FoodReminder

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Purpose of Application:

The purpose of the application is to keep track of the taste of a certain kind of food McMaster students have eaten around the campus. The application also helps the students to contact the restaurant whenever they feel ready to order.

Task Hierarchy:

- Create Food Review
  - Enter Restaurant Name
  - Enter Food Name
  - Enter Cuisine
  - Enter Food Price
  - Enter Rate
  - Enter Comment
  - Attach an image
- Edit Food Review:
  - Edit Restaurant Name
  - Edit Food Name
  - Edit Cuisine
  - Edit Food Price
  - Edit Rate
  - Edit Comment
  - Attach New Image
- Filter Food Review:
  - Filter by Restaurant Name
  - Filter by Food Name
  - Filter by Cuisine
  - Filter by Food Price
  - Filter by Rate
  - Filter by Last Modified Date
- Search Restaurant (Shows Average Rate of Restaurants)
  - Search by Name
  - Search by Cuisine
  - Search by Last Attended Date
  - Sort by Rate
- Delete Food Review
  - Delete single review
  - Delete reviews by restaurant name
  - Delete reviews by food name
  - Clear reviews

- Contact Restaurant
  - Order by website
    - Click link to open online ordering and delivery platform
  - Order by phone call
    - Bluetooth connect with phone (Only for laptop user, microsoft :your phone" app required in the system)
    - click link to call the restaurant

Mockups of Most Important Pages:

- Create Food Review Page:

The layout of the "Create Review" page has 5 text input boxes labelled with "Restaurant", "Food Name", "Price", "Cuisine" and "Comment" respectively. All of the text input boxes are filled with some content in this mockup. The "Cuisine" input box has a drop-down box facility, where all available cuisines for this interface are shown in the box for users to choose one of them and fill the input box with the chosen cuisine. Users can click on the stars below the label "Rate The Food" to rate the food of this review being created(4 stars in this mockup). Users can attach an image of the reviewed food by dragging an image from the local machine to the specified space below the label "Attach Image of the Food" to import an image (this mockup shows the result after attaching). Users can click on the "Create Review" button to submit the creation or the cross at the top-right corner to cancel the creation.
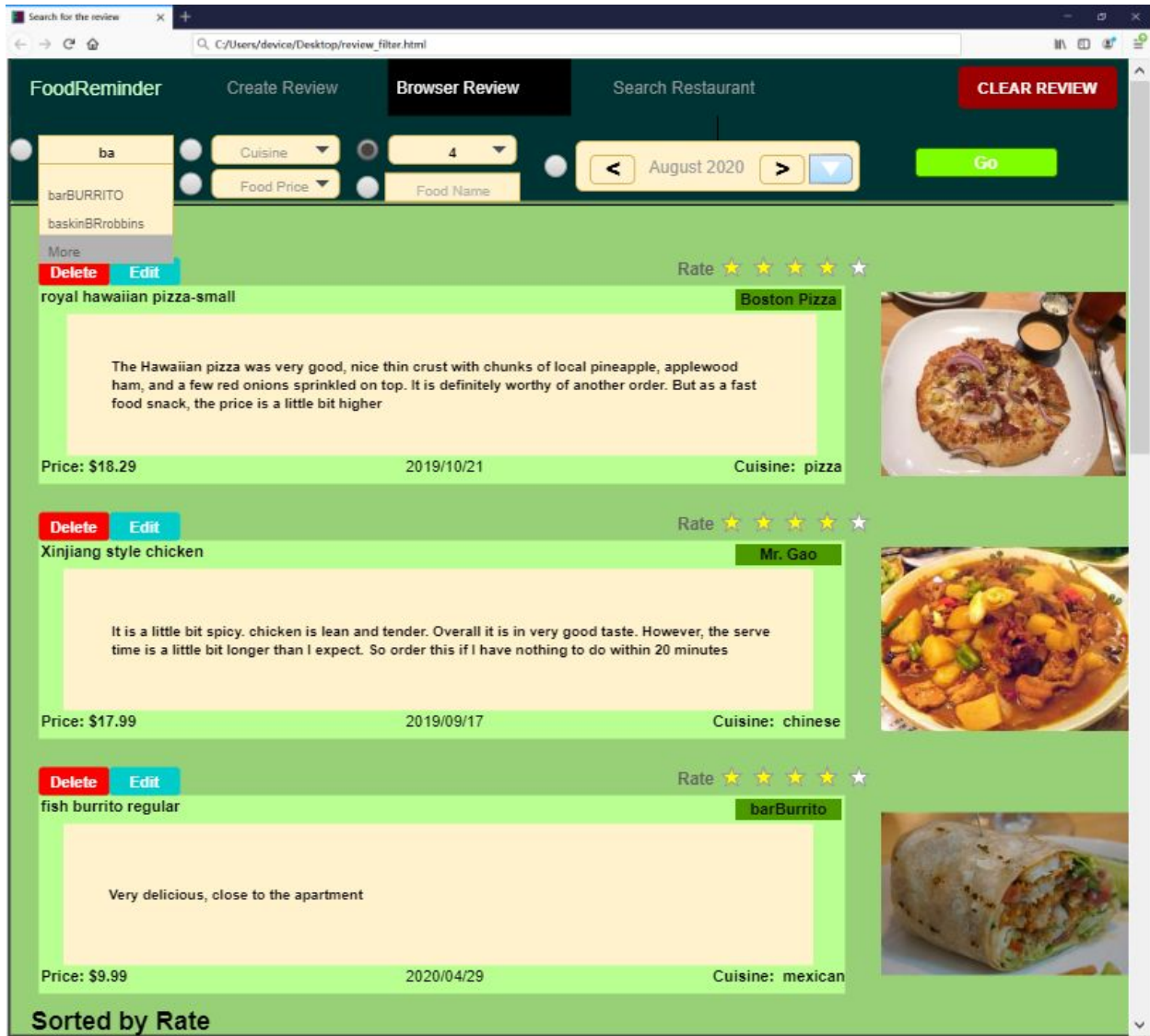
- Search Restaurant Page:

