

# **Dynamic Web Design**

## **Web/database Beta prototype Report ( Group 1)**

***Group Member: Ziyu Du; Luke Cao; Luoying Bao***

[https://media.ed.ac.uk/media/walk%20through%20video%20of%20dynamic%20web%20design/1\\_m4hocm6d](https://media.ed.ac.uk/media/walk%20through%20video%20of%20dynamic%20web%20design/1_m4hocm6d)

<http://ziyudu.edinburgh.domains/fatfree/DeadPeopleSystemBeta/Home>

# Background

Expensive funeral costs are a serious problem and appear to have worsened over the years. According to these expensive funeral costs and other special circumstances, during the popularity of Covid-19, medical examiners' offices and local news has indicated that the number of unidentified bodies is climbing. So in our project, we are aiming to establish a website to connect police departments in different areas and help people search and claim unidentified bodies by posting body information on.

## Process of the theme

We did not come up with this idea immediately but came up with different ideas and two of us voted for this one. Dr.John also gave us a feed back after the first submission about changing the theme of our website into helping people find their lost pets. We considered the suggestion seriously and think throughly. For the main problem is the visual style is too cute for the finding nameless dead theme, we decided not to changing the theme but redesigned the visual part.

*Ziyu Du*

Time Capsule website  
Interactive game website (eg: Species in Pieces)

*Luke Cao*

A website helping students find information about  
the acceptance rate of different majorsuniversities

*Luoying Bao*

Interactive game website (eg: Adult Swim)  
A website that help people find their dead relatives

**stage 1**

*Voting for the theme  
And "Nameless Dead" won*

**stage 2**

*Reconsider the topic selection  
of the website;  
Stick to the original topic selection  
and improve the visual design of  
the website*

**stage 3**

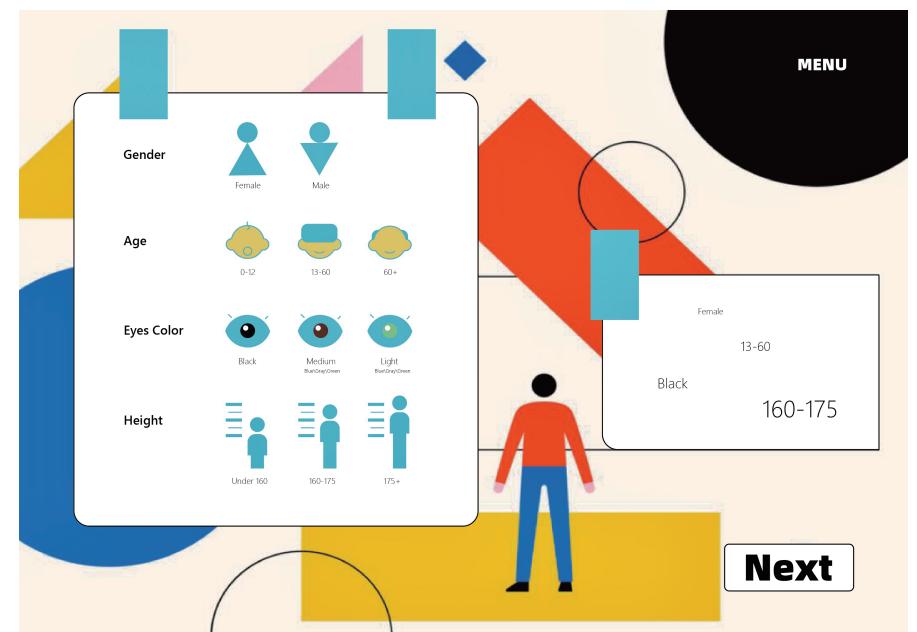
# Process of the visual design

We realized the property of this website is very heavy and serious. And the target users must have been with a sad mood to find the lost people (the people that their truly care about), on our website. So we tried not to create a sad atmosphere. It is quite challenging to design the visual part. We also try to avoid scary images in the website.

At the beginning of our design, there are mainly lines and color blocks, but we soon find it too unserious and not suitable for the theme. So we evolved into a whole new version which based on 3D modeling. We created a cartoon character that represents the missing person.

The 3D motion effects also helped us to make the website more interactive and the 3D character has more affinity. We reduced the colors into blue and white, which is harmony with the tone of the theme of the nameless dead.

