



New Era University

College of Computer Studies
Department of Computer Science



**In Partial Fulfillment of the Requirements in
CS321L Software Engineering Laboratory**

DOCTAL: A web based Doctor's Portal

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Marticio, Maricar M.

Class Schedule:

Monday 10:00 AM – 1:00 PM

Professor Yumie M. Pasiol
Instructor

INTRODUCTION

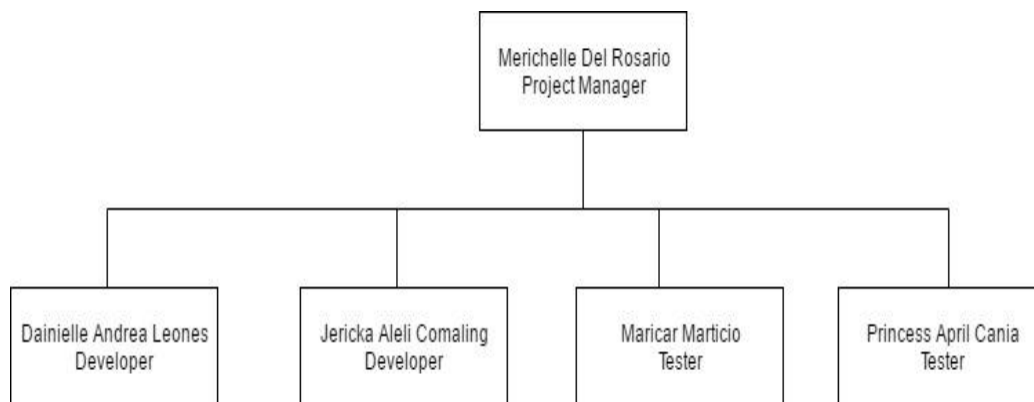
In a world constantly growing and expanding, having a health care system to the field of computer is a good approach for hospitals. Technology is constantly improving so a paperless medical record system is more practical and sensible instead of rummaging through papers and losing them or misplacing those important documents. Computers provide an easier way to look up for a patient's information if a doctor asks for it. Computers allow the patient to grasp a visual perspective of their health. Health care systems could create more advanced way of recording and understanding a patient's situation. Without computers for the doctor and patient communication, all transactions and interaction must be done through telephone or by the office. Having the health care system will allow the doctor and the patient to stay in contact more often through communication on technology.

This study proposes on having an efficient doctor-patient portal, wherein patients can book a reservation or make an appointment through doctors online or with the presence of the internet which will both benefit the doctor and the patient.

COMPANY PROFILE

The group Undecided XXVII was formed for the course CS312L (Software Engineering Laboratory). The members consist of 5 girls who have accomplished different case studies during their previous years with other teams. The group can work as a team even though they have different skills, which is an advantage because they can help each other grow and be able to finish their task.

Organizational Structure



BACKGROUND OF THE STUDY

Making an appointment to a doctor, especially in a hospital where a lot of patients are in need of care seems to be hard. There are a lot of processes that is needed to be done before you can set an appointment to your doctor.

By proposing this doctor-patient handling managing system, the doctors will lessen their work and also the patients in booking doctor appointments.

OBJECTIVES

To develop a system that will help the user/patient to know easily who the doctor in-charge is and to know immediately the other information that the patient needs to know.

The following are the specific objectives that the researchers are aiming to do:

- To help the user/patient to easily find a doctor that suits to their condition/case.
- To lessen their time going to hospital to check if there is an available doctor to check on their condition.
- To easily check the background of the doctor and the achievements they have done.

SCOPES AND LIMITATIONS

The scope of our system is that it will be able to show the medical progress of a doctor, it will also allow to search for doctors depending on their specialization and location. The user can also set for an appointment with their chosen doctor and will receive a confirmation through e-mail.

