Personal Project Process Journal

Topic: Web Development Goal: To learn the skill of coding a website, and research on the contents. Using professional skills to design the website. It can be easily operated by a high school sudents

Inquiry Question: What are the qualities that an excellent, effective website has? What would include in a student council website?

Product: 1. Highly organized and clear webpages and sources(essential files of Criteria: the web). 2. Each functions are completely aware for exceptions in coding. 3. Being able to update/renew weekly or shorter by applying holistic web management. 4. Systematic coding: effectively using programming languages(JavaScript, Html, database connection, java bean, etc) on what they

> are specialized for(ex: html is really good in displaying simple information, database connection would be processing relative languages instead of codes). Journal: 1. Using without specialized terminology to explain the concept of each files. 2. Describe the methods(Technics) chosen and explain the reason of

choosing it. 3. Containing a complete outline of the product, such as specific coding methods, positioning, structure, etc.

MONDAY, 16 DECEMBER 2019





This screenshot keeps my This is a second photo have made code that can work. This is the display make displays on my browser.

progress now. Basically, I that represents my current after deploying my code to browsers.

MONDAY, 18 NOVEMBER 2019

Here is a free pamphlet source I found: https://www.free-css.com/free-css-templates/page7

This page has a large variety of kinds of web designs that I can choose to use as my web template. I will add more introduction to this website later on with screenshots and explanations.

MONDAY, 18 NOVEMBER 2019

I just got another idea, this is common, but remember that every website you visits would want to ask for your email to send you news and events of their website. I am very interesting to how they manage the accounts they have and how they send the emails automatically through programming.

Here is the source I've just found: https://stackoverflow.com/questions/46663/how-can-i-send-an-email-by-java-application-using-gmail-yahoo-or-hotmail

Some general introduction to StackOverFlow:

StackOverFlow is a famous website for programmer that they visit, ask questions, and knowledgable programmers provide their solution to your problem. Though academically, using Q&A form websites like Quora would lose credibility in instance, but in programming these websites are the helpful one. if you directly put the coding or concepts they provide to compile, they actually works.

What I've found and learned:

After reading the coding and the caption, I can clearly see that there is a API in java that supports the auto-mailing function that I was talking about. All I have to do is to go to Java's API page and fund the mailing API, read through the interfaces and function of it, then I can put it to real uses.

MONDAY, 18 NOVEMBER 2019

Besides from the coding part of my website, in other words, to make my website functional. I would also need to make my website beautiful. If I am going to use simple html pages, the visual quality would be poor, like hell poor, so I need a way to produce a beautiful visual content as well as my coding. I realize that these two should be separated. These two are suppose to be done by too different people who have two different jobs, web developers and web designers. Now, I am only qualify as a web developer, or self-learning to be one, I don't any credentials or skill that can support me on the web design part of my website. Here, I have a solution, in business websites, even big companies, they install website templates that is finished by web designers, redo the "content" of the website, then run it as their own. I wish to do the same, indeed, I would miss the chance of learning to design a website, but I don't think I have enough time to finish the process either. I will keep searching for pamphlets that can hopefully be the base of my website's user interface.

MONDAY, 11 NOVEMBER 2019

I have set a strand in my 7-8 criteria that the student is able to perform database connection. I set this strand to challenge myself more. And indeed, this is the part where I need to put serious amount of effort in to get. I am completely ignorant from database languages and application. So I am going to start like a beginner, finding videos that might relate to database website connection, eventually, source that I can find methods to make real applications to. I am writing this right after I've found my first source.

https://www.youtube.com/watch?v=zyuToCeHSbk

This is a video that teaches how to make connection to a Access file through java. This video is great, from my knowledge, I can be applying this to my business logic. Business logic is a part of the website, that provides the service for the client side. As the client clicks a button called login, the html page directs a request to a servlet document, which process the request (I will explain request in another entry) and send back a signal to the server side. The server side would decide whether this client's username and password are correct, which then sends a signal back to the servlet document and then to the html page. The html page would redirect to a login successful page or a login failed page.

This video I got would fix coding of the servlet document. I can apply it to my website right away because would probably include a login function to my website.