## stage 1



**Female Afro Caribbean**

Location: Richmond Upon Thames  
Date Found: 14 December 2020

Height	Age Range	Eye Color
175	20-40	Dark brown

No tattoo	Left ear pierced	No jewellery
No birthmark	Cause of death: traffic accident	

Unit Reference **ED-200113**

**Male Afro Caribbean**

Location: Hendon London England  
Date Found: 01 August 2020

Height	Age Range	Eye Color
176	40-50	Black

No tattoo	No ear pierced	No birthmark
Bald	Cause of death: hanging in a park in Hendon	

Unit Reference **ED-204647**

**Male Asian**

Location: Richmond Upon Thames  
Date Found: 24 September 2020

Height	Age Range	Eye Color
188	50-60	Black

Arm tattoo	No ear pierced	Grey Hair Color
No birthmark	Cause of death: traffic accident	

Unit Reference **ED-200127**

**Male White European**

Location: Hertfordshire England  
Date Found: 05 September 2020

Height	Age Range	Eye Color
164	30-50	Light Brown

Size 7 Shoes	No ear pierced	No birthmark
Light Brown Hair	Cause of death: Drowning	

Unit Reference **ED-203672**

Looking for the missing person is like piecing together a puzzle with information. Therefore, we chose the Chinese jigsaw puzzle as our inspiration to design cartoon characters representing the nameless dead. We use the geometric illustration of a cartoon as a representation of each nameless person. And the information is easy to find in each searching page.

We even did a lot of animation design for the characters, because the interaction of the site is something we're trying to improve, and the animation is part of the interaction.

But after we finished this part, some of our web pages seems too cartoonization, which is not consistent with this serious theme. Therefore, we want to make other breakthroughs in visual aspects, we adopt the direction into 3D modeling to carry out a new design.