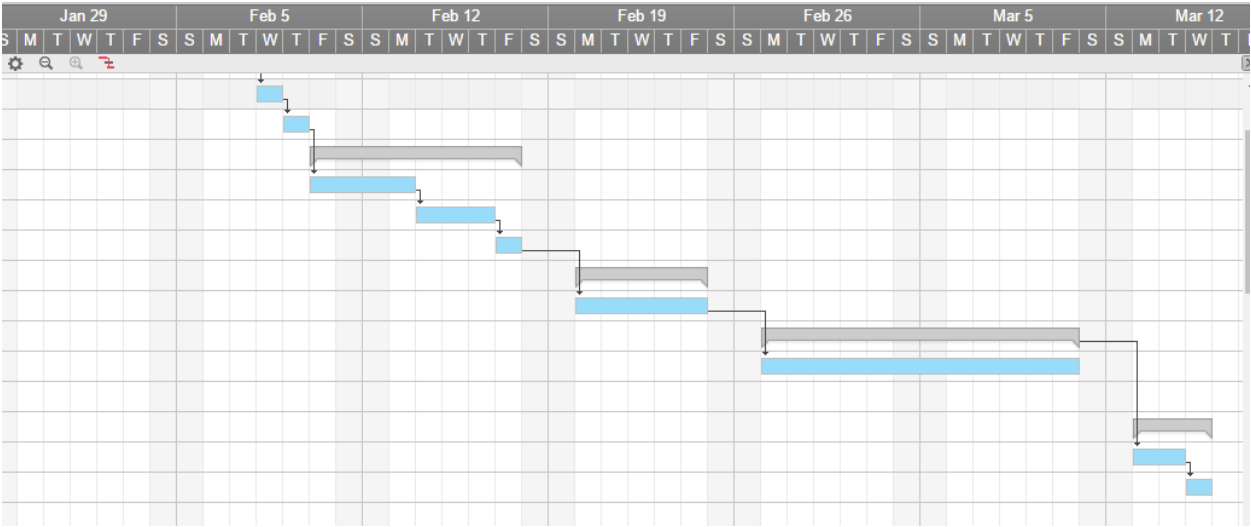
The proposed study is limited to those who have internet connection. And only 5 specializations will be used as an example and 2 doctors per specialization.

