

A system to support the amateurs to take a delicious-looking picture of foods

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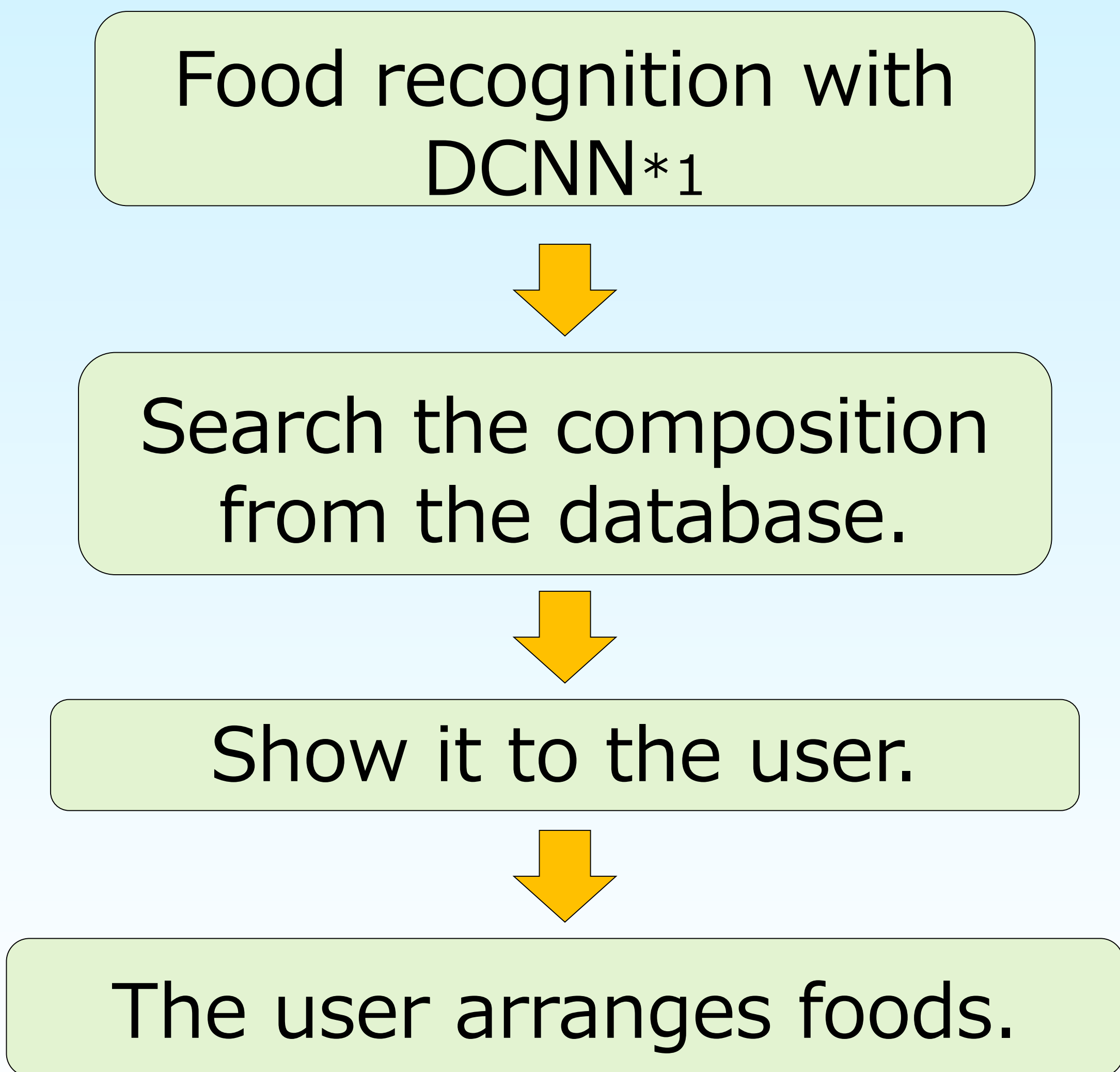
Background

- We take a food picture and upload it to SNS.
- It is difficult for amateurs to take a delicious-looking picture of foods.
- Amateurs want an easy-to-use system: after taking a picture, they want to eat soon!

