

## Report for WebTech

### Andrew Chan and Andrew Dao

Used Express with standard HTML and CSS, with an embedded database using SQLITE. Website is designed primarily for **Medium desktops**.

### Instructions

Run 'npm install' to install required modules.

- Website URL: <https://localhost:3000/> NOTE will not work with localhost:3000
- Browse food deals and add to basket
- Once satisfied with chosen deals proceed to checkout.
- Enter card details (use test details provided below):
  - CARD NUMBER: 4242424242424242
  - EXPIRATION MONTH: 10
  - EXPIRATION YEAR: 2018
  - CVC: 232
- Once successfully paid, your order history will be displayed under "User Account"

Note: if the page refreshing does not work, the user has to go back to <https://localhost:3000/> again.

### HTML

Grade: A

Created several pages of HTML and tried to organise the class and id attributes names best as possible to help the CSS selectors and tried to use div tags effectively to group desired tags together.

- Used a validator to make sure pages are correct
- Generated pages that dynamically resize depending on resolution.
- investigated a variety of different issues and gained a general high level of confidence with the structure of HTML pages demonstrated with pages such as the index page and the home page

### CSS

Grade: A

- Element positioning
  - With the use of floats
  - Use of relative and absolute positioning
  - Dealing with document overflow
- Manipulating the spacing between elements with margins and padding
- Purchase food page
  - Made the purchase food webpage responsive
  - Implemented different borders and created custom border shapes for originality
  - Used various fonts for originality
- There are no style tags or style attributes in your HTML pages, and you've gained some experience with stylesheets
- have investigated a variety of different issues and gained a general high level of confidence with CSS style
- Also used bootstrap and a lot of self-written CSS code

## JS

Grade: A/B

- Implemented HTML drag and drop features by using the **DataTransfer** object to transfer data between elements. This can be activated by pressing on the “customise button”.
  - Use of prevent default events for disabling a default behaviour and creating a new behaviour with DOM manipulation
- Used a variety of query selecting techniques document.querySelector(), getElementById and the JQuery selector.
- Implemented a countdown timer with **jquery countdown**, when it runs out of time the JS will disable the “buy now button” and links to the recommendation (page).
- Implemented a Google maps API (page).
- DOM Manipulation

## PNG:

Grade A

- Combine images

### [bird](#) and Burger SVG icon

- shadow for an object in the image
  - 1. Used layer mask object extraction
  - 2. Used the Transformation perspective tool
  - 3. Used gaussian blur filter
  - 4. Used layers masks for object segment transparency

Layer handling was a common task for implementing a shadow and finer techniques such as filters, transformations and air brushing enhanced the realism of the bird's shadow.

### SVG

Grade: A

Shopping cart logo was created the [groceries](#) and [shopping cart](#) SVG icons found online.



To create



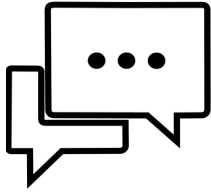
Techniques used: grouping editing, colour edited

- Door icon (original artwork)

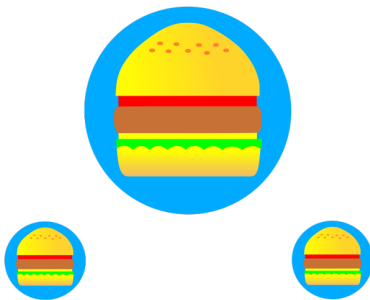


Techniques used: path editing, grouping, freehand drawing, shape tools

- Messenger icon (replicated with the free hand tools of an icon found online)



- Burger pattern (original artwork)



Techniques used: freehand drawing, path editing, grouping, shape tools, transformations, gradients and patterns.

## **Server**

Grade A

- Dealt with things like port numbers, URL validation, sending redirections to browsers and handling UTF-8
- dealt with https and self generated SSL certificates.
- Sessions for logged in users and non users using cookies allowing for implementation of shopping carts
- Use of “Stripes” API to allow for payments
- Hashing of user passwords using bcrypt
- csrf protection when signing in making sure that the person logged in is the same person

## **Database (SQLITE)**

Grade A

- Managed to update or insert data as well as extract it, and have got the hang of callbacks for getting things to happen in the right order
- Use of foreign keys to avoid duplicates or adding things into database which don't belong there and ensuring readability and relations between tables.

- Login system with details being stored
- Storing of order history

## **Dynamic Pages**

### Grade B

- Pages delivered by querying server for information
- Use of conditional statements to output error messages, or certain elements
- A means you've put in a lot of programming effort or become very fluent in using your chosen framework
- Validation of form fields for sign in, sign up and payment
- Timer on food deals
- Quantity can be changed on checkout using “+” and “-” buttons

## **Depth**

Our aim was to create an intuitive interface that allowed users to easily browse over a range of food deals in different cities. We wanted our users to have a full e-commerce experience and so it was important that we implemented the following features:

- Login system
- Checkout system using Stripe
- Order baskets
- Order history
- And a database to support the various deal entries

We are particularly proud with our website with regards to looks requiring us to have in depth knowledge of both HTML and CSS and the overall functionality of the login and checkout systems.

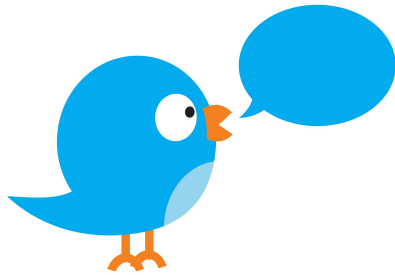
The Drag and Drop feature: The user can swap elements (page) allowing potential customisation capabilities for our users. Building this feature has allowed us to gain a firm understanding in event listeners in Javascript. Further improvements would have included, storing the order of the elements set by the users, which is then stored onto the database and later retrieved.

In desktop screen on the ordering page, the “You May Also Like” section required a lot of attention with many CSS techniques such as relative and absolute positioning, margins, and element positioning with floats. The smaller screen size has also been taken into consideration, the elements follow the default document flow, font size and element width & height considers the screen size.

Original artwork (SVG)



PNG (start) [link](#)



PNG (finished product)

Using the SVG artwork and the twitter bird, the two images were combined and the bird's shadow was produced for realism and originality.

