Developing Interactive Web Documentation

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Developing Interactive Web COM070

23 Dec 2022

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# Introduction

## Purpose

Get Baking! is an organisation who are trying to get more people to bake at home. They have asked for a website to be created to help promote available recipes and the following documentation outlines the processes taken to complete that task.

# Research

## Colours

The client insisted that the colour scheme would be a mix of #FF80C4 and #FFFF80, however different shades of these colours can be used, along with complimentary colours.

After assessing the two colours, it was decided that the latter colour would be altered to be a less saturated yellow as this colour would be the main background colour of the website and desaturated colours are best for backgrounds as they reduce eye strain, increase task efficiency and don’t take focus away from important elements in the foreground (Anthony, 2018).

![Shape, square

Description automatically generated]()![Shape, square

Description automatically generated]()![Shape, rectangle

Description automatically generated]()

After

Before

These colours were also assessed for their accessibility, using a website called whocanuse.com. This would give a WCAG grading which declares how legible text would be to people with visual impairments such as colour-blindness and slight vision loss based on the contrast ratio of the text and the background. Both colours scored perfectly.

Graphical user interface, text, application

Description automatically generated

Graphical user interface, application

Description automatically generated

# Design

## Wireframe

**Diagram

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In order to assess how users will navigate the site, a wireframe was drafted. These ideas would be used in order to create a low-fidelity prototype which could better demonstrate how the users will interact with the site, as well as starting to plan a layout for the pages.

## Low-Fidelity Prototype

A picture containing diagram

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Table

Description automatically generated

A picture containing graphical user interface

Description automatically generated

From the wireframe, a low-fidelity prototype was created. These designs considered the requirements of the client, for example a homepage with a blog about recipes was created as well as a standardised layout for displaying information about each recipe. The next step in the design process was to turn the design into a high-fidelity prototype.

## High-Fidelity Prototype

**Diagram

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**Shape, polygon

Description automatically generated**

**A picture containing shape

Description automatically generated**

**A picture containing graphical user interface

Description automatically generated**

Using a prototyping software called Axure, a high-fidelity prototype could be created. This design would meet the client’s need as it would have a homepage which specifies the organisation’s goal and displays recent, seasonal and popular recipes using carousels. It also included the newly designed logo which was requested by Get Baking! and the prototype demonstrates the effectiveness of the logo and how it symbolises what the organisation is all about. It also incorporates the chosen colours and shows how effective they are.

# Implementation

## Final Implementation

A picture containing text

Description automatically generatedDiagram

Description automatically generated**Homepage**

The home page of the website contains the logo, about text explaining the aims of Get Baking! and a button which scrolls down the page, inviting the user to learn more. Using the react-bootstrap library of components, carousels were made which contained the recent, popular and seasonal recipes. These elements were all requested by the client, demonstrating an effective implementation of the client’s needs.

**Explore Recipes**

Graphical user interface, website

Description automatically generated

The explore recipes page contains cards of each recipe with a button that takes the user the specific recipe page where they can get more information. The search bar was changed to a filter dropdown as it makes finding a recipe easier for people who maybe don’t know much about what recipes are already out there. The layout of the cards was created using CSS grid properties.

Graphical user interface, website

Description automatically generated**Recipe Page**

The recipe page contains the information about a certain recipe including ingredients, nutrition, directions and author details. In order to meet the clients needs of a standardised layout for all recipes, content is dynamically rendered using the slug portion of the URL to define which recipe information to load onto the page template.

## Mobile Responsive

As web traffic moves more towards phones, it is important that websites are also compatible on smaller viewports. Therefore, in order to meet this demand, the final implementation must also be mobile responsive.

A picture containing text, doughnut, different, bread

Description automatically generatedText

Description automatically generated

A picture containing text, screenshot

Description automatically generated

The key differences in mobile view is that the menu becomes a hamburger menu icon and the text next to images moves from the side to below.

## Frameworks Used

In order to complete the final implementation, different frameworks and libraries were used. Some examples include:

* React – to build the components for each page and to render the html for the website
* React-bootstrap – to add customizable, pre-built components to the website to add functionality
* React-router-dom – to add routing to the website so pages could be navigated
* Axios – to fetch data from the API
* React-router-bootstrap – to add routing capabilities to react-bootstrap components
* Bootstrap – for styling the pages and components

# Testing

## Selenium

Selenium is an automated testing software which allows you to build testing scripts which can be ran to automatically test a webpage. Selenium was used to test the website as this removes the need for manual testing which makes the process more efficient.

Text

Description automatically generated

Test suits were created for both mobile and desktop view to make sure that functionality is not lost between devices

Graphical user interface, text, application, email

Description automatically generated

## Lighthouse

Lighthouse testing is part of the chrome DevTools suite. It allows you to automatically check a sites performance based on characteristics such as overall performance, accessibility, best practices and SEO (search engine optimisation). Lighthouse testing was used to make sure the implementation was as effective as possible.

**Graphical user interface, application

Description automatically generated**

**References**

Anthony (2018) *Why You Should Avoid Bright, Saturated Background Colors* [Online]. Available at https://uxmovement.com/content/why-you-should-avoid-bright-saturated-background-colors/ (Accessed 16 December 2022).