Team 35 - Online Case Design

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Abstract—**The basic part of this Online Case Design is to create a webpage to design some 3D object and to send to companies for laser cut. User can design some object they want with some tools provided such as some calculation of the width, Height, Depth. Furthermore, in the webpage also provided an image that the user input from the information that provided. The purpose of this Online Case Design is to help user easy to use the webpage and to design something they want. After user finish design, then they are able to download and save the object that they design.**

I. INTRODUCTION & ACCOMPLISH

This is an Online Case Design and the purpose of this project is to help user easy to design an object and to create themselves. After design they create, then they can download it and send the file to some company to laser cut. Some of the knowledge require high skills, for example, some of the material require specific cuts, or some design require some very specific measurement. Which mean that through this Online Case Design, will be a lot easier for user to use it and does not require high skills.

The minimum requirement for this Online Case Design is to have a webpage with width, height, depth for measurement the size of the box. After that we also have to create the material thickness and what kind of material. Furthermore, the other requirement is to have edge join such as flat, finger and T-slot join. Lastly, also have a 3D image after input all the requirement and user can have some knowledge about what the object is. Some expectation for this Online Case Design from our client is to create some design such as making some hole between the object or some other useful design.

One of the things our project trying to accomplish is to make a full website that let non-high skills people to build a container on our website with some specific design that require high skills. User can use their design for laser cut.

II. PIECES & RESPONSIBLE

1. The first piece to accomplish our project, I think the website is very important. This is because user will go to internet and design using our website. Therefore, having a clean and easy use website will be one of the important things to accomplish. In addition, to accomplish our project, we have to let the website to be very easy to use. For example, we need to have some basic container and then user can add some additional design according to what they want. Furthermore, the website will also need an 3D image to let the user know what their design look like.

   To build a website, it requires knowledge of HTLM, CSS, JavaScript, and other languages. We need JavaScript or other languauge to have user interface. This is because when user want to insert their design, and JavaScript is one of the easy languages to use.

   CSS
   Pros : the advantage of using CSS is very easy to use and easy to understand. In addition, CSS support most of the browser and which mean that don't need to worry about some browser couldn't work.[1]

   Cons: one of the main problems is that HTML need to take longer time to load CSS, which mean that if you have slower internet, then you need more time for that.[1]

2. The other piece to accomplish our project is database. Database is one of the important for this project. This is because user would have to save their design, and this will need database for it.

   To build a database, it requires knowledge of MySQL, PHP or other languages. MySQL is one of the easy languages to use for making database and easy to connect with the webpage. On the other hand, there is other database like MongoDB, NoSQL. This tools also help user to create database easily.

   MySQL
   Pros: one of the advantage of MySQL is that it is design with the focus on the Web.[2] Which mean that mySQL is one of the best for doing website.

   Cons: MySQL is not as mature as another relational database management.[2] what this mean is that it will be complicated to use that other relational database management.

   MongoDB
   Pros: one of the advantages of using MongoDB is that faster to turn around in development.[3] In addition,

MongoDB also flexibility to find out schema design when we change the design or our mind.[3]

Cons: one of the disadvantages is that MongoDB nesting is not always possible. What this mean is that sometime there is no foreign key constraints to enforce consistency [3].

III. CONCLUSION

In conclusion, this Online Case Design will help a lot of user to create 3D object without require high skills. Furthermore, this project also includes some simple tools that other case maker does not have it. Therefore, this will be a simple and easy to use case maker webpage. In addition, there is some piece that we need to accomplish is making website and creating a database for user. There is a lot of technology for us to use, such as html, CSS, JavaScript, MongoDB, MySQL. All these tools have their advantages and disadvantages. To be success to our project, we have to decided which tools is the best for our project and have to learn how to use all of the tools.

Reference

[1] The Pros and Cons of CSS. Stanford-Brown Blogs.
https://www.sanfordbrown.edu/Student-Life/blog/January-2015/Pros-and-Cons-of-CSS

[2] The Pros and Cons of MySQL, SMARTFILE.
https://www.smartfile.com/blog/the-pros-and-cons-of-mysql/

[3] MongoDB Pros and Cons.
https://www.slideshare.net/johnrjenson/mongodb-pros-and-cons