

Report

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● Introduction

1. Aim and function

We develop this website for the News Discussion.

The website can look for the hot news.

The website can sign up and chat with others

2. Installation

In Terminal:

```
cd "the dir of the website project file"
```

```
node install --save
```

```
node server.js
```

In Browser:

```
http://localhost:8080/
```

3. Frameworks

✧ Node.js

✧ Bootstrap

✧ Express

✧ Sqlite3

✧ AngularJS

Aspect	Assessment	Introduction
HTML	A	Using plenty of HTML tags to realize the web pages
CSS	A	Using multiple stylesheets and advanced css3 for animation
JS	A	Using jquery and bootstrap; Using js for print animation to introduce ourselves
PNG	A	Using Gimp handling layers and transparency
SVG	A	Using Inkscape for path editing, transformations, gradients, grouping, and patterns
Server	A	Using nodejs and express to redirections to browsers and web sockets
Database	A	We use the embedded database sqlite and spend lots of time for set up database and we build a server module for database.
Dynamic Pages	A	We realize the delivery system and the data can be transfer to the front pages.
Chat	A	Besides the dynamic pages for data, we realize the web sockets for chat room
Depth	30	We have spent lots of time for the website and we realize some interesting animation with css and javascript. And we combine the dynamic pages and the chat room in our websites.

- HTML

This part we have investigated a variety of different issues and gained a high level of confidence with the structure of HTML pages which can be showed on our project.

We use many HTML tags like <head> <meta> <script> <title> <div> <a> <i>
 <h2> <p>, etc.

We use ejs library to generate the HTML pages, and we use bootstrap framework to construct the web structure.

- JS

Here is an example: in this table, the content showed letter followed by a letter.

```
Project: The news  
Student: BAODO|
```

```
Project: The news  
Student: BAODONG WANG bw16221  
Student: YUEFENG LI yl16253  
We create this website for you to overview the news and discuss it with others. You can sign up by clicking the 'sign up' in  
Discussion room and sign in by clicking the Chatroom or the dialog box to discuss with others.  
Date: 25th,May,2017  
|
```

Bootstrap Carousel:



Here we use four images for four News websites, you can change the image by click the arrow in the right and left side or the images can automatically change in 3 seconds (we can set that).

- CSS

This part we also have investigated a variety of different issues and gained a high level of confidence with CSS style. We define lots of styles for our website, such as border for some images, table height, text indent, animation, style for chat window and user window, style for the dynamic content in about page, etc. And many styles for the home page, when you open it you will see. And use bootstrap framework.

The images below show the CSS we use in homepage. When move the mouse to the picture, the picture will automatically convert to the current news, move the mouse it will return to the picture

