Undergraduate Final Year Project Proposal

Build a "SuppHeathCare" Website to provide dietary supplements and minerals to customers during the COVID-19 pandemic

Nguyen Quang Thong

Project (Special Project)

GCD17150

1 Overview

With the current situation of COVID-19 pandemic, its impacts have seriously affected the economies of countries around the world as well as the physical spirit and human health. This research I want to emphasize on the importance of vitamins and minerals. Vitamins and minerals are no strangers to each of us. Currently is the time of the changing season, so many diseases can happen, especially acute respiratory infections caused by COVID-19, which is very serious, but there is no special treatment, no vaccine to take precautions. The ability to fight disease depends on the immune system of each person. When the body is healthy, has good resistance, the risk of viral infection is less, or if infected, it will quickly recover from the disease. One of the simple ways to increase the body's resistance is to focus on the addition of essential vitamins, which can increase the resistance through foods as well, or can supplement by dietary supplements but as directed by provider or medical staff. Through this document I have the desire to create a website for the purpose of providing essential supplements for everyone during the COVID-19 pandemic.

2 Aim

The reality purpose of my product is to provide a variety of vitamins and mineral supplements for everyone to enhance and protect health during the COVID-19 pandemic.

3 Objectives

3.1 Research overview of the disease situation

3.1.1 Research product

I will research and list the technology and ideas to create a Website dedicated to providing supplements and minerals during the COVID-19 pandemic. The purpose of this research is to understand the process and implementation of the website including the problems and steps to complete. From there, proceed to product implementation.

3.1.2 Write the review

I will write a review just enough to prove my insights about my products after researching the project.

3.2 Preparing necessary tools

3.2.1 Setup IDE (Sublime Text 3)

I will go to 1 and download Sublime Text 3 (Windows 64 bit). After downloading on my local machine, I will install according to what it instructed to complete the installation. The purpose of this is that I can write code on this editor, it is in accordance with the objectives that I have set forth.

3.2.2 Setup XAMPP

I will go to https://sourceforge.net/projects/xampp/ and download the version that matches my computer. After downloading on my local machine, I will install according to what it instructed to complete the installation including changing the port of Apache, MySQL and other ports (if the same).

The purpose of this is XAMPP which allows me to develop websites through Localhost of my personal computer. It gives me a complete web server environment to implement on it.

3.2.3 Setup framework Laravel for PHP language

Often, I use Git Bash to install Laravel through the commands on Laravel docs.

With the use of the Laravel framework, it allows me to easily deploy my project namely SuppHealthCare Website. With the MVC model available in Laravel, it helps me to code more easily and clearly. In addition, the project maintenance also becomes more simple.
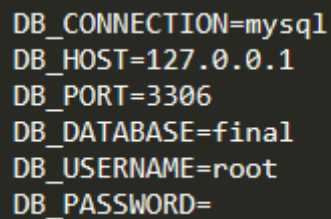
I open up Git Bash and execute commands on Laravel docs to install Laravel.

3.3 Deployment

3.3.1 Config Database and Laravel on local computer

I will proceed to configure the database and laravel parameters to be consistent and consistent with each other. The purpose of this is that the database and laravel parameters must be the same for me to deploy.

I will go the following path inside my computer C:\xampp\htdocs\FinalProject and I open the "env" file as shown below to configure them to sync with each other.

```
DB_CONNECTION=mysql
DB_HOST=127.0.0.1
DB_PORT=3306
DB_DATABASE=final
DB_USERNAME=root
DB_PASSWORD=
```

Figure 1: Config

Next, I do the same thing and then open the file "database.php" as shown below in the config folder and proceed with the configuration.

```
'mysql' => [
    'driver' => 'mysql',
    'url' => env('DATABASE_URL'),
    'host' => env('DB_HOST', '127.0.0.1'),
    'port' => env('DB_PORT', '3306'),
    'database' => env('DB_DATABASE', 'final'),
    'username' => env('DB_USERNAME', 'root'),
    'password' => env('DB_PASSWORD', ''),
    'unix_socket' => env('DB_SOCKET', ''),
    'charset' => 'utf8mb4',
    'collation' => 'utf8mb4_unicode_ci',
    'prefix' => '',
    'prefix_indexes' => true,
    'strict' => true,
    'engine' => null,
    'options' => extension_loaded('pdo_mysql') ? array_filter([
        PDO::MYSQL_ATTR_SSL_CA => env('MYSQL_ATTR_SSL_CA'),
    ]) : [],
],
```

Figure 2: Config

3.3.2 Deploy on hosting or server

I will choose 1 of 2. Firstly, I will get my product a private server such as Heroku, Amazon Web Services ... to deploy. If the process of deploying to the server is too difficult, I would choose to deploy to a host such as 000webhost.com, Awardspace.com or Freehostia.com.