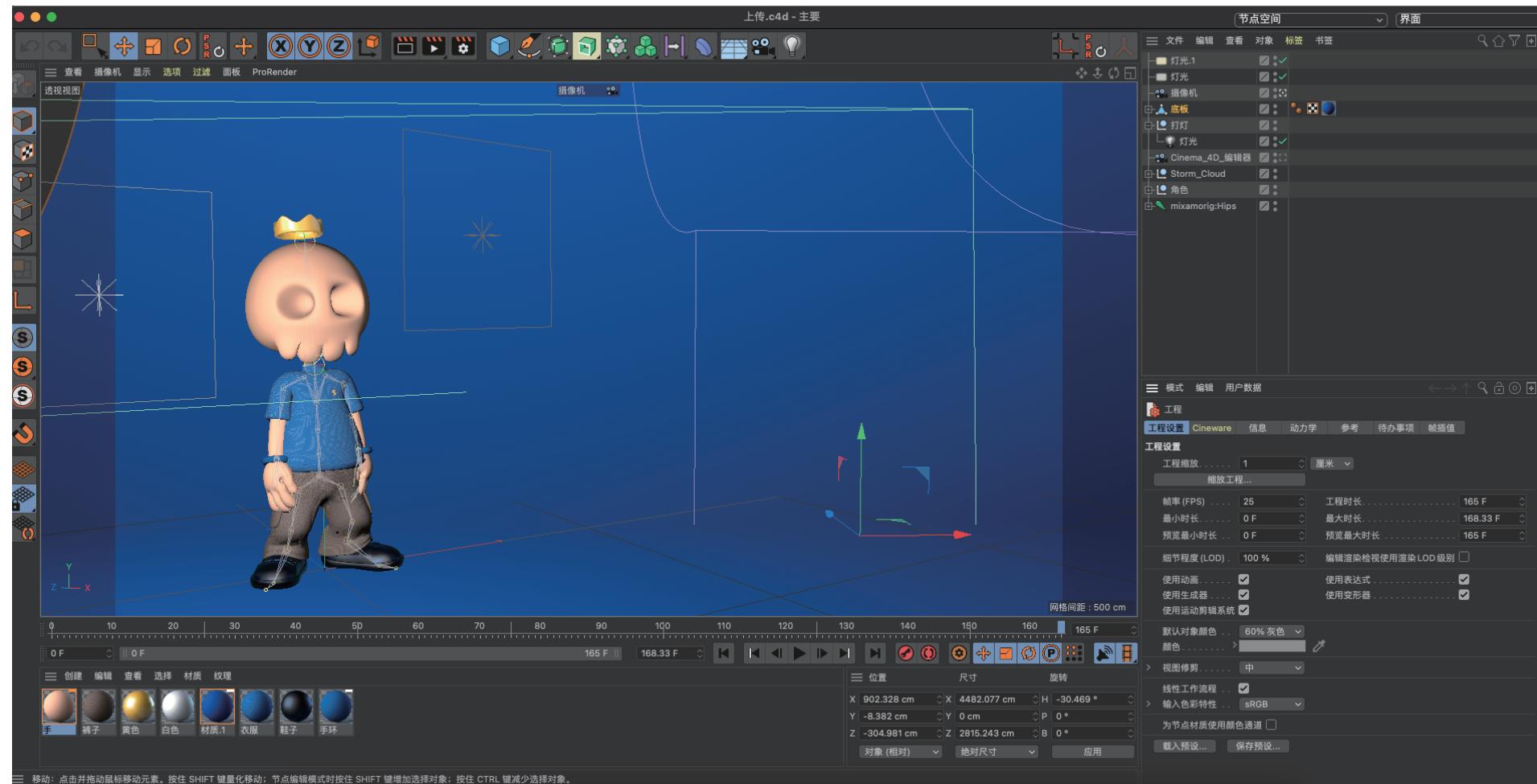
## stage 2



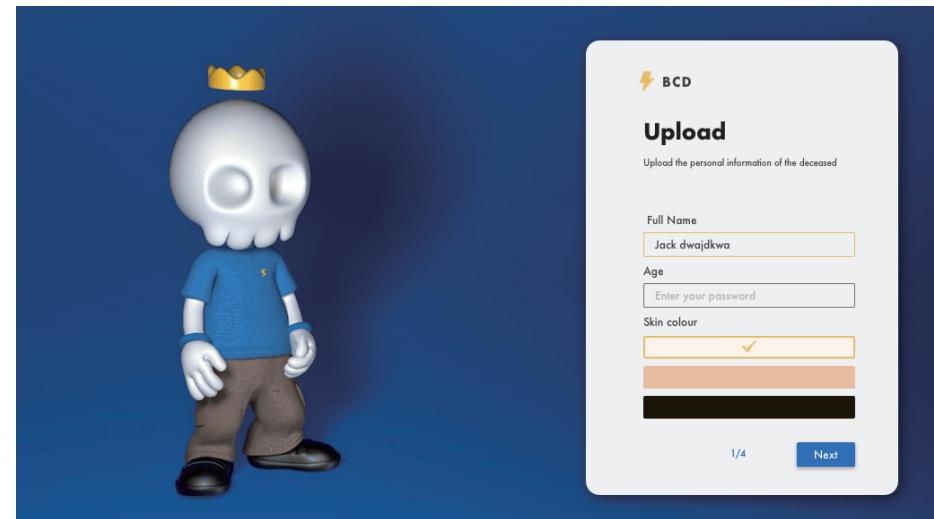
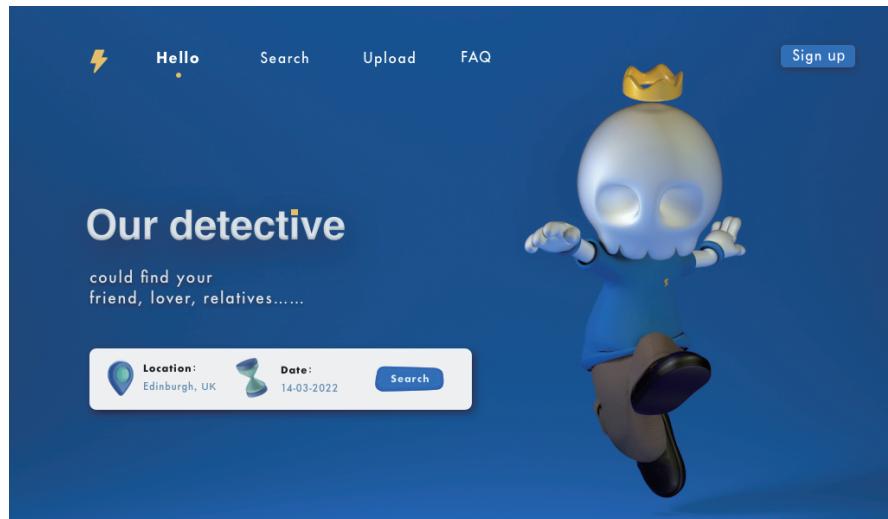
We designed a cartoon character image to unify the representation of the nameless dead. We found that in the previous design, there are too much geometry, which lost the sense of representing a human. So in the design of the cartoon image, we added the elements of ghost angel to the main image of human.

