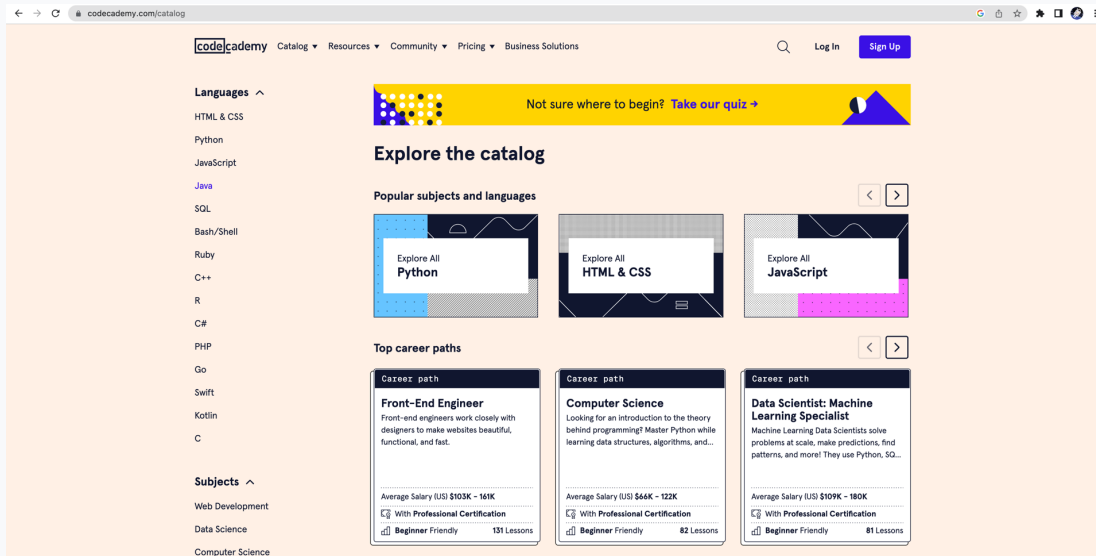
**ChatGPT has some limitations as a tutor yet !!!**