Deploying the product to the host or server is almost the last step in the project. So this means that everyone can easily access my product after deploying it on the internet.

I will choose 1 server or 1 host. After that, I will proceed to configure and change the parameters accordingly to be able to deploy.

3.4 Evaluation

- Once completed, what are the results you get
- Expected plan and development after product completion

4   Legal, Social, Ethical and Professional

Ethical Considerations
- Delivering fake and unidentified products is unethical or illegal.

Social Considerations
- Product information assurance certificate.
- Cultural ethics attitude is a remarkable way.

Legal Considerations

- Registration for product circulation license (eg, perform prescribed procedures to verify the scientificity, practicality, accuracy of the test kit and the legality of the application for registration to allow circulation by issuing a certificate registration received).

- Register product quality standards (eg, technical requirements for products, method of testing the properties, packaging, labeling, shipping, and storage requirements, quality management system requirements and other matters related to product quality).

- Business Registration (e.g., In order to bring goods to the market, it is necessary to consider whether their enterprises have registered for trading and retailing products? If not registered, it will carry out additional procedures for business registration on the Department of Planning and Investment ..)

- Qualified for ISO standards: Standards are based on basic principles of production control related to food safety and hygiene. These standards set out rules for other activities such as control of efficient storage, transportation, testing and methods of retailing products. (Anon., n.d.)

5 Planning

The picture below is my full schedule for the "SuppHealthCare Website" project. In fact, it only correctly describes about 90% of what I will do in the future (because in the future there will be happened more things that are beyond my expectations for this project, so things can change). Moreover, I also use Microsoft Project version 2013 because in Microsoft Project 2013 there is Gant Chart, it can help me easily monitor my work done before or after deadline and that's the foundation and main purpose of the this tool I use.

	Task Name	Duration1	Start	Finish	Detail Status	% Complete
1	◢ **Admin**	**14 days**	**Fri 1/1/21**	**Thu 1/14/21**		**0%**
2	Login	1 day	Fri 1/1/21	Fri 1/1/21	Future	0%
3	Login (QR Code)	2 days	Sat 1/2/21	Sun 1/3/21	Future	0%
4	Login Facebook (API)	2 days	Mon 1/4/21	Tue 1/5/21	Future	0%
5	Login Google (API)	2 days	Wed 1/6/21	Thu 1/7/21	Future	0%
6	Login GitHub (API)	2 days	Fri 1/8/21	Sat 1/9/21	Future	0%
7	Login Twitter (API)	2 days	Sun 1/10/21	Mon 1/11/21	Future	0%
8	CAPTCHA Code	1 day	Tue 1/12/21	Tue 1/12/21	Future	0%
9	Reset Password	2 days	Wed 1/13/21	Thu 1/14/21	Future	0%
10	◢ **Customer**	**6 days**	**Fri 1/15/21**	**Wed 1/20/21**		**0%**
11	Sign In	3 days	Fri 1/15/21	Sun 1/17/21	Future	0%
12	Sign Up	3 days	Mon 1/18/21	Wed 1/20/21	Future	0%
13	◢ **Category Product**	**5 days**	**Thu 1/21/21**	**Mon 1/25/21**		**0%**
14	Add Category Product	1 day	Thu 1/21/21	Thu 1/21/21	Future	0%
15	Show All Category Product	1 day	Fri 1/22/21	Fri 1/22/21	Future	0%
16	Update Category Product	2 days	Sat 1/23/21	Sun 1/24/21	Future	0%
17	Delete Category Product	1 day	Mon 1/25/21	Mon 1/25/21	Future	0%
18	◢ **Brand Product**	**5 days**	**Tue 1/26/21**	**Sat 1/30/21**		**0%**
19	Add Brand Product	1 day	Tue 1/26/21	Tue 1/26/21	Future	0%
20	Show All Brand Product	1 day	Wed 1/27/21	Wed 1/27/21	Future	0%
21	Update Brand Product	2 days	Thu 1/28/21	Fri 1/29/21	Future	0%
22	Delete Brand Product	1 day	Sat 1/30/21	Sat 1/30/21	Future	0%

