Nutrition Web Page addressing SDGs
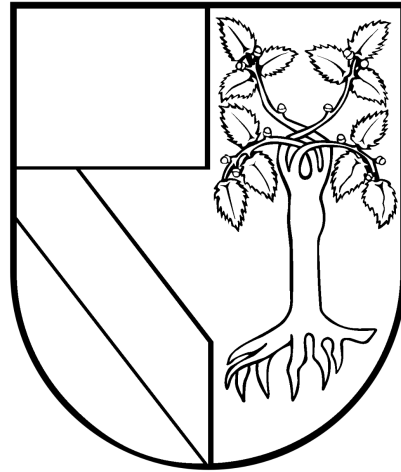
UNIVERSIDAD PANAMERICANA

Autores:

    Emilio Ibarra Lomelí

    Hector Emiliano Flores

    Jesus Abel Gutierrez Calvillo

Fecha: 25/08/2023

Materia: Web Development

Profesor: Gabriel Castillo

Carrera: Ingeniería en Sistemas y Gráficas Computacionales

Institución: Universidad Panamericana de Guadalajara

Introduction

The UN (United Nations) established in their 2030 agenda 17 goals called SDG (Sustainable Development Goals) to address the 2030 agenda. Anyone who is interested has access to these SDGs and uploads a project in which they address one or many of these goals. For our project we chose the third goal, which is "Health and Wealth Being", and because our project is food related we might also address the second SDG which is "Cero Hunger" and may be related to other SDGs as well. Our project is a nutrition web page in which people could consult information about healthy eating no matter the price of the food. We will focus on Macronutrients and how to balance them. Since we don´t know a lot about nutrition we will let people that know about nutrition connect with people with people that want to learn. We might implement a verification to users to stop the spreading of misinformation related to nutrition.

Rationale behind goal selection

- Global Relevance: Health and well-being are universal concerns that affect everyone, regardless of their origin, gender, age, or geographical location. Addressing SDG 3 allows reaching a diverse audience and making an impact worldwide.

- Impact on Quality of Life: Access to information and resources related to health and well-being can significantly enhance people's quality of life. Providing guidance in areas such as disease prevention, promoting healthy habits, and managing medical conditions contributes to overall well-being.

- Connection with Other SDGs: Health and well-being are intrinsically linked to many other Sustainable Development Goals. For instance, improved health can lead to greater work productivity (SDG 8), and the promotion of nutritional health can positively influence the reduction of health related prolems(SDG 10).

- Prevention and Reduction of Burden on the Healthcare System: Offering online information and resources can contribute to disease prevention and the reduction of the need for intensive medical care. This can alleviate the burden on healthcare systems and medical professionals.

- Potential for Collaboration: Establishing an online community centered around health and well-being can foster collaboration among individuals, healthcare professionals, organizations, and experts, resulting in valuable exchange of information and experiences.

Problem

In the whole SDG 3 scene, the challenge of boosting health and well-being is totally connected to what's on your plate. The whole food and health thing is pretty complex and it messes with lots of parts of how we're feeling:

Food and Stuff: Food's a big deal. Not getting the right nutrients messes things up. Like, not getting enough good stuff leads to being underfed, which stunts growth, makes your immune system weak, and makes you easy prey for all sorts of sickness, especially if you're a kid or

a mom-to-be. Then there's the other end, too much food but not enough nutrients, and that's what brings on the whole obesity, heart problems, and diabetes drama.

Tiny Nutrients Missing: Running low on tiny but super important nutrients like vitamins, minerals, and stuff can really mess you up. For example, not getting enough Vitamin A can mess with your eyesight and make you more likely to catch things. Then there's the iron shortage, which brings on anemia, and that's a real pain, especially for women and kids.

The Whole "Not-Feeling-Great" Diseases: Those pesky non-communicable diseases (NCDs) like heart stuff, diabetes, and certain cancers are totally linked to not-so-great eating habits. Eating too much sugar, the wrong kinds of fats, and processed junk just piles on the pounds and invites in those long-term health issues.