GANTT CHART

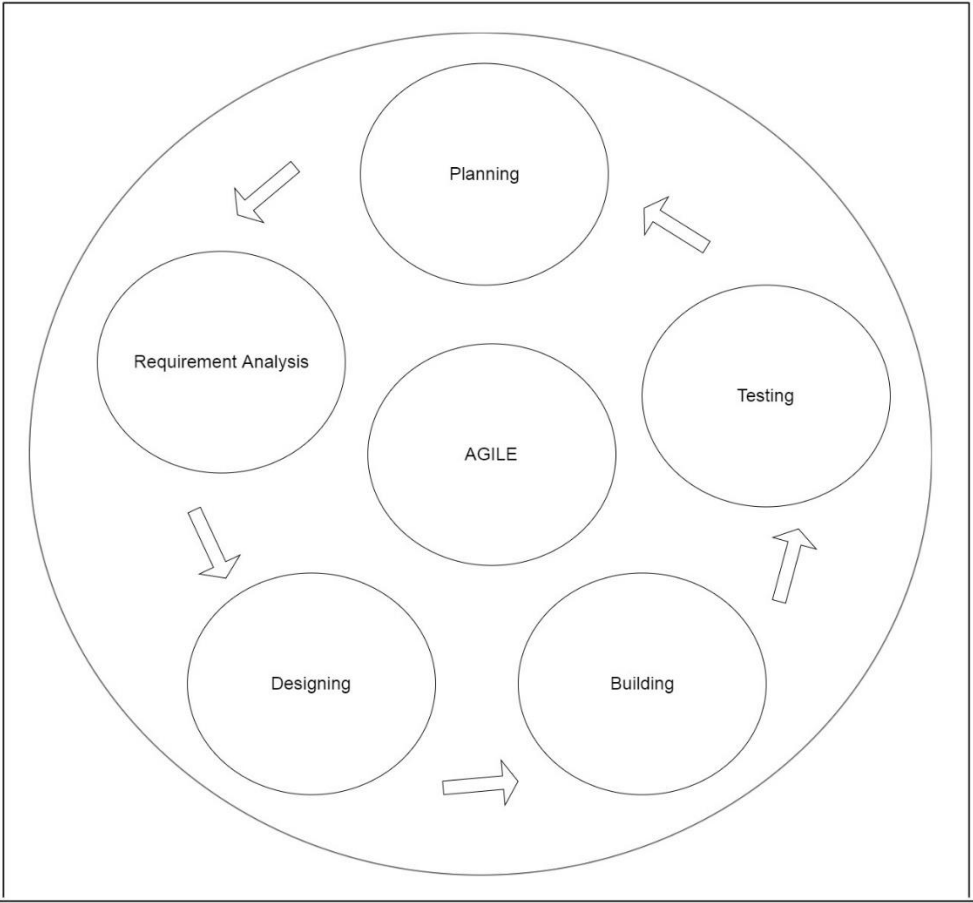
Table

Task Name	Duration	Start	Finish	Predecessors
				<i>i</i> ▼
[-] Doctal: A Web Based Doctor Portal	33d	01/30/17	03/15/17	
[-] Planning	9d	01/30/17	02/09/17	
Gathering of existing data	2d	01/30/17	01/31/17	
Prepare Project Proposal	5d	02/01/17	02/07/17	3
Approve Project proposal	1d	02/08/17	02/08/17	4
Task Assigning	1d	02/09/17	02/09/17	5
[-] Requirement Analysis	6d	02/10/17	02/17/17	
System requirements and user Requirements	2d	02/10/17	02/13/17	6
Sequence and Class Diagram	3d	02/14/17	02/16/17	8
Functional and Non-functional Requirements	1d	02/17/17	02/17/17	9
[-] Designing	5d	02/20/17	02/24/17	
Design of the User Interface	5d	02/20/17	02/24/17	10
[-] Building	10d	02/27/17	03/10/17	
Front End Coding	10d	02/27/17	03/10/17	12
Back-End Coding				
[-] System Testing	3d	03/13/17	03/15/17	
Fixing bugs	2d	03/13/17	03/14/17	13
[-] Requirement Analysis	6d	02/10/17	02/17/17	
System requirements and user Requirements	2d	02/10/17	02/13/17	6
Sequence and Class Diagram	3d	02/14/17	02/16/17	8
Functional and Non-functional Requirements	1d	02/17/17	02/17/17	9
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[-] Building	10d	02/27/17	03/10/17	
Front End Coding	10d	02/27/17	03/10/17	12
Back-End Coding				
[-] System Testing	3d	03/13/17	03/15/17	
Fixing bugs	2d	03/13/17	03/14/17	13
System finalization	1d	03/15/17	03/15/17	17

Diagram



SDLC



The first process is planning, inside this process are the preparing the project proposal, the approval of the proposal, the gathering of data and the task assigning. The second process is requirement analysis, in this process are the system and user requirement, sequence and class diagram and the function and non-functional requirements. The third process is designing, in this process the designing of the user interface happened. The fourth process is building, the coding stage of the project. And the last process is testing, researchers will test the system and also fix the bugs.

USER REQUIREMENTS

1.0 Patient

- 1.1 Doctal is a web based system that will allow the patient to find a doctor that will help them in their need.
- 1.2 The system will provide the user to locate the nearest doctor available in the city.
- 1.3 The user can search a doctor by entering the needed specialist and its location or address, in order for the system to find the nearest doctor in the area.
- 1.4 User can also reserve the doctor's appointment only if the doctor is available on the said date.
- 1.5 User can also give the doctor feedback and the doctor won't know who send the feedback.

2.0 Doctors

- 2.1 Doctors will approve or not, the reservation of the patient.
- 2.2 Doctors will send the patients email of acceptance.
- 2.3 Doctors will receive feedback from the patient.

3.0 Admin

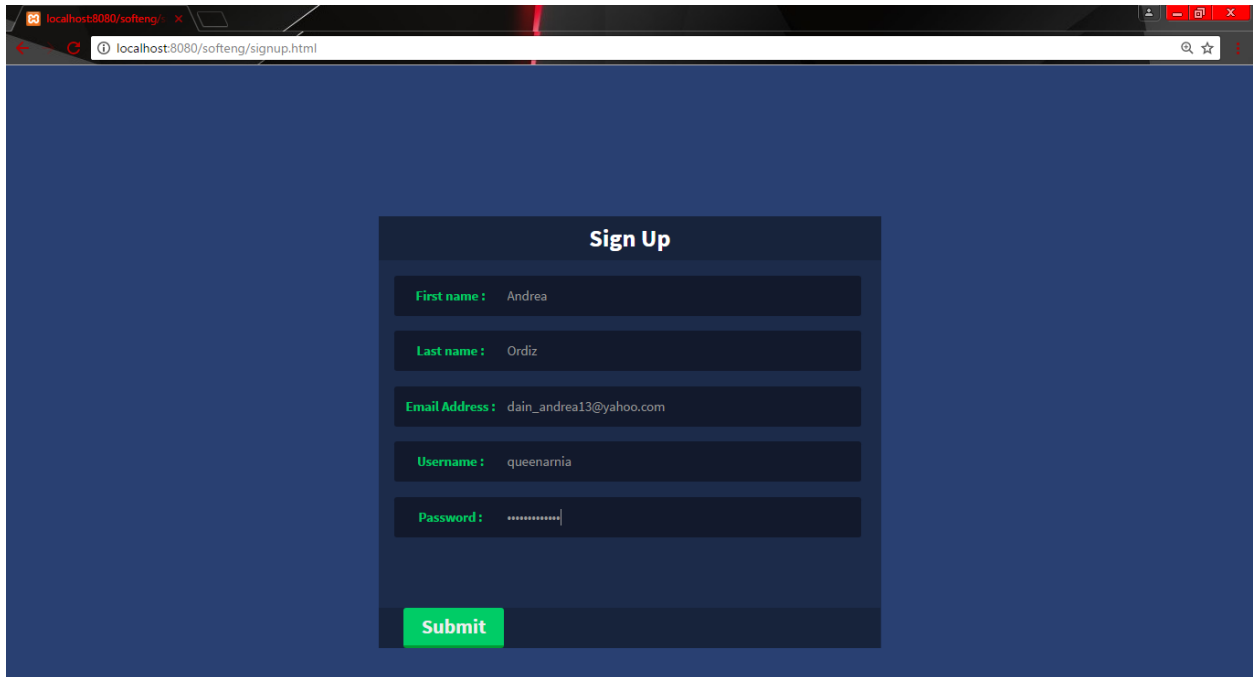
- 3.1 Admin is the only one who can handle the System Maintenance.
- 3.2 Admin can see the name of the feedback sender.
- 3.3 Admin can shut down the system.
- 3.4 The ability of the patient can be done by the admin as well.