Figure 3: Demo Functions Project

	Task Name	Duration1	Start	Finish	Detail Status	% Complete
23	◢ **Product**	**8 days**	**Sun 1/31/21**	**Sun 2/7/21**		**0%**
24	Add Product	2 days	Sun 1/31/21	Mon 2/1/21	Future	0%
25	Update Product	3 days	Tue 2/2/21	Thu 2/4/21	Future	0%
26	Show Detail Product	2 days	Fri 2/5/21	Sat 2/6/21	Future	0%
27	Delete Product	1 day	Sun 2/7/21	Sun 2/7/21	Future	0%
28	◢ **Cart**	**6 days**	**Mon 2/8/21**	**Sat 2/13/21**		**0%**
29	Add Cart	2 days	Mon 2/8/21	Tue 2/9/21	Future	0%
30	Detail Cart	1 day	Wed 2/10/21	Wed 2/10/21	Future	0%
31	Delete Cart	1 day	Thu 2/11/21	Thu 2/11/21	Future	0%
32	Update Cart	2 days	Fri 2/12/21	Sat 2/13/21	Future	0%
33	◢ **Payment**	**15 days**	**Sun 2/14/21**	**Sun 2/28/21**		**0%**
34	By Card	4 days	Sun 2/14/21	Wed 2/17/21	Future	0%
35	Direct Payment	4 days	Thu 2/18/21	Sun 2/21/21	Future	0%
36	E-wallet payment	7 days	Mon 2/22/21	Sun 2/28/21	Future	0%
37	◢ **Blog**	**10 days**	**Mon 3/1/21**	**Wed 3/10/21**		**0%**
38	Add Blog	2 days	Mon 3/1/21	Tue 3/2/21	Future	0%
39	Delete Blog	1 day	Wed 3/3/21	Wed 3/3/21	Future	0%
40	Show Blog	2 days	Thu 3/4/21	Fri 3/5/21	Future	0%
41	Update Blog	5 days	Sat 3/6/21	Wed 3/10/21	Future	0%

Figure 4: Demo Functions Project

As you can see Figure 3 and 4, here are all the functions of the "SuppHealthCare Website" project that I will be implementing.

The four pictures below show the entire process of how the "SuppHealthCare Website" project will be implemented in compliance with the SDLC (Software Development Life Cycle) process. The overview project is estimated to be implemented in about 127 days.

	Task Name	Duration1	Start	Finish	Resource Names	% Complete
0	**Software Development Plan**	**127 days**	**Tue 12/1/20**	**Wed 5/5/21**		**0%**
1	**Scope**	**3 days**	**Tue 12/1/20**	**Thu 12/3/20**		**0%**
2	Determine project scope	1 day	Tue 12/1/20	Tue 12/1/20	Me and My Supervisor	0%
3	Define preliminary resources	2 days	Wed 12/2/20	Thu 12/3/20	Me	0%
4	**Analysis/Software Requirements**	**7 days**	**Fri 12/4/20**	**Thu 12/10/20**		**0%**
5	Conduct needs analysis	2 days	Fri 12/4/20	Sat 12/5/20	Me	0%
6	Draft preliminary software specifications	1 day	Sun 12/6/20	Sun 12/6/20	Me	0%
7	Develop preliminary budget	2 days	Mon 12/7/20	Tue 12/8/20	Me	0%
8	Review software specifications/budget	2 days	Wed 12/9/20	Thu 12/10/20	Me	0%
9	**Design**	**16 days**	**Wed 12/16/20**	**Thu 12/31/20**		**0%**
10	Develop and design wireframes based on functional specifications	6 days	Wed 12/16/20	Mon 12/21/20	Me	0%
11	Develop and design prototypes based on functional specifications	6 days	Tue 12/22/20	Sun 12/27/20	Me	0%
12	User interface design	4 days	Mon 12/28/20	Thu 12/31/20	Me	0%

Figure 5: Project process simulation according to SDLC

	Task Name	Duration1	Start	Finish	Resource Names	% Complete
13	**Development**	**72 days**	**Fri 1/1/21**	**Mon 3/15/21**		**0%**
14	Develop code	69 days	Fri 1/1/21	Wed 3/10/21	Me	0%
15	Review functional specifications	3 days	Thu 3/11/21	Mon 3/15/21	Me and My Supervisor	0%
16	**Testing**	**10 days**	**Tue 3/16/21**	**Thu 3/25/21**		**0%**
17	Overview Performance Product	3 days	Tue 3/16/21	Thu 3/18/21	Me	0%
18	Test component modules to product specifications	7 days	Fri 3/19/21	Thu 3/25/21	Me	0%
19	**Documentation**	**5 days**	**Fri 3/26/21**	**Tue 3/30/21**		**0%**
20	Develop user manuals specifications	3 days	Fri 3/26/21	Sun 3/28/21	Me	0%
21	Develop user manuals	2 days	Mon 3/29/21	Tue 3/30/21	Me	0%
22	**Deployment**	**7 days**	**Wed 3/31/21**	**Tue 4/6/21**		**0%**
23	Determine final deployment strategy	2 days	Wed 3/31/21	Thu 4/1/21	Me	0%
24	Develop deployment methodology	4 days	Fri 4/2/21	Mon 4/5/21	Me	0%
25	Deploy software	1 day	Tue 4/6/21	Tue 4/6/21	Me	0%
26	**Post Implementation Review**	**7 days**	**Fri 4/30/21**	**Wed 5/5/21**		**0%**
27	Document lessons learned	4 days	Fri 4/30/21	Sun 5/2/21	Me	0%
28	Create software maintenance	3 days	Mon 5/3/21	Wed 5/5/21	Me	0%