Bad Eating = Bad Health: Eating bad means getting bad stuff. Too much sugar? Get ready for cavities and extra pounds. Overdo the salt? Say hello to high blood pressure and heart problems.

Eating Safe: Staying away from tummy troubles means eating safe and healthy stuff. Food that's gone bad or not handled right can give you a major tummy ache and put a real damper on everyone's health.

Knowing What's Up: Not knowing what's good to eat makes things worse. If we all learn a bit more about good food, it's like giving us the power to choose healthier stuff for ourselves and our crew.

Getting Enough Food: Not having enough good food is often because some folks have more money. Making sure everyone can afford and get their hands on good food is key to keeping everyone healthy.

Food That Doesn't Mess Up the Planet: How food is grown and shared also matters for health and the environment. Going for sustainable ways to grow food means we can get the good stuff without messing up nature or causing other problems.

Idea
The project aims to resolve this problem by providing a website with the following main components:

1. Home Web Page: This will serve as an introduction to our platform. This section will present an overview of the problem we are trying to solve and the solutions our platform offers. It will also highlight the importance of physical health and healthy eating habits.

2. Latest News: This section will present regularly updated news about nutrition, workout routines, and overall physical health. With the intention of bringing our users current and reliable information.

3. Possible implementations

a. BMI Calculator: The Body Mass Index will provide a simple indication of the actual body condition of the user, based on their weight and height.
b. Interactive macronutrients calculator: This calculator focuses on macronutrients rather on weight. The idea is clear but the development is not. it might be a pizza graph with the distribution of your macronutrients based on the ingredients of your food. It's possible the information will be limited since there are a lot more ingredients in the world than the ones we can fit in a free database.
c. Minigame related to healthy eating.
d. Meal planner: like a calendar but for food

4. Forum: Since the web page can't provide all possible answers our users may have, in this section, they will have the opportunity to help the community with any issues they may have. They can also share their experiences and celebrate their successes. By fostering a sense of community, we aim to provide the support and motivation that individuals often need to embark on and sustain their health journeys.

Note: Point number three has many options because some of them have big disadvantages, uncertainties,and might even surpass our actual capabilities, though the final project will only include one of those options.

In addition, there will be administrator users who are responsible for updating the news, providing an image, description, and link to the original source. These administrators are trustworthy individuals that thoroughly check the news they are uploading and as a result the news will be trustworthy as well.

Therefore administrators will have an additional section from which they are going to be able to upload the respective news. This segment will have the following components:

- Image box. In this component administrators will upload the image that is going to represent their news.

- Title box. In this component the administrators will be able to set the title they want the users to identify the news.

- Description box. Component that contains a summary of what the article is about. That way, the user can identify if it's useful information for them.

- Link box. Component that contains the link of the source web page. This will allow the user to go to the source if they need any additional information or check the news by themselves.

This implies having user registration as there will be two types of users, administrators and customers. The registration of the administrator user will not be using the web page, so since the launch of the web page the administrators will be already set, if there are any needs to change them it will be done manually. As for the registration of our users it will be done from the web page. There will be a login section from which they can access their

account and interact with the community, in case they don't already have an account, in the same section they can register.

Conclusion

If it isn't clear by now, let's address why we suggest that the scope of this project is mainly health and no nutrition. Nutrition is not a sdg on itself, but nutrition is the main preventive medicine in the world. In a way, by addressing the nutritional aspect of health we are addressing a lot of possible conditions and facilitating treatment for a lot more. We don't expect to solve any of the problems we are addressing but undoubtedly we are making something about it.

To reiterate, the focus of this project revolves around health rather than solely nutrition. While nutrition might not be an independent SDG, it undoubtedly functions as a pivotal form of preventive medicine worldwide. By emphasizing the nutritional dimension of health, we indirectly address a lot of potential health issues and facilitate possible treatments. While our efforts may not offer definitive solutions to all the challenges we've identified, they undeniably contribute to positive change. Our initiative recognizes the relationship between health and nutrition, and even though we certainly will not deploy the solution to any of those SDGs we are taking our own grain of sand.