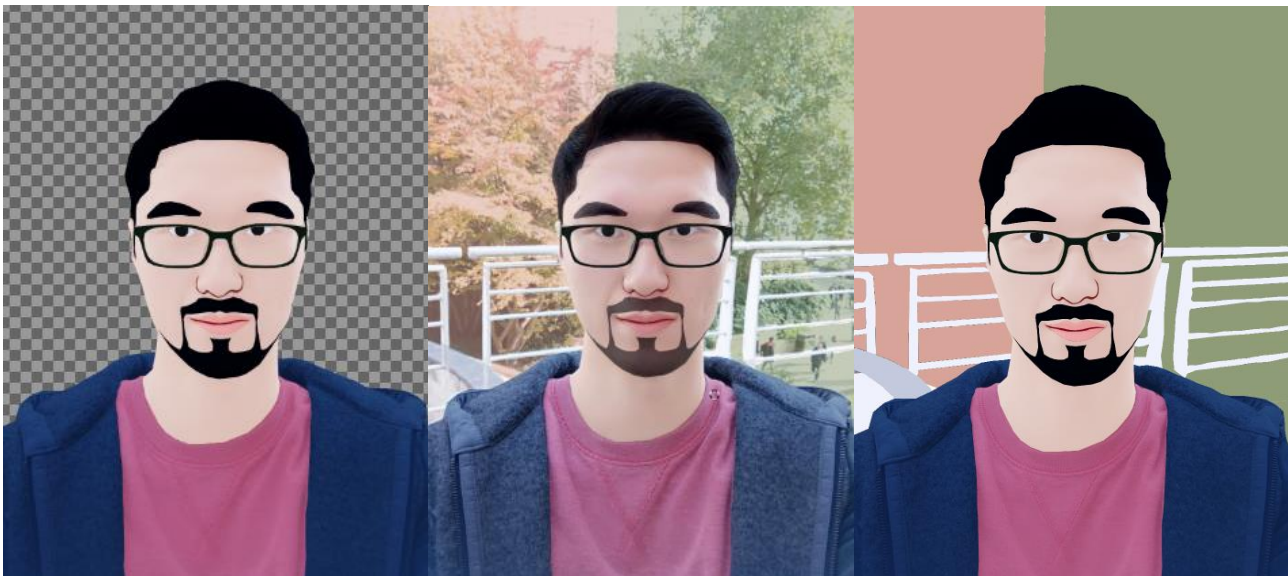
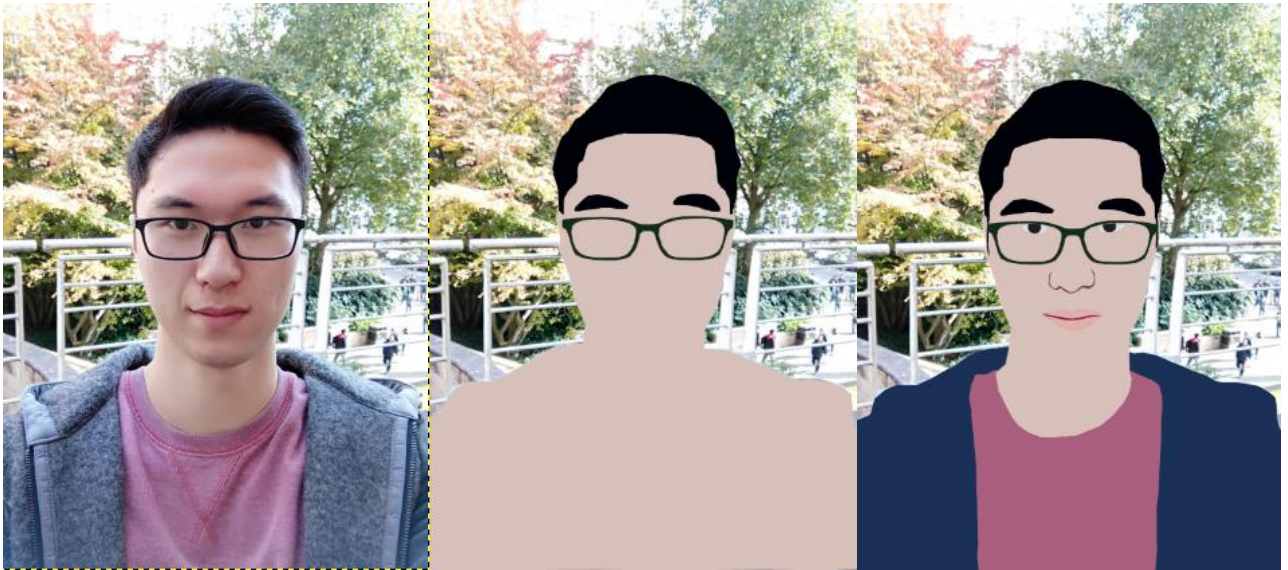


We use CSS3 for background-size, transitions, rotations and box-shadow so on. And I use the -moz for Firefox, -ms for IE and -webkit for Chrome, Safari to be suitable for them. Our code follows the standards of naming and structures. I also use -ms-filter for better visual effect.

- PNG

In this part, we use GIMP. We have gained experience with handling layers and transparency. Here are the steps we worked:

I chose the photos of each of us and opened in GIMP, then create cartoon layers and use the path tools to divide the various regions and paint them according to its original main color. After this create shadows and highlights for the cartoon character through adding Alpha Channel. Then change the Mode to Overlay. After that, we reduced Opacity to around 50%. Then create a new layer from the visible part in this image and add a new layer to create a background (the background has so many small details so I divided it into five parts). Finally, create a new layer from all the visible part and compare with the original image. We can change the transparency to see what happened in image 5 and 6.



The other image was using the same process:



- Server

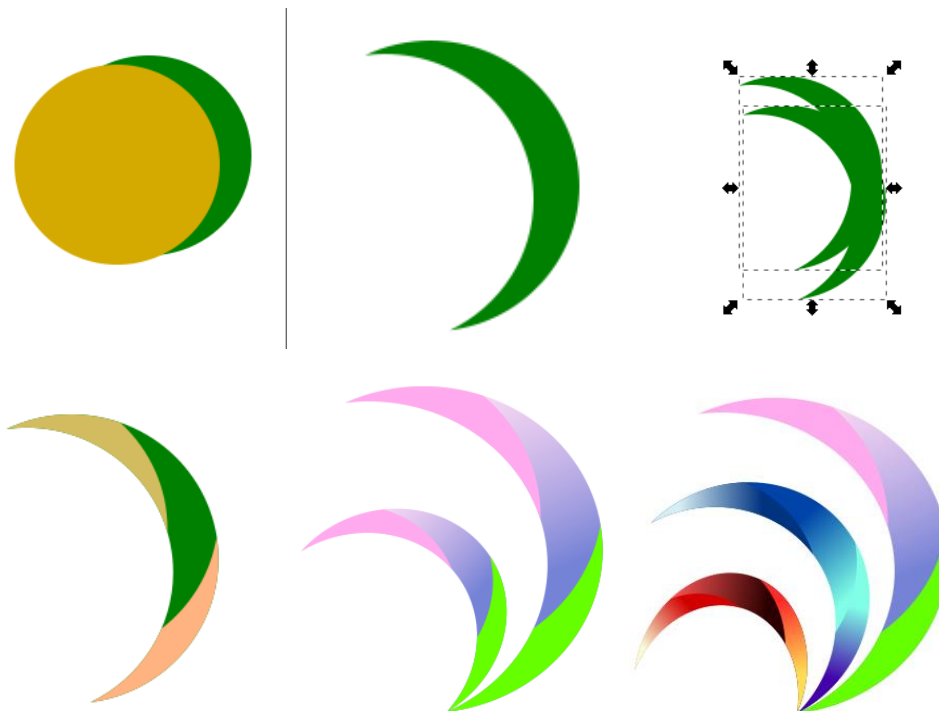
We create our own server, including Express web framework, web sockets for user chat online (http and socket.io), and port 8080 (we use cloud9 as IDE created this project, so we change the C9 PORT into 8080). Here Express use body-parser and method-override and Router Then http listen.

