You are an experienced Web Developer.

You need to generate the frontend (HTML & JavaScript) for a web page that will call a JSON web API to generate healthy meals from food ingredients and kCal intakes. The application name is Fridge Chef.

You need to use bootstrap CSS library.

You need to create one single HTML file that only contains HTML, Vanilla JavaScript and bootstrap classes.

The content of the page shall be included in a div with the container bootstrap class and have round edges.

The background color of the page shall be light grey while the container shall be dark grey.

You need to create a header that has a logo (logo.png) and a title (both in the center).

The container width shall be 80% of the entire width.

The page includes a form at the top to collect the food ingredients which are separated by commas (default value "broccoli, chicken, fish, vegetables, cabbage, eggs, olive oil") and the kcal intakes which is a number defaulting to 2000 and also has a Send & Clear buttons.

Below the form there is a tabbed output with three tabs, one belongs to the breakfast, and one belongs to the lunch and one belongs to the dinner. Include sufficient margin between the form and the Tabs.

When the submit button is clicked on the form a vanilla JavaScript code shall read the ingredients & the kcal intakes inputs and call the following url “http://localhost:4000/openai/meals” and pass the ingredients and kcal in the body as json object.

Here is a sample request body

{

    "ingredients": "broccoli, chicken, fish, vegetables, cabbage, eggs, olive oil",

    "kcal": 2000

}

A spinner must be shown during the call and the controls on the form must be disabled.

When the API is returned it has an array of json objects (key is meals). The first element in the array is the breakfast, the second is lunch & the third is dinner.

Each Object contains a title, description and a url for an image.

An example returned Json is below

{

    "meals": [

        {

            "title": "Broccoli and Egg Scramble",

            "description": "- Ingredients: Broccoli, Eggs, Olive oil\n- Instructions:\n   1. In a pan, heat olive oil over medium heat.\n   2. Add chopped broccoli florets and sauté until they become slightly tender.\n   3. In a separate bowl, whisk the eggs.\n   4. Pour the beaten eggs into the pan with broccoli.\n   5. Stir and scramble the eggs with the broccoli until they are cooked through.\n   6. Season with salt and pepper to taste.\n- This recipe provides a nutritious and protein-rich start to the day, with the added benefits of antioxidants and vitamins from broccoli. The olive oil adds healthy fats to the meal.\n\n",

            "url": "https://oaidalleapiprodscus.blob.core.windows.net/private/org-P1NunolHaNfe1BvoVmlFZFpX/user-R7NGQHcoIyysvTCmkHjh6YWw/img-IuAR2r4B3NzzWwQCmypKwLRn.png?st=2023-07-18T03%3A15%3A22Z&se=2023-07-18T05%3A15%3A22Z&sp=r&sv=2021-08-06&sr=b&rscd=inline&rsct=image/png&skoid=6aaadede-4fb3-4698-a8f6-684d7786b067&sktid=a48cca56-e6da-484e-a814-9c849652bcb3&skt=2023-07-17T23%3A53%3A04Z&ske=2023-07-18T23%3A53%3A04Z&sks=b&skv=2021-08-06&sig=XS1OP//ioQxDg5vtbr%2BbkeKI0UZAM76%2BW%2B/Uv218Hds%3D"

        },

        {

            "title": "Grilled Chicken Salad",

            "description": "- Ingredients: Chicken, Vegetables (mixed greens, tomatoes, cucumbers, bell peppers), Olive oil\n- Instructions:\n   1. Preheat a grill or grill pan.\n   2. Season chicken breasts with salt, pepper, and any other desired seasonings.\n   3. Grill the chicken until cooked through, then let it rest before slicing.\n   4. In a large bowl, combine mixed greens, sliced tomatoes, sliced cucumbers, and sliced bell peppers.\n   5. Drizzle olive oil over the salad and toss to coat.\n   6. Top the salad with sliced grilled chicken.\n- This salad offers a good balance of lean protein from the grilled chicken, fiber and nutrients from the vegetables, and healthy fats from olive oil. \n\n",

            "url": "https://oaidalleapiprodscus.blob.core.windows.net/private/org-P1NunolHaNfe1BvoVmlFZFpX/user-R7NGQHcoIyysvTCmkHjh6YWw/img-jRbAqqptHdfWcc9zGVEBkX6G.png?st=2023-07-18T03%3A15%3A22Z&se=2023-07-18T05%3A15%3A22Z&sp=r&sv=2021-08-06&sr=b&rscd=inline&rsct=image/png&skoid=6aaadede-4fb3-4698-a8f6-684d7786b067&sktid=a48cca56-e6da-484e-a814-9c849652bcb3&skt=2023-07-17T23%3A53%3A12Z&ske=2023-07-18T23%3A53%3A12Z&sks=b&skv=2021-08-06&sig=3iXYr39rs8THHQoA7PVtx8kIi%2BzC13IxMwjadAyJRwA%3D"

        },

        {

            "title": "Baked Fish with Roasted Vegetables",

            "description": "- Ingredients: Fish fillets (such as salmon or tilapia), Vegetables (broccoli, bell peppers, cabbage), Olive oil\n- Instructions:\n   1. Preheat the oven to 400°F (200°C).\n   2. Place fish fillets on a baking sheet, drizzle with olive oil, and season with salt and pepper.\n   3. In a separate bowl, toss sliced vegetables (broccoli, bell peppers, and cabbage) with olive oil, salt, and pepper.\n   4. Spread the vegetables around the fish on the baking sheet.\n   5. Bake for approximately 15-20 minutes or until the fish is cooked through and the vegetables are tender.\n- This simple and healthy dinner option provides a good source of high-quality protein from the fish along with a variety of vitamins and minerals from the mixed roasted vegetables.\n\n\n",

            "url": "https://oaidalleapiprodscus.blob.core.windows.net/private/org-P1NunolHaNfe1BvoVmlFZFpX/user-R7NGQHcoIyysvTCmkHjh6YWw/img-7uIwxftrcUT3hFxdIGqy9Z4E.png?st=2023-07-18T03%3A15%3A22Z&se=2023-07-18T05%3A15%3A22Z&sp=r&sv=2021-08-06&sr=b&rscd=inline&rsct=image/png&skoid=6aaadede-4fb3-4698-a8f6-684d7786b067&sktid=a48cca56-e6da-484e-a814-9c849652bcb3&skt=2023-07-17T23%3A53%3A54Z&ske=2023-07-18T23%3A53%3A54Z&sks=b&skv=2021-08-06&sig=ggREvdHv2FTAqD%2B6It%2B8jfMZFur/mumOYWlELIN/69M%3D"

        }

    ]

}

You need to display the breakfast, lunch and dinner in the corresponding tabs.

Each tab has a title at the top, followed by the description on the left and the image on the right.

In the description returned from the REST API call, please replace all newline characters with <br> tag

Leave enough padding around the image.

Resize the image if it doesn’t fit.

Please include all the code in one file called fridge\_chef.html