

## Deliverables

### (1) Research report detailing:

Collect massive data about various kinds of food mainly from the following 3 websites:

58PIC: <http://www.58pic.com/tupian/shiwu.html>

BOOHEE: <http://www.boohsee.com/food/>

FITNES: <http://www.fitnes.cn/food/>

**Prepare data:** Find pictures and related data (such as calorie, quality and so on) of various foods, then screen out foods to ensure the diversity and commonness of data.

**Analyze the data sets:** Associate food images with related data and store them in groups according to different criteria.

### Training algorithm.

**Test algorithm:** Test whether the food picture and data match each other, and evaluate the richness of the food types in the database.

① Use the CNN algorithm.

There are four main steps in CNN: convolution, subsampling, activation and full connectedness. (Hhchin87, 2015)

### (2) UI Design:

#### Expected Interface

In the top half part of the main interface, there is a calendar used to make it more convenient for people to mark the date. Every day, people can record food names and food photos of their breakfast, lunch, dinner and snacks. These data are recorded in the lower part of the main interface, which is more regular and beautiful. When clicking the photos of food, another interface which shows the calories of food would appear. When clicking the button of loving heart, people can see their preferred food and the food they

can't eat.

### **Required Software**

Photoshop、AI、AE、Fireworks、CorelDraw、Flash

### **(3) Portfolios**

Project Proposal

Project Charter

Team Contract

Risk Management

Task allocation and tracking—trello

UI Design

Deliverables (two versions)

Testing

Developer Guides

Literature Review

Meeting minutes