- SVG

1. Design the logo of our website using Inkscape

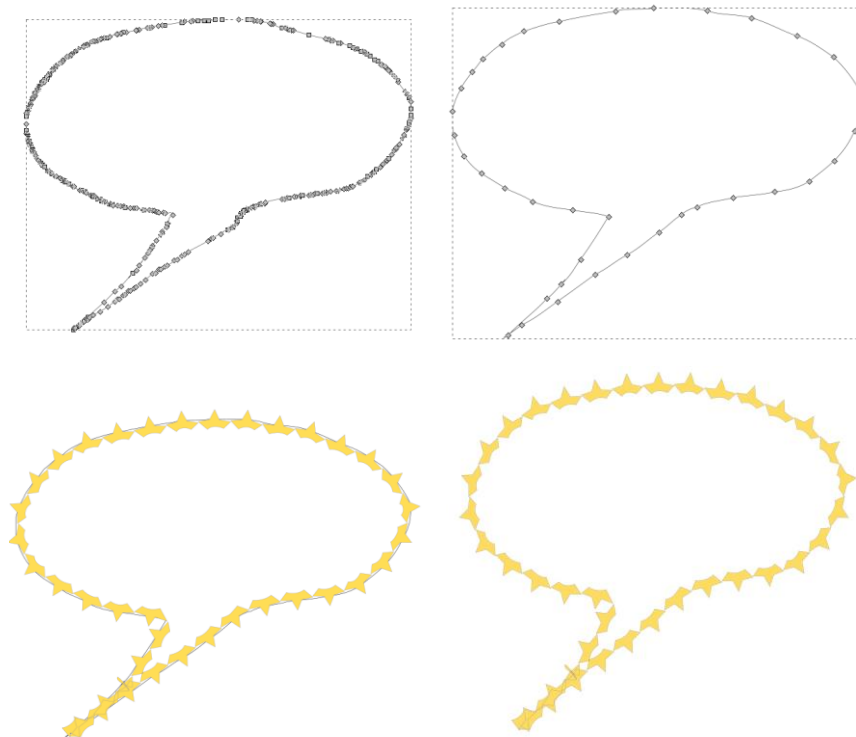
- Use the path edit of difference to two circles to get the moon-shape image and difference to get smaller image;
- Use the grouping to comb the combining the three image.
- Transfer the shape into a good outlook;
- Use the gradients to adjust the color to make it like three-dimensional.
- Finally, adjust the shape and group the three moon-shape images

The logo we designed is like a feather, symbolizing a peaceful and positive image.



2. Discussion room logo

- Use the hand-draw to create the talking symbol and smooth the image.
- Edit path by node to adjust the shape to make it looks better
- Using the generate from path, make the talking symbol as the path and the part of star as the patterns, then generate the image with patterns along the path.



- Database

We have put a lot of effort into organizing database access.

We use SQLite3 as the database through a separate server-side module and use it in sign-up and sign-in parts. We implemented the ability to add users when user sign up;

Transfer data from the database to the page to achieve that users can see other users in the sign-up page; delete users; and find users used when user want to enter chatroom they need to sign-in.

- Dynamic pages

We create dynamic pages shows in discussion room. Transfer data from the database to the sign-up page to achieve that users can see other users in the sign-up page. Here is an empty page.

[News Discussion](#)
[Home](#)
[About Me](#)
[Discussion room](#)

Firstname

Lastname

Phone Number

Add User In to Database

Show Data In the Right table

[Previous](#)
[1](#)
[Next](#)

When I sign up some users and click ‘add user into Database’ and click ‘Show data in the right table’, it showed like this (like what I mentioned in Database part).

[News Discussion](#) [Home](#) [About Me](#) [Discussion room](#)

Firstname

Lastname

Phone Number

Add User In to Database

Show Data In the Right table

[Previous](#) [1](#) [Next](#)

- Added: web sockets for chat.

Here we added a chat for users to discuss the news. In server, we create the sockets so that users could chat online (see chatroom page).

What is your name?

Cancel

OK

Chat

Enter Text Here...

Send Message

feng has entered the channel

feng Hi everyone

bao has entered the channel

bao nice to meet u

Chat

Enter Text Here...

Send Message

feng

bao