# Goal

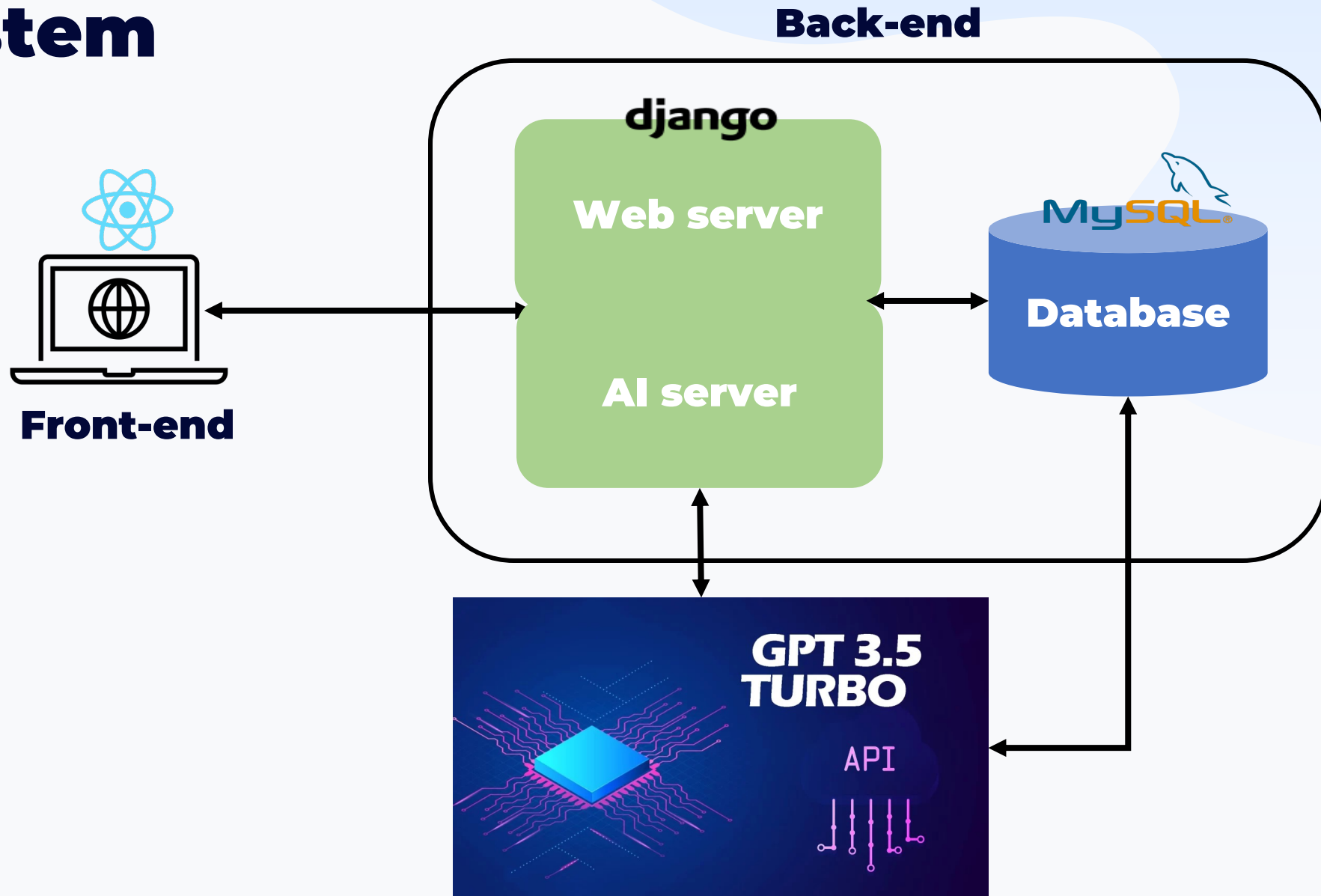


# Goal

e.g. codecademy



# System





# System

## How to train GPT Model with our custome data ???

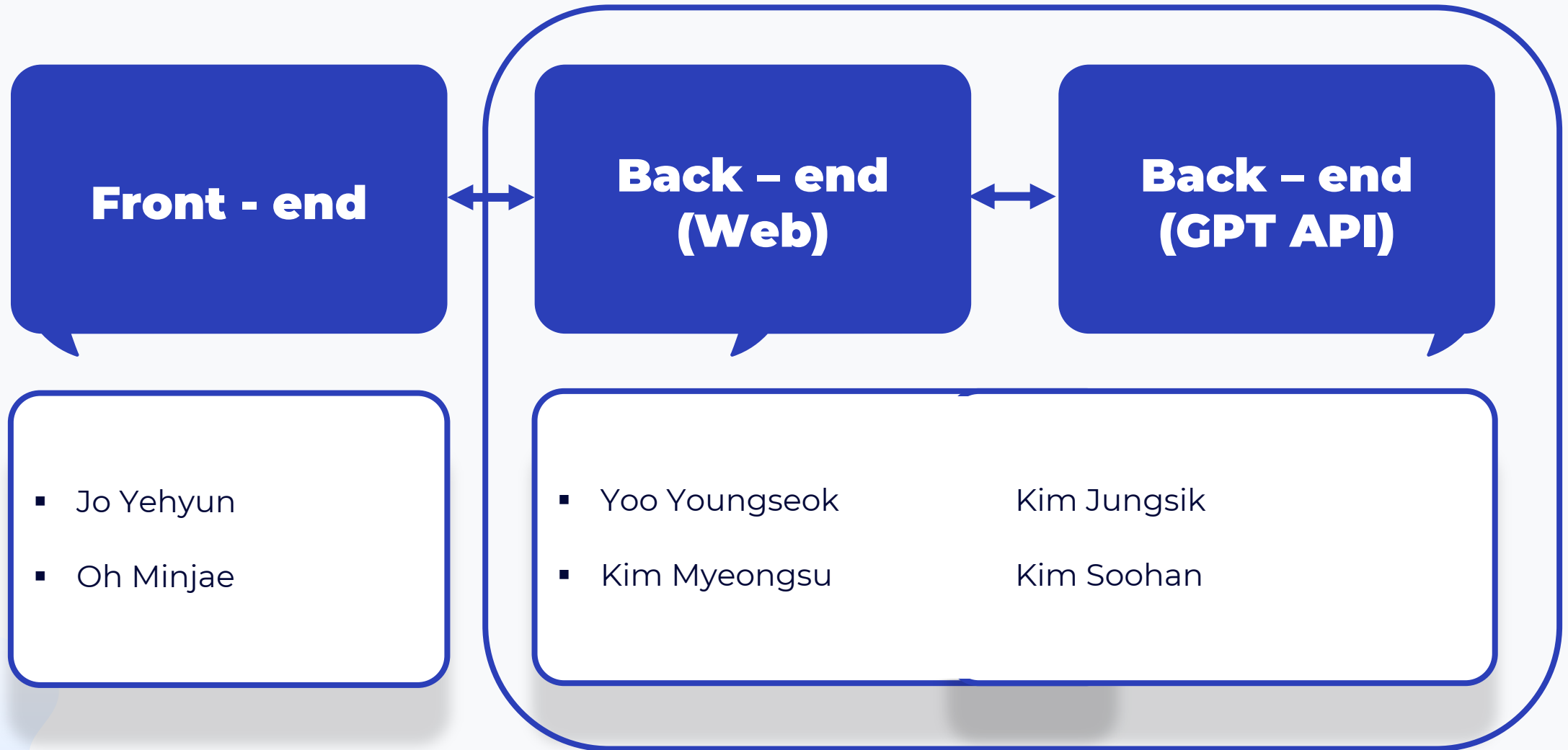
### Few shot learning

Few-shot learning or few-shot prompting is a prompting technique that allows a model to process examples before attempting a task..

### Fine-tuning

Fine-tuning is an approach to transfer learning in which the weights of a pre-trained model are trained on new data.

# Role



# Plan

Task	week6	week 7	week8	week9	week10	week11	week12	week13	week14	week15
Requirement engineering										
Architectural Design										
Subsystem Engineering										
Component Testing										
System Integration										
System Testing										

**Thanks !**