

Introduction

I have developed a web application for helping people cook healthy meals from the comfort of their own homes. This web application is designed to work on 1280 by 800px screens. The web application is developed in order to be personalized for every user. The home page (“main.html”) is designed to help the user with some tips that can help them in maintaining a healthy diet. The dishes page(“dishes.html”) contains healthy recipes for breakfast, lunch, dinner and dessert. This page is also personalized so the user does not have to search for the recipe that would fit their diet, which can be stressful for someone that tries to follow a healthy lifestyle. The drinks page(“drinks.html”) contains a variety of mocktails, cocktails and beverages recipes, in order to fit every occasion, this page is not personalized because drinks are easier to fit in different categories of diets. The quiz page(“quiz.html”) is designed to help the user have a better understanding of some myths regarding diets, while at the same time designing and developing it in a way that has the shape of the game. The answers are obvious because the aim of the game is not the score but gaining knowledge.

Usability and user experience

From the beginning of the development, I have aimed for the web application to be not only user friendly, but also to have an engaging design and to be responsive regarding the user’s actions. The choice of the flat structure for the information architecture, along with the names chosen for the items inside the navigation bar, help in directing the user directly to the page they need.



For the web application to have an engaging design, I have used Bootstrap, as well as CSS. The use of JavaScript helped in making the website responsive.

The landing page has a form that the user must complete for the website to be personalized to their needs, all the questions inside the form are required, therefore the user must complete them in order to go further in the application. In order to create the wanted design, I have used bootstrap. I have used the grid system for the form, for it to be flexible and responsive. The form is also included in a section that is classed as “card”, while the text is inside the class: “card-body”. Apart from the features already available due to using bootstrap, I have also modified the design of the elements inside the class “card” using CSS.

```
.card{
  background: linear-gradient(□rgba(0, 0, 0, 0.6),□rgba(0,0,0,0.6));
  color: □black;
}
```

By changing the background’s alpha element, the card has transparency, in addition the text inside it has the color of the font black. The button and the logo, included at the end of the form are included in the class “row”, while each one of them is included in a class named “col-lg-6”, the reason behind this choice was the desire to have both elements in the same row. I have added an id for the logo element in order to change its padding-left.

After submitting the form, the user is redirected to the web application. Some of the elements inside the header element repeat on every page for consistency. The navbar is visible on every page and it also has a personalized greeting for the user. Every page has the same background color “#AFC2C6”. The content on the background is different on every page, however the font is the same “Abril Fatface” and all the pages have the picture of the logo visible. On the home page, the text is inside the id “textheader”, while a part of the text is inside a span element that has the id “rightdiet” as well for that part to be highlighted with yellow. The main page also contains the “healthy.png” image that is styled so it fits not only inside the header, but its also visible on the main. The main page is divided in 3 rows, using bootstrap. The first row contains the title inside a column, while the other two rows contain two column each. The titles have the font “Abirl Fatface”, while the paragraphs have font “Lato”, for a better visual layout.

The pages “dishes.html”, “drinks.html” and “quiz.html” follow the same design rules in terms of the content inside the header. Therefore, on each page, there is a container that has a

picture of the logo and a heading with the name of the page the user is on, the heading is inside the span element that has the id “rightdiet”, so the text is highlighted with yellow. The pages “dishes.html” and “drinks.html” also share the same design when it comes to the elements inside the main. The title is inside the class “titleDiet”, so it has the font “Abril Fatface”, while the text inside the class “card” has the font “Lato”. The “dishes.html” page is designed to showcase four sections: breakfast, lunch, dinner and desserts, while the “drinks.html” is designed to showcase three sections “mocktails”, “cocktails” and “soft drinks”.