MONDAY, 11 NOVEMBER 2019

From my journal entry, November 4th 2019 9:52, I have mentioned that I will scale down the website into a few webpage that keeps the functionality I pursue. I think I have only brief about the idea, but here is what I am going to do.

1. Trimming the size of the website, I think three to five pages would be enough.

- 2. I would include database to my website. I set this goal as 7-8, and I will aim it as my target.
- 3. With the more time I got, I can pay more attention to the visual quality of the pages and the programs running the website at the server side.

MONDAY, 11 NOVEMBER 2019

I have been doing research, which is doesn't fit for what I've been doing lately. Sightseeing I would say, I spend around half an hour every week, visiting famous websites. I am trying to catch some certain pattern they have or any function I might try install on mine. I will update the website that I am visiting and write a individual paragraph or a few sentences for what I've captured from the website. Here, I am building my think tank that will help me on constructing the "completeness" of my website. This process will proceed in parallel to my practice to programming, skills, which is another important part.

MONDAY, 11 NOVEMBER 2019

I am facing another problem here. I was meant to use NetBean as my developer tool, because I have experience on it. I believe that this would make it easier if I use NetBean. But, here is the thing, NetBean isn't available on MacOs computers. To solve this, I would switch to a WindowsOs computer. This cost a lot, but I am planning to buy a surface laptop 3, 8GB ram, 256GB storage. It would arrive on December 4th, which is a weakness to this solution. The time I have to finish my product would shrink. I should have been starting writing my code right now. My two month time had cut in half before I can have my new computer. But, I am not going to waste the time I loss, I am going to practice the language and structure of my web before I put it in to NetBean. This is not a productive process, but this is indeed going to to catch up some time.

MONDAY, 04 NOVEMBER 2019

I believe that I have mentioned that I had a struggle, but from talking with my supervisor, I kind of know what kind of criteria I should have. I was confused of should I evaluate myself in a subject-specific way or a global context way. It turns out that in personal project, I would have to integrate them into one that can evaluate my work ultimately. Well, that sounds scary, combining something I don't like with something I like doesn't sound fun. But, my supervisor says "No worry, it is just adding more strands to your criteria". Still, integrating global context to my work sounds eerie and cringed, but, I try my best to aim for the highest score.

MONDAY, 04 NOVEMBER 2019

After talking with my supervisor, I have a feeling that my goal is too "Big" and "Challenging". Here is the thing, my goal was to make a entire website, but after gaining more and more knowledge of this subject, I felt I know less. The knowledge there is too much to harness in two months and to make a original product alone. So, to make my goal realistic, I am going to scale down my goal from a entire website to several webpages that still remains the functionality I pursuit. This is the general idea, I am still thinking about the functions I am keeping and what kind of style my website should be having.

MONDAY, 28 OCTOBER 2019

I am facing a problem, or concern. It is about the criteria of my project. At this time, at this stage, we are finishing on our criteria, but I am not. I am not, because I am not straight on what my criteria is going to be focused about. There are two perspectives that I be be focusing to. The first one being evaluating on the coding and the learning I have done. The second one is to address my connection with the global context I have chosen. Personally, I prefer to view on my work on as a web developer, a professional programmer that can criticize on my work productively and constructively. But in terms of personal project, IB wants us to connect what ever we are doing with the Global Context. I think I might going to have a better grade if I set my criteria to the Global Context path, but that is not going to be the part where I will put most of my effort on. This is the biggest struggle I am facing with right now.

MONDAY, 14 OCTOBER 2019

I am adding this as an over view of what and what kind of sources I have:

- 1. Official textbooks of Java from Oracle
- 2. An expert on Java, C, C++, VB, C sharp, R, Python, Microsoft Series(Word, Powerpoint, Excel, Access, Outlook),html descriptive languages(html, css, bootstrap, SQL...), database language, and of course Web development.
- 3. W3school, reliable, provides me something like a dictionary that I can look at anytime when I forgot something.
- 4. Book: Servlet & Jsp book that I have at home which is very reliable and advance.
- 5. A free pamphlet website that allows me to more easy on the User Interface.
- 6. A few videos that teaches me how to make basic on database connections.
- 7. StackOverFlow, a Q&A style website, but it is actually helpful and reliable, people who writes responses there are credible.

To be continued...