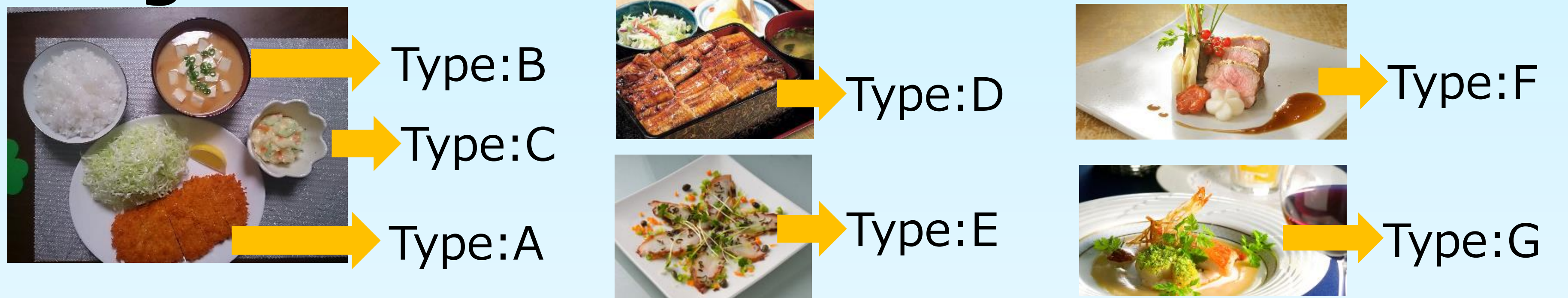
Purpose

- The system recognizes foods on the table and suggests a good composition.
- The user arranges the foods based on the suggested composition and takes a delicious-looking picture in a short time.
- We develop the system on a mobile phone with Android OS.

Method



Food categories

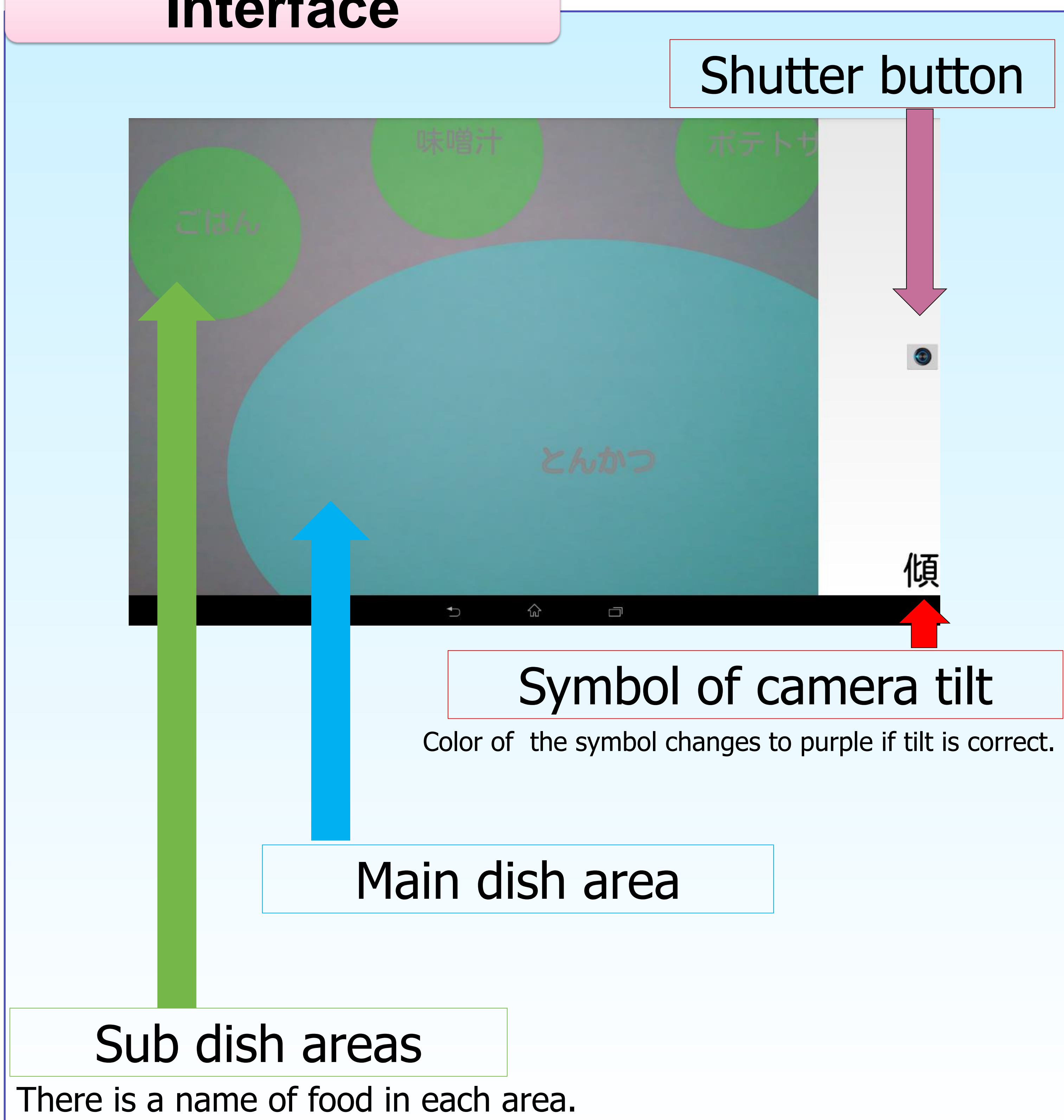


- We consider 7 categories of foods according to "dish shape", "dish size" and "food size".