The “quiz.page” is following the format of the “index.html”. The content is included inside the class “row”, which then is divided in two equal columns. The first column contains the quiz, while the second column contains the score and a GIF that is displayed in accordance with the score. When the page loads for the first time, the second column is not visible to the user. However, once the user submits the answers, the second column becomes visible.

```
document.querySelector("#afterSubmit").style.visibility="visible";
```

Technical implementation

Inside the “index.html”, the user must complete a form. The user’s data is stored using JSON in localStorage. Each user is given a ClientID. Once the user clicks the submit button, the function “validate()” makes sure the user completed all the required fields, if not it send a feedback saying “This field is required”. Once a field is completed the function “removeFeedback” is called and removes the feedback. Once every required field is completed, the user’s data is added to the local storage using JSON. Inside the function “addClient()”, the values of the data collected from the form is added to the variables inside the function.

Inside the navigation bar there is a personalized greeting.

```
<div class="navbar-nav">
  <div class="nav-link">
    Hi,
    <span id="fullName">
      David
    </span>
    !
  </div>
```

The name of the user is added inside a span element that has the id “fullName”. Inside the JavaScript script, I have created a variable “index” that takes the index of the last user that completed the form, retrieves the name of that user and replaces the name “David” inside the span element with the name of the most recent user. Inside the “dishes.html” page, I have decided to make the menus be personalized in such a way that someone that is vegetarian would get only vegetarian recipes.

```
if(storedData.clients[index].dietSelect=="vegan"){
  document.querySelector("#diet-carnivore").style.display="none";
  document.querySelector("#diet-vegan").style.display="inherit";
  document.querySelector("#diet-vegetarian").style.display="none";
}
```

On the dishes page, there are three sections, each one of them has an id: “diet-vegetarian”, “diet-vegan” and “diet-carnivore”. When the user selects a diet, that choice is stored in the local Storage and then it is retrieved. I have used “style.display=none” and “style.display=inherit” so the elements do not show that there can be other content on the page, except for what is visible and is already there.

The quiz page also uses JavaScript. The quiz is inside a form and uses a similar method of retrieving the data, however it does not store it in the local storage. The submit button has the “submit” id that is then used inside JavaScript to call the method “addEventListener” that listens for a click. When the user clicks the button, the function check() is called. Inside the check function, I created local variables to store the answers from the quiz. Given that the quiz asks the user to select the correct answer, I have used the input type “radio”. Therefore the function checkRadioInput() loops through the possible answers and returns the selected

value that is then stored inside the local variable inside the check() function. The selected answer is then compared to the answer. If the answer is correct, then it is added to the total number of correct answers that is stored inside the local variable “countCorrectAnswers”. Inside the function check() I have also created an array of GIFs, the GIF that is visible to the user is in accordance with their score. Therefore, I have created the local variable named “range”, depending on the number stored inside the variable “countCorrectAnswers”, the variable “range” would store a number from 0 to 2. The range variable is then used as the index for the pictures array. Therefore, someone who got 4 or more answers correct would have a GIF that symbolizes “Congratulations”. The method I have used for making the GIF visible is similar to the method used for showing the greeting message on the navigation bar, but instead of having “.innerHTML”, I have replaced the source of the GIF by using “.src”. The second column in which the score is placed, along with the GIF, becomes visible when the check() function is called, because the visibility is set to “visible” inside the function. The score is inside a span that has the id “score” and it is set to be equal with the variable “countCorrectAnswers”.



Critical Reflection

At the beginning, I wanted the user to be able to select their favorite recipe and be able to see it inside the profile page that would be accessed by pressing the greeting, the design would have looked like a shopping cart. However, I was not able to do so, therefore I have chosen to delete the select button that used to be visible on each card that showcases a recipe. Instead of that idea, I have added the quiz page. I have also faced problems with the “dishes.html” page, the buttons that should allow the user to jump to different sections is not working the same way it works on the “drinks.html” page. I have also faced problems in regards to the layout of the pages. The “main.html”, “dishes.html” and “drinks.html” do not fill 100% of the space available, leaving the page looking not as aesthetically pleasant as I planned it to be.