Figure 6: Project process simulation according to SDLC

6 Initial References

BIBLIOGRAPHY

Anon., n.d. [Online]
Available at: "https://vietnambiz.vn/van-de-dao-duc-ethical-issues-la-gi-20190909171217725.htm

APPENDIX A - SCHEDULE OF WORK

	Task Name	Duration1	Start	Finish	Detail Status	% Complete
1	▲ **Admin**	**14 days**	**Fri 1/1/21**	**Thu 1/14/21**		**0%**
2	Login	1 day	Fri 1/1/21	Fri 1/1/21	Future	0%
3	Login (QR Code)	2 days	Sat 1/2/21	Sun 1/3/21	Future	0%
4	Login Facebook (API)	2 days	Mon 1/4/21	Tue 1/5/21	Future	0%
5	Login Google (API)	2 days	Wed 1/6/21	Thu 1/7/21	Future	0%
6	Login GitHub (API)	2 days	Fri 1/8/21	Sat 1/9/21	Future	0%
7	Login Twitter (API)	2 days	Sun 1/10/21	Mon 1/11/21	Future	0%
8	CAPTCHA Code	1 day	Tue 1/12/21	Tue 1/12/21	Future	0%
9	Reset Password	2 days	Wed 1/13/21	Thu 1/14/21	Future	0%
10	▲ **Customer**	**6 days**	**Fri 1/15/21**	**Wed 1/20/21**		**0%**
11	Sign In	3 days	Fri 1/15/21	Sun 1/17/21	Future	0%
12	Sign Up	3 days	Mon 1/18/21	Wed 1/20/21	Future	0%
13	▲ **Category Product**	**5 days**	**Thu 1/21/21**	**Mon 1/25/21**		**0%**
14	Add Category Product	1 day	Thu 1/21/21	Thu 1/21/21	Future	0%
15	Show All Category Product	1 day	Fri 1/22/21	Fri 1/22/21	Future	0%
16	Update Category Product	2 days	Sat 1/23/21	Sun 1/24/21	Future	0%
17	Delete Category Product	1 day	Mon 1/25/21	Mon 1/25/21	Future	0%
18	▲ **Brand Product**	**5 days**	**Tue 1/26/21**	**Sat 1/30/21**		**0%**
19	Add Brand Product	1 day	Tue 1/26/21	Tue 1/26/21	Future	0%
20	Show All Brand Product	1 day	Wed 1/27/21	Wed 1/27/21	Future	0%
21	Update Brand Product	2 days	Thu 1/28/21	Fri 1/29/21	Future	0%
22	Delete Brand Product	1 day	Sat 1/30/21	Sat 1/30/21	Future	0%

Figure 7: Schedule

	Task Name	Duration1	Start	Finish	Detail Status	% Complete
23	▲ **Product**	**8 days**	**Sun 1/31/21**	**Sun 2/7/21**		**0%**
24	Add Product	2 days	Sun 1/31/21	Mon 2/1/21	Future	0%
25	Update Product	3 days	Tue 2/2/21	Thu 2/4/21	Future	0%
26	Show Detail Product	2 days	Fri 2/5/21	Sat 2/6/21	Future	0%
27	Delete Product	1 day	Sun 2/7/21	Sun 2/7/21	Future	0%
28	▲ **Cart**	**6 days**	**Mon 2/8/21**	**Sat 2/13/21**		**0%**
29	Add Cart	2 days	Mon 2/8/21	Tue 2/9/21	Future	0%
30	Detail Cart	1 day	Wed 2/10/21	Wed 2/10/21	Future	0%
31	Delete Cart	1 day	Thu 2/11/21	Thu 2/11/21	Future	0%
32	Update Cart	2 days	Fri 2/12/21	Sat 2/13/21	Future	0%
33	▲ **Payment**	**15 days**	**Sun 2/14/21**	**Sun 2/28/21**		**0%**
34	By Card	4 days	Sun 2/14/21	Wed 2/17/21	Future	0%
35	Direct Payment	4 days	Thu 2/18/21	Sun 2/21/21	Future	0%
36	E-wallet payment	7 days	Mon 2/22/21	Sun 2/28/21	Future	0%
37	▲ **Blog**	**10 days**	**Mon 3/1/21**	**Wed 3/10/21**		**0%**
38	Add Blog	2 days	Mon 3/1/21	Tue 3/2/21	Future	0%
39	Delete Blog	1 day	Wed 3/3/21	Wed 3/3/21	Future	0%
40	Show Blog	2 days	Thu 3/4/21	Fri 3/5/21	Future	0%
41	Update Blog	5 days	Sat 3/6/21	Wed 3/10/21	Future	0%

Figure 8: Schedule