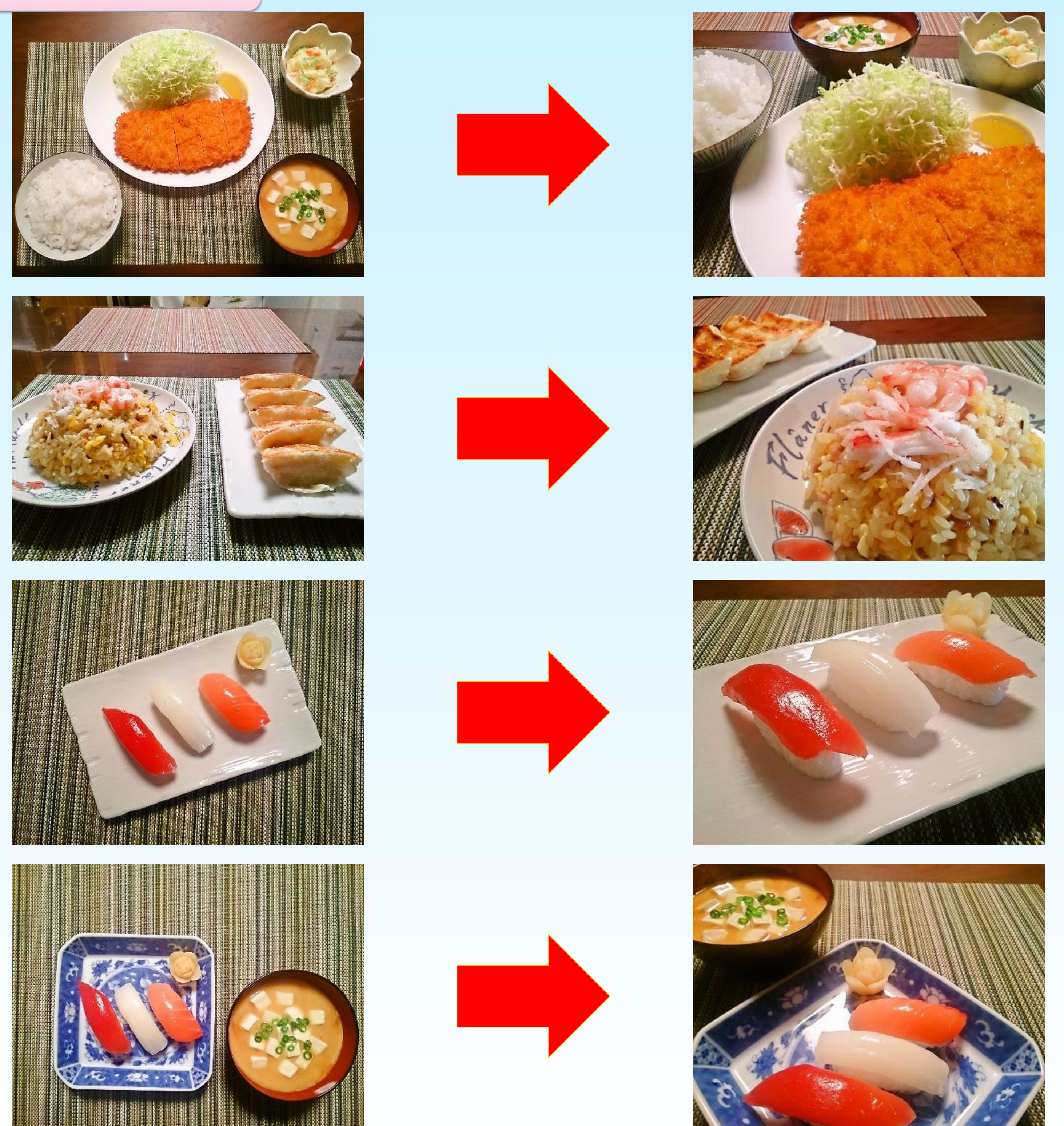
Examples



Interface



Results



Future Work

- We plan to improve compositions : I do not like the too much space at the top-right corner in the bottom-left figure.
- We will perform subjective evaluations : we will ask subjects to evaluate the usability and the quality of the pictures.
- More image editing : color correction, relighting, focus and defocus, etc...

*1Yanai, K. and Kawano, Y. : Food Image Recognition using Deep Convolutional Network with Pre-training and Fine-tuning, Proc. of ICME Workshop on Multimedia for Cooking and eating Activities, (2015).