SYSTEM REQUIREMENTS

- The user must have an internet connection to have an access to the system.

UI DESIGN INTERACE

UID 1.0 Sign-Up



localhost:8080/softeng/ X

localhost:8080/softeng/signup.html

Sign Up

First name : Andrea

Last name : Ordiz

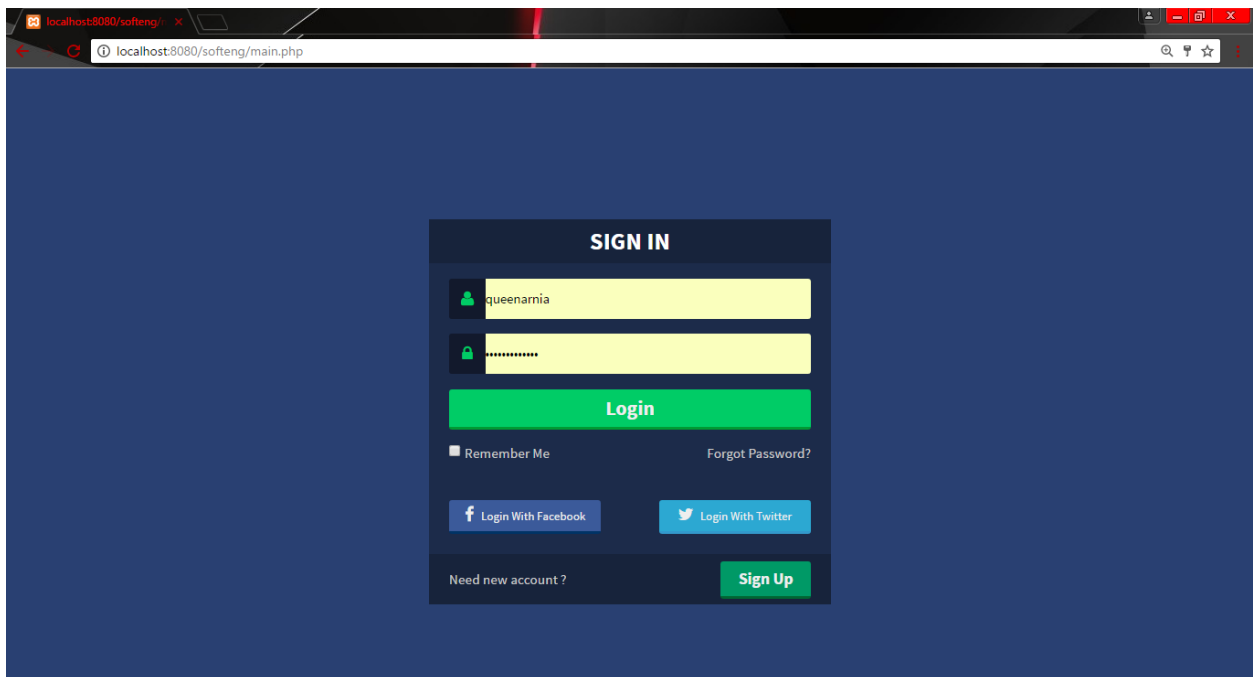
Email Address : dain_andrea13@yahoo.com

Username : queenarnia

Password :

Submit

UID 2. 0 Login



localhost:8080/softeng/ X

localhost:8080/softeng/main.php

SIGN IN

queenarnia

.....