The "Search Restaurant" page has one text input box initially with a text guide telling what the input box should be filled with (restaurant name in this mockup). At the right side of the text input box, there is a drop-down box where users can choose one of the other two search methods (By Cuisine and By Last Attended Date). Once another search method has been selected, the text guide in the text input box would change accordingly. Below the text input box, the interface lists out the restaurants whose names, cuisine, or last attended dates match the input from the users (By default, it shows all of the restaurants whose foods have been reviewed). The restaurants' names are listed along with their last attended dates, cuisines and average rates. Above the listed restaurants, there is a "Sort By Rate" button which users can click to sort the restaurants in the opposite of the current order (Highest to lowest by default). Beside each restaurant's record, there is a contact button which users can click to contact the restaurant with a text message, email or calling its phone number.
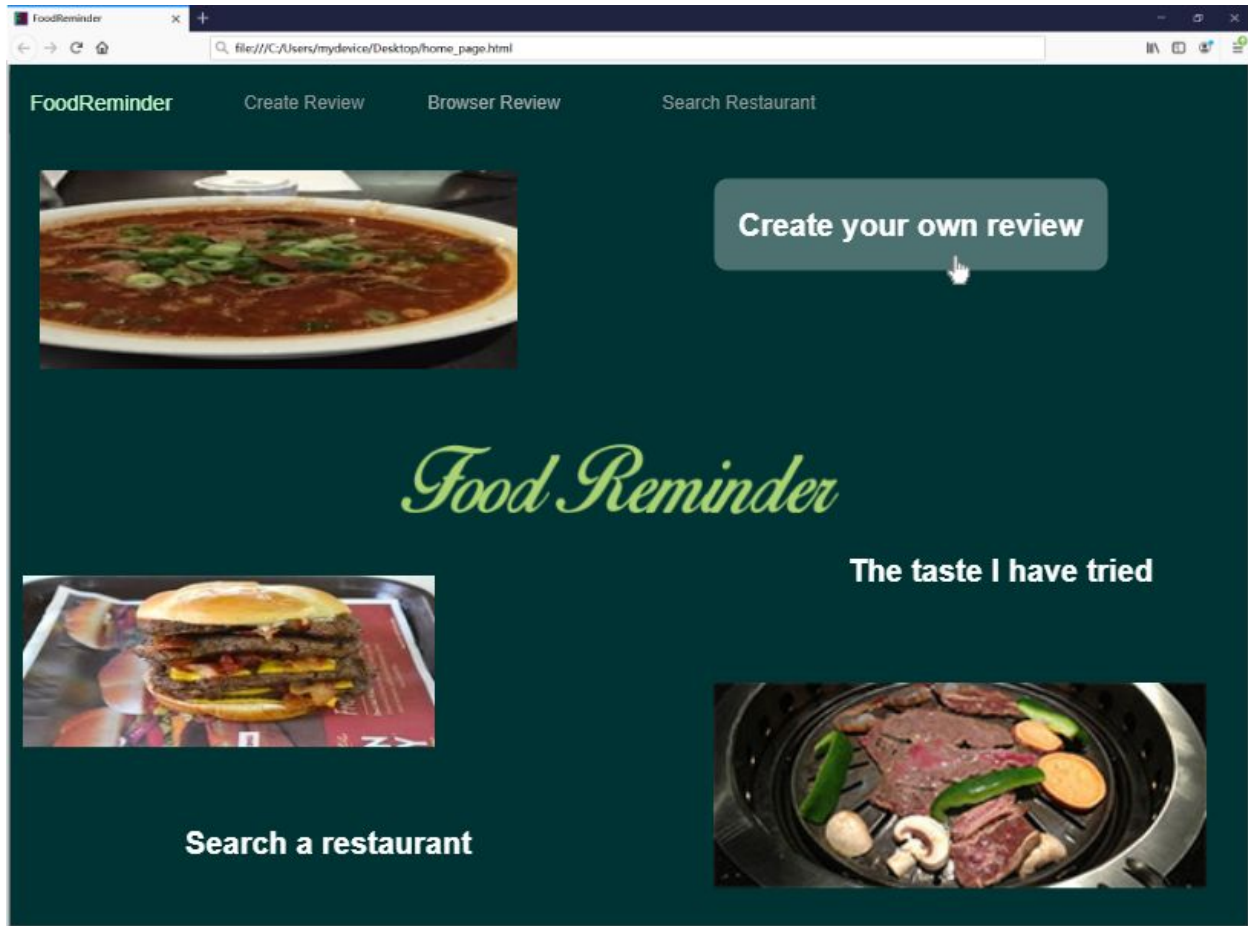
- ● Filter food review page:

