Date	08-11-2022
Team ID	PNT2022TMID29505
Project name	AI based Nutrient analysis and fitness enthusiasts

P<u>roject</u> Objectives

- 1. Nutritional intake is fundamental to human growth and health, and the intake of different types of nutrients and micronutrients can affect health.
- 2. The content of the diet affects the occurrence of disease, with the incidence of many diseases increasing each year while the age group atwhich they occur is gradually decreasing.
- 3. Methods: An artificial intelligence model for precision nutritional analysis allows the user to enter the name and serving size of a dish to assess a total of 24 nutrients.
- 4. A total of two AI models, including semantic and nutritional analysismodels, were integrated into the Precision Nutritional Analysis.
- 5. A total of five different algorithms were used to identify the most similarrecipes and to determine differences in text using cosine similarities.
- 6. The model structure consists of a digital data semantic analysis model, an Alprecision nutrient analysis model, a database of 1590 recipes, and 7869 ingredients from common Taiwanese recipe databases
- 7. This study proposed an Intelligence Precision Nutrient Analysis Model basedon a digital data collection framework, where the nutrient intake was analyzed by entering dietary recall data. The AI model can be used as a reference for nutrition surveys and personal nutrition analysi