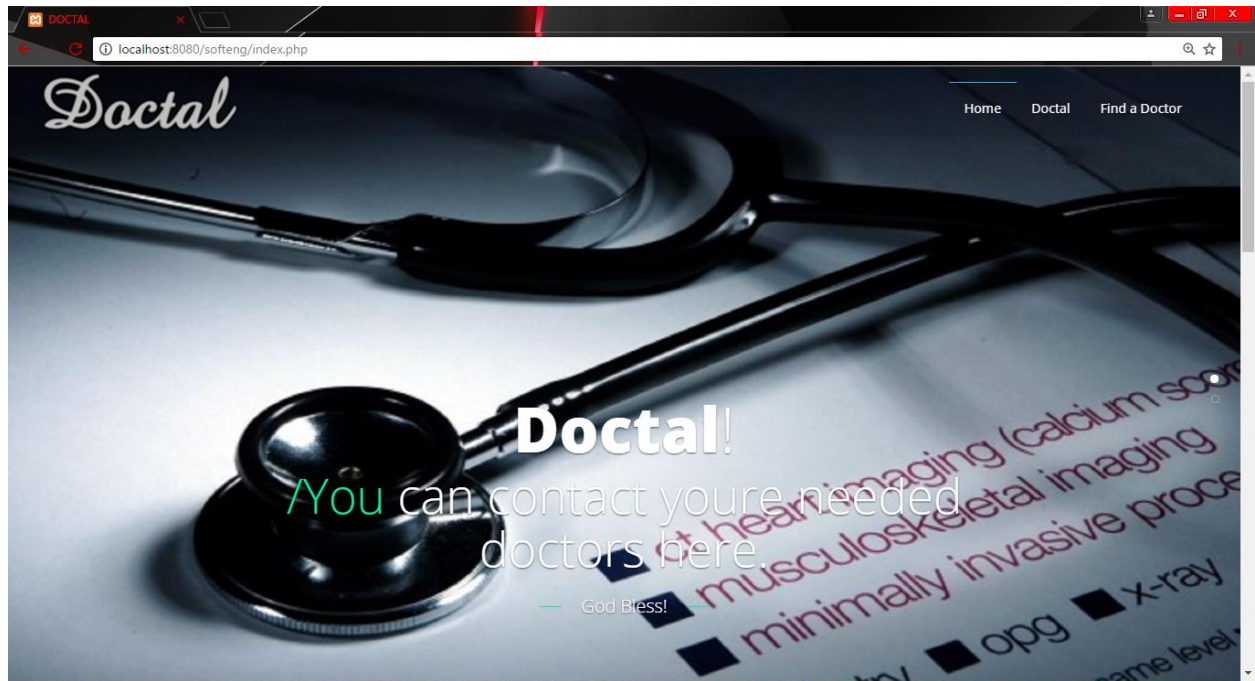
Login

☐ Remember Me [Forgot Password?](#)