We also redesigned the UI buttons into 3D version, so the whole website would be more detailed. At the right picture, the skin color of the character is slightly different, which represents the different races of human.( for users to find thier relatives more effciently with the differ of race.

After we designed the character, we add the bones bond in C4D to add motion of the character and apply it into our website.



## stage 3



**Our features**

- Enter your email and password to login our dashboard
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**Banky**  
Let's connect on social media:

**Useful Information**  
Who we are  
Services  
Help Center  
FAQ

**Navigation**  
Home  
About  
Features  
Contact Us

**Legal**  
Terms of Use  
Privacy Policy  
Accessibility  
Security

**Upload**

Upload the personal information of the deceased

Height  
175cm

Time of death  
2021-04-01

Place of death  
EH9 1NB, Edinburgh

Cause of death  
Car accident

Back 2/5 Next

Does the deceased have tattoos?  
Yes No

Does the deceased have a birthmark?  
Yes No

Information release unit

Contact number

Gender  
Male Female

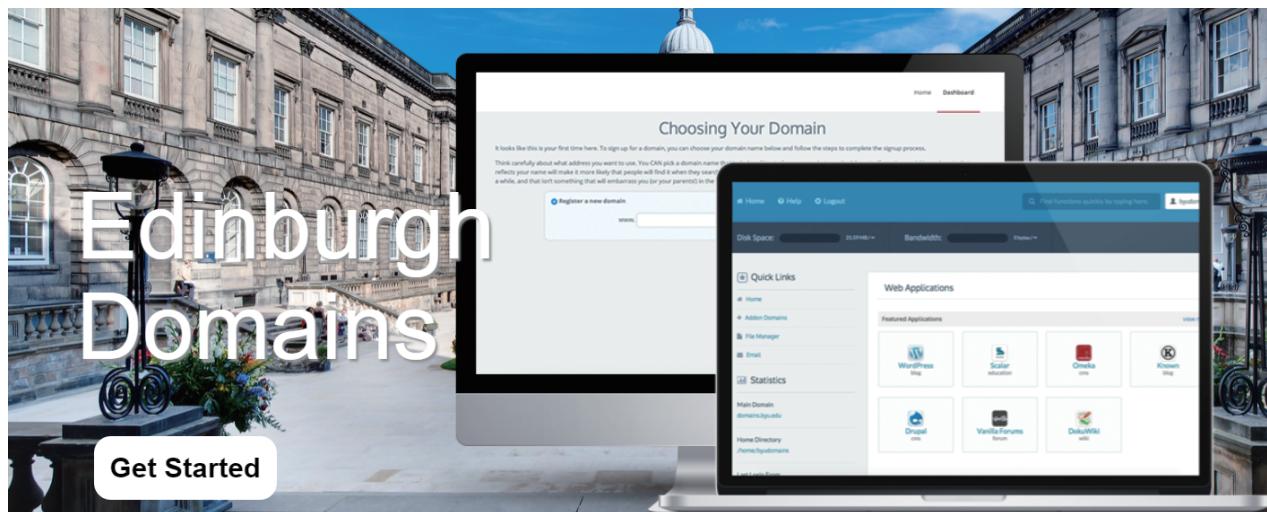
Other information  
You can also fill in other information directly, such as Pupil color, clothing, weight, hair color...

Back 4/5 Next

Upload relevant photos of the deceased (appearance, clothing, etc.)

Back 5/5 Finish

At this stage, we continue to design the whole web page into the same visual style. Here are 9 of the pages and each section implements different function.



# The function of Back-End

## 1.Database

In our project, we store and record all useful data on the Edinburgh Domain Server(<https://edinburgh.domains>).