MONDAY, 14 OCTOBER 2019

Yesterday, October 13th, I met with a teacher outside of school that is an expertise in the field of programming. I had an hour talk to him. I have continuously going to see him and joining his courses. About the content I talked to him with, we have talked about the future plans on mine. Yes, this isn't probably highly related to my personal project, but I want to log this. He hopes that I can achieve the master of Outlook, Access from Microsoft. He suggested those two because that Access is basically a smaller scaled database, and Outlook is a mail-organizing platform. Just like any websites, you might able to receive some emails if you have a account logged. The account you registered is being managed in a database, weather it is MySQL, SQL Server, etc. The two is somehow related to my web system, but instead to be a simpler version that I can practice on and reflected on to my coding process. Secondly, he wishes me to take the Apcs tests. The Apcs test evaluates the thinking process while you code, it gives you a problem and the result of the solution, the test requires you to code the solution in java, c, or c++. There are two version of the exam, in Chinese or English. The two doesn't differ much, just that there are two score you will get after the Chinese exam. He thinks that the exam is able to help me on the coding while designing functions. You can see on websites that there are often various of buttons or links you might find, there being coded through java's basic language. The up coming test will be on January and May. Yes, it is very much late comparing to all the due dates, but Outlook and Access is a valid option. I will be practicing in the two from now on.

WEDNESDAY, 11 SEPTEMBER 2019

The reason that I have chosen Globalization and Sustainability as my global context:

The reason is that there is a stand called "The interconnectedness of human-made systems and communities", and I can relate the human-made system as network system and communities as school. Though the human-made systems should normally refer to governments, organizations, countries, and etc, but I think network system is applicable as well.

MONDAY, 27 MAY 2019

Here are the ideas I have about the student council website:

Menu bar: Home, About us, Events, Volunteer, Calendar, Classrooms Reservation System, (up to now, that is it, but there will be more stuff being adding in or combined of needed).

- 1. Home: home will be the first page the student can see when they get into the student council website, there should be combinations of events, volunteer, about, and basic information of the student council.
- 2. About us: In the home page, "about us" is basic info, but in the About us section, there would be a complete set of information of the student council: member, core value, progress, policies we promote, and etc. The about us info would be provided from the general affair, which we will submit a full list of requirements we need in terms of information.
- 3. Events: In events, we will display the basic information of events in a list style, which is easier for the students to read and find information. To get further info, the section of each event will have a link set to another web page that has complete information. (We might use this kind of structure, so it will be easier to organize the website's public informations)
- 4. Volunteer: Because the student council groups had been mentioning about this, I have put some though in this. The structure of this section in the website might involve some volunteer started up from students (ex: stand in shoe). So I think we need to assign a person responsible for this volunteer work and set a auto-mailing system that will have a better communication between the student council and the person in responsibility. Also the students entering this section would be able to view the volunteer work published from the school. There will also be a button/link set up for the students on the websites to intend the event. If the volunteer is started up by student, the auto-mailing system would be available to create contacts between the student responsible with the student intended to join the volunteer. Forgot to mention, we might use this process to the event section to inform the student council. If the volunteer work is published by the school, we might just have it linked to the school web page for the student to sign up.
- 5. Calendar: This part would be uncertain, because this is basically the function of managebac, but this section will include the event and volunteer's schedule. If possible, the auto-mailing system mention can be used in here to inform students who intended certain events as a reminder.
- 6. Classroom Reservation System: I hope to combine Jay's reservation system to the student council web page (if he allows it). Though this is already set up, but I just want to show that the student council website is also available for classrooms reservation.

To compile the info above:

1. Home

- a. Basic info of student council.
- b. Brief display of events and volunteer.

2. About us

- a. Complete info of student council
- b. Possibly include: member, core value, progress, policies we promote, and etc

3. Events

- a. List style display of the events
- b. Links in every display to the full info display of certain event
- c. All event info needs to be provided from the Activity Group
- d. Auto-mailing system, view the 7th, a

4. Volunteer

- a. List style display of volunteer work
- b. Separate student start-up volunteer and school published volunteer
- c. Assign a person in responsibility if it is a student start-up volunteer
- d. School published volunteers need general affair to communicate with
- e. Auto-mailing system, view the 7th, b

5. Calendar

- a. Compilation of events and volunteer works in a schedule/calendar style
- b. Auto-mailing system, view the 7th, c
- 6. Classroom Reservation System
 - a. It turns student council website also available for reserving classrooms.