The "food review" page has two input textbox, three dropdown selection and a date type input. There is a radio option box before each input that specifies the filtering attribute. After selection is done, click the green "go" button and then the result will be shown below. The original page content will be food in rate 5. After the reviews shown, People can click the edit button or the delete button to edit/delete the single review and the image. Only on this page the "clear review" button is shown that allows the user to clear all the reviews he wrote. And when filtering by restaurant or filtering by food name input box is chosen, a red delete button will appear just below the top navigation bar that allows the user to delete all the reviews related to the food name or the restaurant name. For one dish, the user can write multiple reviews and the star rate will be re-evaluated.

- Home Page:

The home page is shown every time the user enters the website. When the user's cursor moves to the button text, the button box will be shown with some opacity. Click the logo in the center can change the image shown in the page.

Design Discussions:

- Home Page
    - This page is for the beginner users who are not familiar with the top navigation bar. Three big buttons illustrate the three main functionalities of the website and also three pictures from the dataset will be displayed in the page.
    - To enhance interaction and the user experience, clicking the logo at the center of the homepage will change the picture in the page.
    - The button boxes will only pop up when the user moves the cursor over the button text(the text will always be in the page---Text shown the location of the button and the popped-up button box indicate that clicking it will lead to some actions) ← Signifier.
- Create Review Page
    - Each creation of food review needs to go through the process of filling in the information (Food Name, Restaurant, Price, Cuisine, Comment and image of the food), rating the and confirming the creation or cancelling current creation (includes confirming cancellation or denying cancellation) to standardize the task sequence.
    - The heading "Create Review" which directs the users to this page is unique in this interface and also conceptually related to the functionality of the page.
    - Filling in the "Comment" and attaching an image of the food are optional in this page to ensure the users are in control.
    - Completion of creation will direct the user to the completion window to give users a sense of closure with informative feedback
    - To permit easy reversal of groups of actions, the page provides the facility to cancel the creation with two clicks (click the red cross shown on the mock up then click "yes" to confirm the cancellation).
- Browse Reviews Page
    - Using of radio button when choosing filtering attributes, This make the filtering process more simple for the user and the result will be more specific
    - The deletion and edition process of every single review are the same which standardizes the task sequences.
    - When there are multiple reviews towards a single dish (e.g. two stars for the burger yesterday and 4 stars for it tmr), The system will calculate and round the average value and present it to the user when it passes the attribute filtration (3 stars shown). And that will help to reduce the workload of the user.
    - When the edition button is clicked, the original information will be shown in the input boxes or selection options by default so that the user does not need to memorize the details of the original review if he/she just wants to alter parts of the review.. This reduce the short-term memory load.
    - In the text input boxes [filtering by restaurant, filtering by food name] , auto suggestion is provided (e.g. ba → baBurrito, baskinBRobbins …) to provide immediate results.
    - After the selection of the filtering attribute, clicking the go button will lead to the correct filtered result. If there is no result in the dataset matched. The filtering attribute value will be within the unfounded message presented to the user. It can prevent the unnecessary mistake made by the user (choose the 0 result filter attribute value again). A funny saying will also be shown on the screen to prevent a possible disappointing mood by missing the target result.
    - Clicking an image will open a window with the full size image, as the full-size image is not critical (review and rate is) but needs for the full-size pic may still occur sometime.
    - Completing deleting/editing action will lead to the completion window to give users a sense of closure with informative feedback.

- Search Restaurant Page
  - Searching by restaurant's name:
    - The input text box for inputting the keywords for searching shall always be placed at the top of the page to ensure the search is displayed prominently.
    - The input text box shall provide auto-suggestions when some input is entered to improve immediate results.
  - Searching by cuisine:
    - The input box shall have a drop-down box that contains all available cuisines for the users to choose from to prevent errors due to users' inputs and minimize input actions by users
  - Searching by last attended date:
    - The page shall give notification to the user when his input is not following the format (yyyy/mm/dd), or the input date is clearly not existed (eg. entering 2020/04/31, entering a date that is beyond the current date) to prevent errors due to users' inputs.
  - Following the search guideline, users shall simply click the "Sort by Rate" button to sort the search results or flip the current sorted order of the search results.
  - To reduce the workload of users, there is a "Contact" button beside each search result which users can call the restaurant by a single click on the button instead of several clicks to enter the phone number.

Summary:

   In the whole user interface, the background color of all pages will stay the same (light green for the content and dark green for the header, grey for input guide) and the terminology used for the labels of the input boxes for the same type of information (eg. restaurant, food name, cuisine etc.) is identical across pages to satisfy the "strive for consistency " principle. There is no unsolicited window in the website and The user can only perform one task. (Starting another task will drop the current task operation automatically). Every useful action made by users leads to some feedback, such that clicking or hovering over the button changes the color of the button. And the feedback will be inline with the frequency of the action (only a dropdown box will be presented by clicking search boxes, but clicking the delete button leads to a confirmation window," clear all reviews action" need the user to type "confirm" in the confirmation window). In order to minimize the index of difficulty of the page, the navigation bar will always be fixed on the top of the page to achieve an infinite width and large buttons in the bar will decrease the "D" value in the Fitts's law formula.The link to every page should end with some text to make the link text accurately describe its destination, such as the link for the "Create Review" page should always end with "create_page". The size of each division from every page will be related to the screen size to keep the page on screen during screen printing. Currently, it is a multi-page prototype but SPA(single page for create review-browse review-search restaurant) will be an optional choice that stretch the goal of the website and reduce the user's workload.