

## **Section 1: Overview of tasks (as of 04/03/20)**

### **M5 Stack (Arduino recommended. Java/C allowed)**

1. [CORE]Main menu
2. [CORE]A page to save/set dietary preferences
3. [CORE]A page to select menu items
4. [EXT]A page for loading
5. [EXT]A page to navigate a list of restaurants
6. [EXT]Build a page to navigate recent orders
7. [EXT]A page to display meal deals
8. [EXT] Help section(TBD)

### **Website (Javascript/CSS/HTML required)**

9. [CORE] A page that displays a table of restaurants
- 10.[CORE] A page that adds/deletes restaurants from the table
- 11.[EXT] A page to generate/return a random 6-digit alphanumeric id
- 12.[EXT] A page to process/approve new restaurants

### **Desktop (Processing/Java allowed)**

- 13.[CORE] A page to send the restaurant's menu to the website
- 14.[CORE] A page to edit/add the restaurant menu
- 15.[EXT] A page to register as a new user on the website

### **Any Language(C/Processing/Arduino/Javascript/Java)**

- 16.[CORE]Build a JSON interpreter

## Section 2: Task Breakdown

### [CORE]Main menu

1. Build a homepage for the m5 stack.

- [Basic]Write a page that shows at list of at least two interactable options: 'Preferences' and 'New Meal'. Each option, when selected, will navigate to a new page on the m5 program using the following functions: navNewMeal() and navRecent().
- [Extend]Extend the list and interactions to include two more options: 'Recent Activity' and 'Help'. The pages' navigation functions, respectively, are navPref() and navHelp().

2. Difficulty: Easy

### [CORE]A page to save/set dietary preferences

3. Build a page on the m5 stack to save and edit the user's dietary preferences.

- [Basic]Write a page that shows at list of the following editable options: 'Kcal per meal', 'Vegetarian', 'Gluten-free', 'Nuts'.
  - i. 'Kcal per meal' is an integer value.
  - ii. 'Vegetarian', 'Gluten-free', 'Nuts' are Booleans (true/false)
- [Extend]Add the ability to save the user's preferences. When clicked, it saves the user's preferences to an external file. This file should also now be loaded and displayed by default when a user accesses the page.

4. Difficulty: Hard

### [CORE]A page to select menu items

5. Build a homepage for the m5 stack.

- Basic:
  - i. Write a page that shows at list of at least two interactable options: 'Preferences' and 'New Meal'. Each option, when selected, will navigate to a new page on the m5 program using the following functions: navNewMeal() and navRecent().
- Extend:
  - i. Extend the list and interactions to include two more options: 'Recent Activity' and 'Help'. The pages' navigation functions, respectively, are navPref() and navHelp().

6. Difficulty: Easy

### [EXT]A page for loading

[EXT] A page to navigate a list of restaurants

[EXT] Build a page to navigate recent orders

[EXT] A page to display meal deals

[EXT] Help section(TBD)

[CORE] A page that displays a table of restaurants

[CORE] A page that adds/deletes restaurants from the table

[EXT] A page to generate/return a random 6-digit alphanumeric id

[EXT] A page to process/approve new restaurants

[CORE] A page to send the restaurant's menu to the website

[CORE] A page to edit/add the restaurant menu

[EXT] A page to register as a new user on the website

[CORE] Build a JSON stringifier

[CORE] Build a JSON interpreter