As a future feature, I would add an explore menu that would be like Tinder. It would use the carousel with captions feature the bootstrap is able to produce. It would also have two buttons, a like and dislike button, exactly like tinder has. In order for it to work in accordance with what I have planned, the form would also have an allergy question. All the allergies selected would be stored in the local storage. If the user likes one of the recipes that contains one or more of the allergens the user has selected in the form, it will show an animation that says, “not a match”. In addition, the caption would look like the captions that are on Tinder and the profile would expand when the user clicks on a specific button. The liked recipes would be added to the dish page.

Word count: 1817


Description of asset	Source	Location on website	License
	https://cookieandkate.com/banana-coconut-muffins/#tasty-recipes-23274-jump-target	Dishes.html	Used under Illustration for Instruction principle.
	https://www.tarladalal.com/mint-honey-lemon-drink-lemon-mint-and-honey-water-40074r	drinks.html	Used under Illustration for Instruction principle.
	https://marisamoore.com/blood-orange-mocktail/	Drinks.html	Used under Illustration for Instruction principle.
	https://hurrythefoodup.com/bulgur-porridge/	Dishes.html	Used under Illustration for Instruction principle.
	https://www.goodhousekeeping.com/food-recipes/a37223730/cauliflower-tacos-recipe/	Dishes.html	Used under Illustration for Instruction principle.
	https://hurrythefoodup.com/chia-pudding-with-almond-milk/#recipe	Dishes.html	Used under Illustration for Instruction principle.

	https://www.goodto.com/recipes/chicken-pittas	Dishes.html	Used under Illustration for Instruction principle.
	https://wholeandheavenlyoven.com/2022/02/28/italian-avocado-chickpea-salad/	Dishes.html	Used under Illustration for Instruction principle.
	https://giphy.com/gifs/CulturaJubile-cultura-medium-9xijGdDI MovchalhxN	Quiz.html	Used under Illustration for Instruction principle.
	https://homecookedroots.com/vegan-roasted-red-pepper-and-tomato-soup/	Dishes.html	Used under Illustration for Instruction principle.
	https://www.goodto.com/food/breakfast-under-100-calories-39173	Dishes.html	Used under Illustration for Instruction principle.
	https://www.taste.com.au/recipes/gluten-free-mini-doughnuts-cinnamon-glaze/fb5c24e1-afdf-44f6-be99-17244f5ae091	Dishes.html	Used under Illustration for Instruction principle.
	https://nutritionstarringyou.com/blueberry-protein-pancakes/	Dishes.html	Used under Illustration for Instruction principle.

	https://elements.envato.com/healthy-vegan-vegetarian-food-in-full-paper-bag-ve-HSDAN4Y	main.html	e. Used under Illustration for Instruction principle.
	https://natashaskitchen.com/iced-tea-recipe/	Drinks.html	Used under Illustration for Instruction principle.
	https://www.townandcountrymag.com/leisure/drinks/g13050949/healthy-alcoholic-drinks/	Drinks.html	Used under Illustration for Instruction principle.
	https://www.taste.com.au/recipes/italian-spiced-orange-rice-cake/85ffb02d-fc42-4a88-b729-5173fe91a06e	Dishes.html	Used under Illustration for Instruction principle.
	https://tinder.com/	Every page	Used under Illustration for Instruction principle.
	https://www.dawnjacksonblatner.com/recipes/hibiscus-sangria/	Drinks.html	Used under Illustration for Instruction principle.

	https://giphy.com/gifs/TapTheTable-tap-the-table-tapthetable-ryanbaggott-0laTzoLJHVHTwiag6Q	Quiz.html	Used under Illustration for Instruction principle.
	https://www.freepik.com/free-photo/pots-vegetables-harvest_1440232.htm#query=vegan%20background&position=12&from_view=keyword	Index.html	Used under Illustration for Instruction principle.
	https://www.goodhousekeeping.com/food-recipes/a38388248/sheet-pan-fish-and-vegetables-recipe/	Dishes.html	Used under Illustration for Instruction principle.
	https://www.vegannie.com/cookies/skinny-25calorie-chocolate-chip-cookies/	Dishes.html	Used under Illustration for Instruction principle.
	https://cookieandkate.com/best-lentil-soup-recipe/#tasty-recipes-23764-jump-target	Dishes.html	Used under Illustration for Instruction principle.
	https://www.goodto.com/recipes/steak-chicory-and-orange-salad	Dishes.html	Used under Illustration for Instruction principle.

