**Algorithm**

Term Project: Alpha Dumpling

Team4

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**[1] How to execute**

Run the "main.py" file.

**[2] How to game**

Object: “Select ingredients of the best synergy!”

1) The user and the robot alternately select ingredients.

2) When all four ingredients are selected,   
the synergy score sum between the user and the bot is compared.

3) There are four stages.  
As the stage goes up, it will be difficult because robot learns himself.

**[3] Code Explanation**

**[main.py]**

main.py containing the main code for UI and gameplaying with screen configuration and action configured.  
It consists of codes for events required for game play, codes for UI.

Part of algorithm implementation and synergy implementation is packaged in Algorithm folder

**[Algorithm.py]**

The algorithms used in the project are algorithm.py containing the implementation

It consists of method for implementing the gready algorithm, methods implemented with DP, Synergy Calculation method, methods for learning robots

**[Synergy.py]**

Synergy.py with code containing Enum class containing lists for synergy implementation

Enum class that quantifies the synergy of food