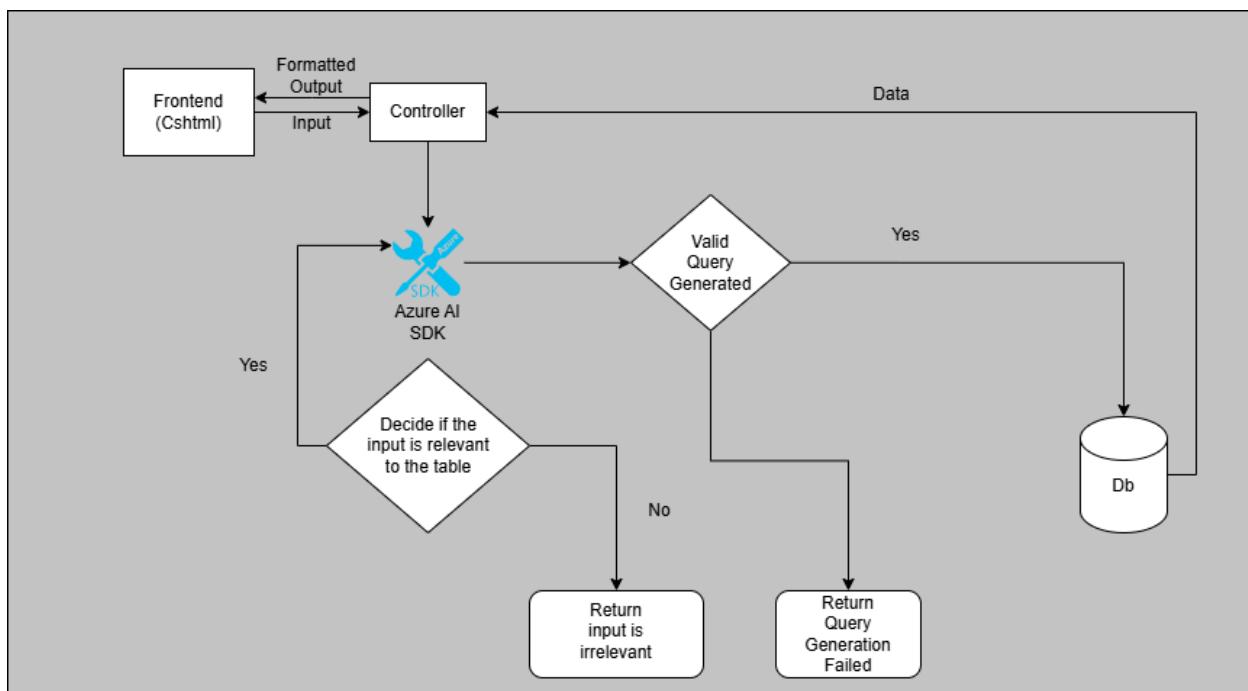


# MVC Application for Football Data Querying

## Overview

This is a basic MVC application that allows users to input questions or queries regarding a football dataset containing match-by-match data from 1993 to 2023. The application then returns the data in a formatted form. Users do not need to input SQL queries to get the required results.

## Architecture Diagram



## Steps

- User Input:** The controller forwards user input to the Azure AI model via the Azure SDK. The model used is gpt-35-turbo-16k, which is the only one available on the free trial.
- AI Query Generation:** The AI model checks if the user input is relevant to the existing dataset. If it is, it generates a SQL query based on the user input scenario.
- SQL Query Validation:** The AI model then checks if the generated SQL query is valid. If the query is valid, it is executed to fetch data from the database.

4. **Data Display:** The fetched data is passed back to the controller, which then formats it into the required structure and displays it on the page.

## Improvements

1. **Model Fine-tuning:** The AI model could be fine-tuned with custom validation data to provide more accurate results.
2. **Error Handling:** The error handling mechanisms should be made more robust to handle edge cases and ensure smoother user experience.
3. **Data Visualization:** Implementing data visualization using a frontend framework would enhance the presentation of the data.