	https://www.vegannie.com/cake-bars-brownies/healthy-strawberry-shortcake-bars/	Dishes.html	Used under Illustration for Instruction principle.
	https://hurrythefoodup.com/speedy-vegan-burrito/	Dishes.html	Used under Illustration for Instruction principle.
	https://healthiersteps.com/recipe/strawberry-breakfast-cake/	Dishes.html	Used under Illustration for Instruction principle.
	https://www.jaroflemons.com/vegan-ramen-soup-zucchini-noodles/	Dishes.html	Used under Illustration for Instruction principle.
	https://www.myplantifulcooking.com/vegan-thai-red-curry-with-tofu-and-veggies/#recipe	Dishes.html	Used under Illustration for Instruction principle.
	https://wholeandheavenlyoven.com/2016/04/22/vegetarian-sweet-potato-noodles-stir-fry-2/	Dishes.html	Used under Illustration for Instruction principle.
	https://www.townandcountrymag.com/leisure/drinks/g13050949/healthy-alcoholic-drinks/	Drinks.html	Used under Illustration for Instruction principle.

	https://giphy.com/gifs/alexanderirl-alexander-irl-26DOoDwdNGKAg6UKI	Quiz.html	e. Used under Illustration for Instruction principle.
Text about tips about weight loss	https://www.healthline.com/nutrition/25-best-diet-tips#TOC_TITLE_HDR_3	Main.html	Used under Illustration for Instruction principle.
Text about banana coconut muffins	https://cookieandkate.com/banana-coconut-muffins/#tasty-recipes-23274-jump-target	Dishes.html	Used under Illustration for Instruction principle.
Text about strawberry breakfast cake	https://healthiersteps.com/recipe/strawberry-breakfast-cake/	Dishes.html	Used under Illustration for Instruction principle.
Text about vegetarian sweet potato noodles sir-fry	https://wholeandheavenlyoven.com/2016/04/22/vegetarian-sweet-potato-noodles-stir-fry-2/	Dishes.html	Used under Illustration for Instruction principle.
Text about italian avocado chickpea salad	https://wholeandheavenlyoven.com/2022/02/28/italian-avocado-chickpea-salad/	Dishes.html	Used under Illustration for Instruction principle.
Text about lentil Soup	https://cookieandkate.com/best-lentil-soup-recipe/#tasty-recipes-23764-jump-target	Dishes.html	Used under Illustration for Instruction

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Text about roasted cauliflower tacos	https://www.goodhousekeeping.com/food-recipes/a37223730/cauliflower-tacos-recipe/	Dishes.html	Used under Illustration for Instruction principle.
Text about gluten-free mini doughnuts with cinamon glaze	https://www.taste.com.au/recipes/gluten-free-mini-doughnuts-cinnamon-glaze/fb5c24e1-afdf-44f6-be99-17244f5ae091	Dishes.html	Used under Illustration for Instruction principle.
Text about italian spiced orange and rice cake	https://www.taste.com.au/recipes/italian-spiced-orange-rice-cake/85ffb02d-fc42-4a88-b729-5173fe91a06e	Dishes.html	Used under Illustration for Instruction principle.
Text about chia pudding	https://hurrythefoodup.com/chia-pudding-with-almond-milk/#recipe	Dishes.html	Used under Illustration for Instruction principle.
Text about bulgar porridge	https://hurrythefoodup.com/bulgur-porridge/	Dishes.html	Used under Illustration for Instruction principle.
Text about creamy vegan tomato soup with roasted red peppers	https://homecookedroots.com/vegan-roasted-red-pepper-and-tomato-soup/	Dishes.html	Used under Illustration for Instruction principle.
Text about vegan ramen soup w/ zucchini noodles	https://www.jaroflemons.com/vegan-ramen-soup-zucchini-noodles/	Dishes.html	Used under Illustration for Instruction