#	名字	类型	排序规则	属性	空	默认	注释	额外	操作
□	1 <b>id</b> 🌐	int(11)			否	无	AUTO_INCREMENT		
□	2 <b>name</b>	varchar(64)	latin1_swedish_ci		否	无			
□	3 <b>sex</b>	varchar(16)	latin1_swedish_ci		否	无			
□	4 <b>age</b>	int(11)			否	无			
□	5 <b>height</b>	int(64)			否	无			
□	6 <b>tattoos</b>	varchar(16)	latin1_swedish_ci		否	无			
□	7 <b>birthmark</b>	varchar(16)	latin1_swedish_ci		否	无			
□	8 <b>timeofdeath</b>	varchar(128)	latin1_swedish_ci		否	无			
□	9 <b>placeofdeath</b>	varchar(32)	latin1_swedish_ci		否	无			
□	10 <b>causeofdeath</b>	varchar(128)	latin1_swedish_ci		否	无			
□	11 <b>authority</b>	varchar(32)	latin1_swedish_ci		否	无			
□	12 <b>contactnumber</b>	int(32)			否	无			
□	13 <b>otherinformation</b>	varchar(300)	latin1_swedish_ci		否	无			
□	14 <b>skincolor</b>	varchar(16)	latin1_swedish_ci		否	无			

Body information table

#	名字	类型	排序规则	属性	空	默认	注释	额外	操作
□	1 <b>id</b> 🌐	int(11)			否	无	AUTO_INCREMENT		
□	2 <b>username</b>	varchar(64)	latin1_swedish_ci		是	NULL			
□	3 <b>password</b>	varchar(128)	latin1_swedish_ci		是	NULL			

User information table

#	名字	类型	排序规则	属性	空	默认	注释	额外	操作
□	1 <b>id</b> 🌐	int(11)			否	无	AUTO_INCREMENT		
□	2 <b>picname</b>	varchar(64)	latin1_swedish_ci		否	无			
□	3 <b>pictype</b>	varchar(32)	latin1_swedish_ci		否	无			
□	4 <b>picfile</b>	varchar(64)	latin1_swedish_ci		否	无			

Picture information table

## 2.Fat-Free FrameWork

Fat-Free Framework is a powerful easy-to-use PHP micro-framework, technically avoiding the complexity of web component and achieving balance between performance and the elegance of code, designed to build dynamic and robust web applications, especially back-end. (reference: Fat-Free Framework for PHP ([fatfreeframework.com](http://fatfreeframework.com))

In our project, Fat-Free Framework is used to build robust back end interactive system and deploy the web page to the Edinburgh Domain Server. And four main functions are implemented by Fat-Free Framework for PHP.

```
public function loginUser($user, $pwd) {          // very simple login -- no use of encryption, hashing etc.
    $auth = new \Auth($this->loginMapper, array('id'=>'username', 'pw'=>'password'));
    return $auth->login($user, $pwd);           // returns true on successful login
}
```

```
$f3->route('POST /Signup',
function($f3) {
    if($f3->get('POST.checkpolicy')){ // Check whether checkpolicy is true
        if($f3->get('POST.password1')==$f3->get('POST.password2')){//Check whether pd1 and pd2 are same
            //if checkpolicy is true and pd1,pd2 are same
            //then insert Username and password into database
            $formdata = array();                                // array to pass on the entered data in
            $formdata["username"] = $f3->get('POST.Username'); // whatever was called "Username" on the form
            $formdata["password"] = $f3->get('POST.password1');// whatever was called "password1" on the for

            $controller = new SimpleController;

            $controller->putIntoAdmDatabase($formdata);//insert formdata into database

            $f3->set('formData',$formdata);      // set info in F3 variable for access in response template
            $f3->set('flag','success');         // set info in F3 variable for access in response template
            echo template::instance()->render( file: 'Hello.html');
        }
        //if password1 and password2 are different, then alert and refresh page
        else{
            $f3->set('flag','errorpass');      // set info in F3 variable for access in response template
            echo template::instance()->render( file: 'Hello.html');
        }
    }
    //if checkpolicy is False, then alert and refresh page
    else {
        $f3->set('flag','policy');        // set info in F3 variable for access in response template
        echo '<script type="text/javascript">alert("Please check Service and Privacy Policy.")</script>';
        echo template::instance()->render( file: 'Hello.html');
    }
})
```

## Log in and Login out

Administrators can unlock higher privileges function by logging in. On our website, administrator can input username & password and web page will display the alert of password error or username in-existence.