7. Auto-mailing System

- a. Events: It is available for students intending certain events, to send messages as reminders.
- b. Volunteer: Similar to events, but used also to make contacts between the person responsible for student start-up

volunteer and the students intending those volunteer work.

- c. The calendar compiles all events and volunteer a student is intending, and send messages as reminders or informs.
- d. Auto-mailing System is also able for the student council to send information to student faster and easier

List of complete Request:

- · Student Council
 - About us information.
 - To talk to the school about putting "published volunteer and events on school website" in student council website.
 - The system of "Assign a person responsible" for student start-up volunteer, needs to be create and announce through the student council.
 - A complete set of events and activities along with the info. In order for us to bb publish the event on the website.

MONDAY, 27 MAY 2019

This part is about Prior Learning.

Personal Experiences:

I have my personal experiences of learning programming language myself, which means that I have a advance understanding about my topic. Due to the fact that my product is based on the knowledge and skill that I have, so learning the skill before hand in definitely a helpful factor in terms of saving me time to focus on creating the product.

Subject-Specific Knowledge

Because my product is going to be a website, so I would have to research on other websites, about how do those website organized the massive amount of coding that I am going to put. Before going in coding, I still need to acquire the skill of producing the code. I have already mentioned this for a few times, but the skills I would probably need are Java, HTML, PHP, SQL, Bootstrap, Javascript.

MONDAY, 27 MAY 2019

These questions are thrown by Mr. Frels for me to answer

Why is this interesting to me?

First, I was found by my dad that I have talent in mathematic comparing to other subjects when I was still in my first year of elementary school. Later on, he got me ahead of learning in Math, but I didn't really liked math very much. Even I stopped, I still remain having a higher level of math comparing to my classmates and even my brother. Eventually, my brother caught his interest in programming languages, my dad had me attend the lessons, too. That is when I caught my interest in programming languages. From the year I've started learning, I have got Microsoft Master Licenses including Word, Excel, and PowerPoint, also Java 808, 809 license.

What knowledge or skill do I have that will help me?

I would probably need to be able to write HTML, Java, PHP, CSS, Javascript, Bootstrap, SQL, XML. There may be others that I don't know about yet, but required in order for me to create a website. This part may increase when I got further in this topic.

Who and/or what resources could help me?

I have mentioned before, I have a teacher and a website that can help me with learning those. I have a clear explanation in the previous entry, so if need, you can go there for more. This part may also increase, if I can find trustworthy resources, such as another website that is available to explain more clearly about the contents in these programming languages.

What will I know or able to do if I am successful?

Probably the time when I am finished with my website. I am still searching for a point that can prove that I am done, but this is adjustable.

MONDAY, 27 MAY 2019

https://www.w3schools.com/

MONDAY, 27 MAY 2019

My topic is about creating a website, though I haven't thoroughly think about what kind of content or function the website is going to have, but I have a basic orientation that I can follow. Personally, I have already know Java, and I have licenses right now, Java 808 and Java 809. I also plan to learn more about JDBC, Java Database Connection, more in the summer; in the personal project I want to learn more closely to website creating and applying JDBC to it. Even though I still don't have the skill to create a website or build a JDBC system, I think I will plan to learn those in the next year in order to create this website. I have trustworthy sources that can help me with learning these programming languages. I have a teacher that is specialized in Java, C, C++, Swift, and more advanced in Java. There is also a website that is public and available for learning html, php, css, etc, step by step. I have already tried html myself, and I am already able to create a small scaled html document and a simple structured website. I have posted a entry that has the link to it.

Other than the internal content of the website, I still need to determine the content or function that I am including in my website. I would also need to research on those. I am thinking about creating a student council website, though there is one that is already available, but I want to include more function. I am going to upload a document that has details of the ideas I have.

Because I have chosen that I will make the website about student council, so I think my Global Context would be "Globalization and Sustainability" and under that "The Interconnectedness of human-made system and communities". I have chosen this for another reason, because it fits. I am referring human-made system to student council, communities as the school(MDID), and interconnectedness as the website.