			on principle.
Text about creamy vegan thai red curry with tofu	https://www.myplantifulcooking.com/vegan-thai-red-curry-with-tofu-and-veggies/#recipe	Dishes.html	Used under Illustration for Instruction principle.
Text about speedy vegan burrito	https://hurrythefoodup.com/speedy-vegan-burrito/	Dishes.html	Used under Illustration for Instruction principle.
Text about skinny chocolate chip cookies	https://www.vegannie.com/cookies/skinny-25calorie-chocolate-chip-cookies/	Dishes.html	Used under Illustration for Instruction principle.
Text about vegan strawberry shortcake bars	https://www.vegannie.com/cake-bars-brownies/healthy-strawberry-shortcake-bars/	Dishes.html	Used under Illustration for Instruction principle.
Text about blueberry protein pancakes	https://nutritionstarringyou.com/blueberry-protein-pancakes/	Dishes.html	Used under Illustration for Instruction principle.
Text about scrambled egg and mashrooms	https://www.goodto.com/food/breakfast-under-100-calories-39173	Dishes.html	Used under Illustration for Instruction principle.
Text about steak, chicory and orange salad	https://www.goodto.com/recipes/steak-chicory-and-orange-salad	Dishes.html	Used under Illustration for

			Instructi on principl e.
Text about chicken pittas recipe	https://www.goodto.com/recipes/chicken-pittas	Dishes.h tml	Used under Illustrati on for Instructi on principl e.
Text about sheet pan fish and vegetables	https://www.goodhousekeeping.com/food-recipes/a38388248/sheet-pan-fish-and-vegetables-recipe/	Dishes.h tml	Used under Illustrati on for Instructi on principl e.
Text about sparkling blood orange mocktail	https://marisamoore.com/blood-orange-mocktail/	Drinks.h tml	Used under Illustrati on for Instructi on principl e.
Text about hibisvus sangria “mocktail”	https://www.dawnjacksonblatner.com/recipes/hibiscus-sangria/	Drinks.h tml	Used under Illustrati on for Instructi on principl e.
Text about “its about thyme”	https://www.townandcountrymag.com/leisure/drinks/g13050949/healthy-alcoholic-drinks/	Drinks.h tml	Used under Illustrati on for Instructi on principl e.
Text about golden roots	https://www.townandcountrymag.com/leisure/drinks/g13050949/healthy-alcoholic-drinks/	Drinks.h tml	Used under Illustrati on for Instructi on principl e.
Text about iced tea	https://natashaskitchen.com/iced-tea-recipe/	Drinks.h tml	Used under Illustrati

			on for Instructi on principl e.
Text about minty honey Lemon drink	https://www.tarladalal.com/mint-honey-lemon-drink-lemon-mint-and-honey-water-40074r	Drinks.h tml	Used under Illustrati on for Instructi on principl e.
Question about apple	https://www.businessinsider.com/breakfast-foods-that-will-give-you-as-much-energy-as-coffee-2017-6?r=US&IR=T#apples-1	Quiz.ht ml	Used under Illustrati on for Instructi on principl e.
Question about eating 2000 calories	https://www.verywellfit.com/how-many-calories-to-lose-weight-3495659	Quiz.ht ml	Used under Illustrati on for Instructi on principl e.
Question about supplements	https://www.healthline.com/nutrition/top-12-biggest-myths-about-weight-loss#TOC_TITLE_HDR_4	Quiz.ht ml	Used under Illustrati on for Instructi on principl e.
Question about fat	https://www.healthline.com/nutrition/top-12-biggest-myths-about-weight-loss#TOC_TITLE_HDR_4	Quiz.ht ml	Used under Illustrati on for Instructi on principl e.
Question about diet foods	https://www.healthline.com/nutrition/top-12-biggest-myths-about-weight-loss#TOC_TITLE_HDR_4	Quiz.ht ml	Used under Illustrati on for Instructi on principl e.