Final Report

1. Team Members

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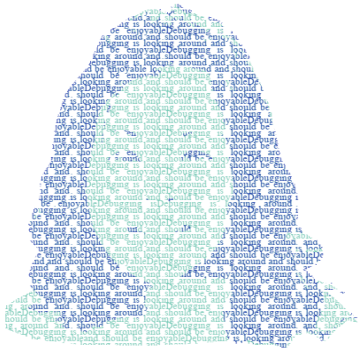


Linqing Fu	**Hui Yan**
This portrait was drawn by using Inkscape and we exported it as PNG format in order to add it into this report.	This portrait was created by using GIMP and we exported it as PNG format in order to add it into this report.

The details of the skills we used will be described later.

2. Topic

Our website aims at helping students who do not cook say “Goodbye” to ready meals. They can find other students who cook and pay for a simple but hot, nutritious and affordable meal.

3. User Guide

To run the website, you need to install Node.js, then type in command line

$npm install

$node server.js

Then open website in “http://localhost:443

Our website provides users with a fluent user experience and nice perception of vision. Users can register and login on our website. After login successfully, users will see a customized page for welcoming. They can view pictures and search information that they concern. We create a link to search page on the main page and welcome page. In the search page, we provide three dimensions of keywords searching including flavors, areas (postcode) and users.

Figure. Main page with three entries

4. Estimation

Point	Self-estimation
HTML	A
CSS	A
JS	A
PNG	A
SVG	A
Server	B
Database	A
Dynamic Pages	A
Depth	B

5. Implementation Details

(1) HTML

- ✧ Framework bootstrap was used to generate HTML pages.
- ✧ We use the strict syntax, XHTML, to implement.

(2) CSS

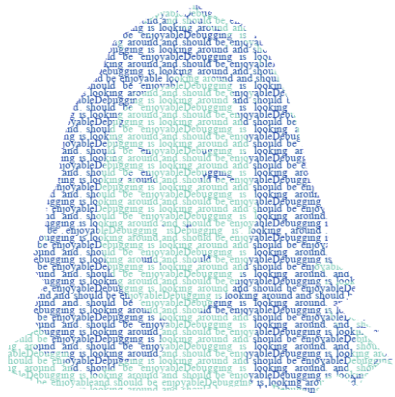
- ✧ Use bootstrap to beautify the website.
- ✧ Font libraries are imported to optimize the vision.
- ✧ Animations are applied to components to improve user experience.

(3) JS

- ✧ JavaScript functions are implemented to give quick responses to user's actions in order to improve user experience.
- ✧ We implemented page scrolling when users click the top menu or use the mouse wheel.

(4) PNG

We created two PNG artworks including Hui's portrait and a floating-effect logo.



a. Hui's portrait (text portrait)

b. a floating-effect logo

- ✧ Basic Skills
  - ✓ Convert images to PNG, crop away unwanted edges and change resolutions.
  - ✓ Use **filters** such as Gaussian Blur, Plasma and Bump Map.
  - ✓ Apply color threshold, adjust color levels and invert colors (to create shadow

effect).

✧ Advanced Skills

- ✓ Proficiently handle layers and transparency such as anchoring layer, color to Alpha and applying masks, etc., to create a floating-effect background-transparent logo.
- ✓ Proficiently apply techniques such as inverting colors, selecting regions with similar colors, editing paths, text, etc., to create an interesting text portrait.

(5) SVG

We created several SVG artworks including Qing's portrait, favicon of our website and background image of our website.

a. Qing's portrait b. favicon (bowl) c. background image (Salmon)

✧ Basic Skills

- ✓ Draw some basic **shapes** by using shape tools.
- ✓ Pick up, choose colors and fill and change **colors**.
- ✓ Draw **Bezier Curves**.

✧ Advanced Skills

- ✓ Use **Paths** to sketch objects and **draw our own pictures**.
- ✓ Use techniques such as **grouping**, adding and editing **layers**.
- ✓ Use text techniques to let the **texts display curve following the path**.
- ✓ **Write and edit the source texts** by hand typing to create the favicon and change some parameters of artworks.

(6) Server

- ✧ Express Node of Node.js is used to build in this website.
- ✧ URL validation will be done before post a website.
- ✧ The server delivers pages as XHTML.

(7) Database

- ✧ **Sqlite3** is used to create database, store data and execute complex queries such as **JOIN, COUNT.**
- ✧ We obey database design rules and our tables are clear and satisfy **BCNF.**
- ✧ We pre-insert many data and write queries with **joining** tables and **counting** tuples in order to provide users with more useful information.
- ✧ We **prevented SQL injection** by using **prepared statements.**

(8) Dynamic Pages

- ✧ We use JavaScript and pug view engine to create dynamic pages for users.
- ✧ A welcome page is implemented to welcome users who have successfully login.
- ✧ The pages are able to render different query results on the templates.

(9) Depth

- ✧ We strictly obey the syntax and rules of XHTML, such as every tag being well closed, separating HTML, CSS and JS from each other.
- ✧ We cared about the security such as URL validation and guarding against SQL injection.
- ✧ We improved the user experience by beautifying the website, adding animation effects, adding more functions such as searching.

6. Resources

- ✧ Node modules:

  npm

  express

  body-parser

  sqlite3

  pug

  valid-url

url

- ✧ css:

  https://www.bootstrapzero.com/

  https://w3layouts.com/

- ✧ icon:

  https://github.com/ionic-team/ionicons

- ✧ fonts:

  https://fonts.googleapis.com/css?family=Questrial

  http://fonts.googleapis.com/css?family=Dancing+Script:700