## Sign up

Visitor can obtain higher privileges by registering administrator. However, visitor must check and agree the Privacy Policy and the confirmed password must be the same as the previous password input, otherwise registration will fail, displaying the alert of password confirmation error or missing privacy policy check.



Privacy Policy.

Register

```
$list = $f3->get('DB')->exec("SELECT * FROM deadinfo WHERE (age < '$age') AND (sex = '$sex')  
AND (height < $height) AND (tattoos=' $tattoo ')  
AND (birthmark=' $birthmark ') AND (skincolor=' $skincolor ')  
AND (placeofdeath = '$placeofdeath')");  
//
```

### Conditional Search

```
$list = $f3->get('DB')->exec("SELECT * FROM deadinfo WHERE (name LIKE '%$t%')  
OR (causeofdeath LIKE '%$t%')  
OR (otherinformation LIKE '%$t%')  
OR (skincolor LIKE '%$t%'")");
```

### Fuzzy Search

## Search

Visitor and administrator can obtain expected body information by searching. Searching function is open to the user with all privileges. In our website, we use SQL conditional search to achieve the accurate location of the desired body information, besides, we have achieved fuzzy search by using 'LIKE' condition of SQL.

## Upload

```
,  
public function putInfoDatabase($data) {  
    $this->deadinfo->name = $data["name"]; // set value for "name" field  
    $this->deadinfo->age = $data["age"]; // set value for "age" field  
    $this->deadinfo->sex = $data["gender"];// set value for "gender" field  
    $this->deadinfo->height = $data["height"];// set value for "height" field  
    $this->deadinfo->tattoos = $data["tattoo"];// set value for "tattoo" field  
    $this->deadinfo->birthmark = $data["birthmark"];// set value for "birthmark" field  
    $this->deadinfo->timeofdeath = $data["timeOfdeath"];// set value for "timeOfdeath" field  
  
    $this->deadinfo->skincolor = $data["skincolor"];// set value for "skincolor" field  
    $this->deadinfo->placeofdeath = $data["placeOfdeath"];// set value for "placeOfdeath" field  
    $this->deadinfo->causeofdeath = $data["causeOfdeath"];// set value for "causeOfdeath" field  
    $this->deadinfo->authority = $data["authority"];// set value for "authority" field  
    $this->deadinfo->contactnumber = $data["contactnumber"];// set value for "contactnumber" field  
    $this->deadinfo->otherinformation = $data["otherinformation"];// set value for "otherinformation" field  
    //$this->deadinfo->pictitle = $data["pictitle"];  
    $this->deadinfo->save(); // save new record with these fields  
}
```

The upload function is open to the administrator only, when visitor try to open this function, the request will be denied. In our website, there are 13 different attributes of body uploaded to 'deadinfo' table of database, such as age, name, gender and so on. It is worth mentioning that these attributes could be null, because sometimes the information on bodies is not fully available.

# The function of Front-End

## 1. Save filter options after refreshing web page

```
function store() {
    //print(1);
    var obj_tattoo=document.getElementsByName("tattoo")
    for (var i=0;i<obj_tattoo.length;i++) {
        if (obj_tattoo[i].checked) {
            var tattoo = obj_tattoo[i].value;
        }
    }

    var obj_birthmark=document.getElementsByName("birthmark")
    for (var i=0;i<obj_birthmark.length;i++) {
        if (obj_birthmark[i].checked) {
            var birthmark = obj_birthmark[i].value;
        }
    }

    var age = document.getElementById('age').value;
    var height = document.getElementById('height').value;
    var gender = document.getElementById('gender').value;
    var skincolor = document.getElementById('skincolor').value;
    var placeofdeath = document.getElementById('placeofdeath').value;

    localStorage.setItem("age_store", age);
    localStorage.setItem("height_store", height);
    localStorage.setItem("tattoo_store", tattoo);
    localStorage.setItem("birthmark_store", birthmark);
    localStorage.setItem("gender_store", gender);
    localStorage.setItem("skincolor_store", skincolor);
    localStorage.setItem("placeofdeath_store", placeofdeath);
}
```

This function is used to let visitors remember the previous filter options when user get the desired search results.

```
function store_fuzzy(){
    var textSearch = document.getElementById("textSearch").value;
    localStorage.setItem("textSearch_store", textSearch);
}
```

```

var age_get = localStorage.getItem("age_store");
var height_get = localStorage.getItem("height_store");
var tattoo_get = localStorage.getItem("tattoo_store");
var birthmark_get = localStorage.getItem("birthmark_store");
var gender_get = localStorage.getItem("gender_store");
var skincolor_get = localStorage.getItem("skincolor_store");
var placeofdeath_get = localStorage.getItem("placeofdeath_store");
var textSearch_get = localStorage.getItem("textSearch_store");

if(document.getElementById("tattooyes").value==tattoo_get){
    document.getElementById("tattooyes").checked=true;
}
else{
    document.getElementById("tattoono").checked=true;
}
if(document.getElementById("birthmarkyes").value==birthmark_get){
    document.getElementById("birthmarkyes").checked=true;
}
else{
    document.getElementById("birthmarkno").checked=true;
}

document.getElementById("age").value = age_get;
document.getElementById("height").value = height_get;
var gender_options = document.getElementById("gender").options

```

This function is achieved by using localStorage technique, as we can see in "store()" and "store\_fuzzy()", values posted by filter form are stored in local storage and these values will be re-obtained and put into filter from when the web page is refreshed.

```

    gender_options[i].selected = true;
}
}
var placeofdeath_options = document.getElementById("placeofdeath").options
for (i=0; i<placeofdeath_options.length; i++){
    if (placeofdeath_options[i].value == placeofdeath_get){
        placeofdeath_options[i].selected = true;
    }
}
var skincolor_options = document.getElementById("skincolor").options
for (i=0; i<skincolor_options.length; i++){
    if (skincolor_options[i].value == skincolor_get){
        skincolor_options[i].selected = true;
    }
}
document.getElementById("textSearch").value = textSearch_get;

```

## 2. Allow users to upload information

```
var login = document.getElementById("login");
var login2 = document.getElementById("login2");
var login3 = document.getElementById("login3");
var login4 = document.getElementById("login4");
var login5 = document.getElementById("login5");
var btn3 = document.getElementById("btn3");
var back1 = document.getElementById("back1");
btn3.onclick = function() {
    login.style.display = 'none';
    login2.style.display = 'block';
}
btn4.onclick = function() {
    login2.style.display = 'none';
    login3.style.display = 'block';
}
btn5.onclick = function() {
    login3.style.display = 'none';
    login4.style.display = 'block';
}
btn6.onclick = function() {
    login4.style.display = 'none';
    login5.style.display = 'block';
}

back1.onclick = function() {
    login2.style.display = 'none';
    login.style.display = 'block';
}
```

This function is using Java Script to achieve.

### 3. After the user agreed with the terms, their user information will be automatically kept for 24 hours

By using our website, you agree to our cookie policy Including but not limited to the sharing of cookies, session, geographical location information.

Accept

```
<script>
    $(document).ready(function() {
        var COOKIE_NAME = "showbox";
        if($.cookie(COOKIE_NAME)) {
            $(".cookie-banner").hide();
        } else {
            $(".cookie-banner").show(1000);
            $(".close").click(function() {
                $(".cookie-banner").hide(1000);
                $.cookie(COOKIE_NAME, 'ishide', {
                    expires: 1
                });
            })
        }
    });
</script>
```

The cookie will be expired in 24 hours (one day).

```
<div class="cookie-banner" style="width: 1280px; height: 100px">
    <p>
        By using our website, you agree to our cookie policy Including but not limited to the sharing of
        cookies, session, geographical location information.
    </p>
    <button class="close" type="button">Accept</button>
</div>
```

# **Division of Labor**

- 1. The theme of the webpage: Ziyu Du; Luke Cao; Luoying Bao**
- 2. Main functions of the webpage & information structure: Ziyu Du; Luke Cao; Luoying Bao**
- 3. Visual design: Luke Cao; Luoying Bao**
- 4. Front-end design: Ziyu Du; Luke Cao; Luoying Bao**
- 5. Back-end design: Ziyu Du**
- 6. Walk through video: Luoying Bao**
- 7. Report: Luoying Bao; Ziyu Du; Luke Cao**