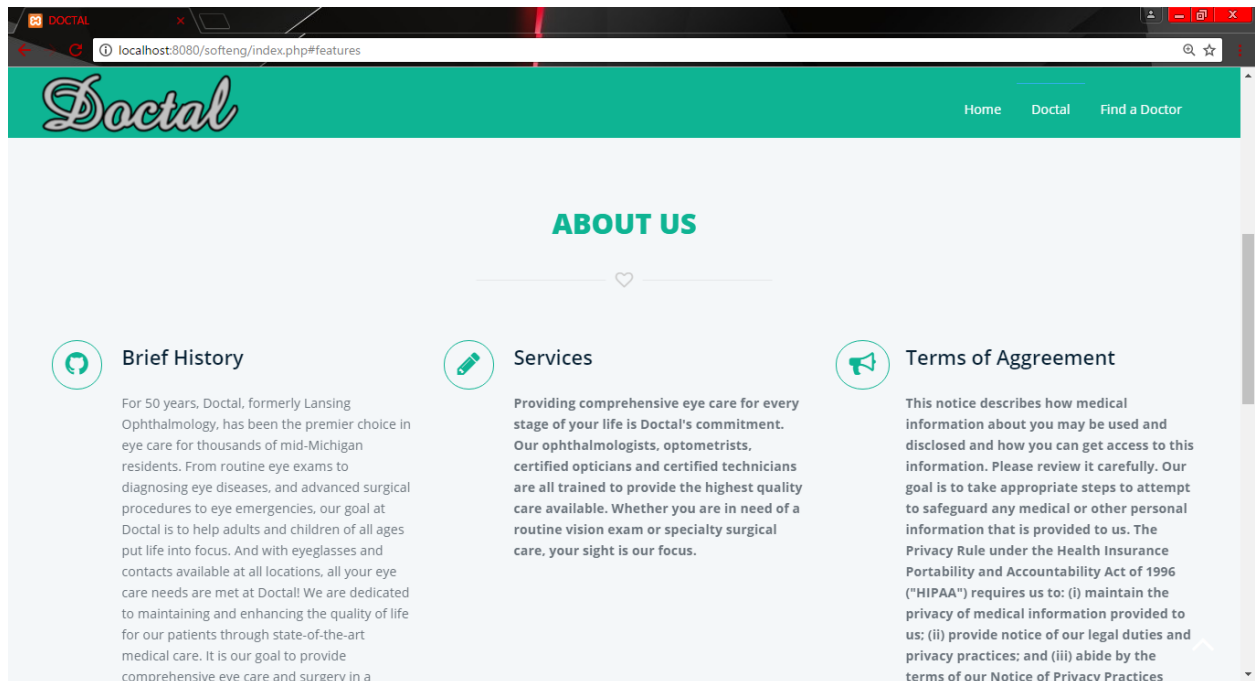
[Login With Facebook](#) [Login With Twitter](#)

[Need new account?](#) [Sign Up](#)

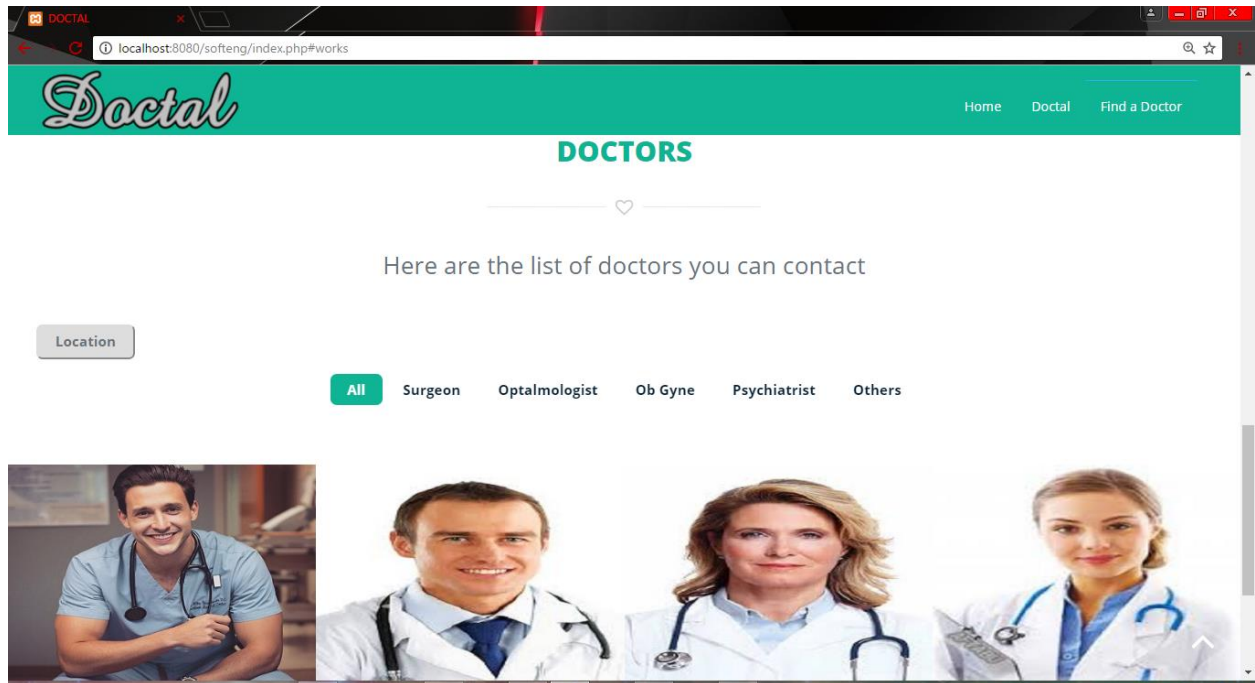
UID 3.0 Home



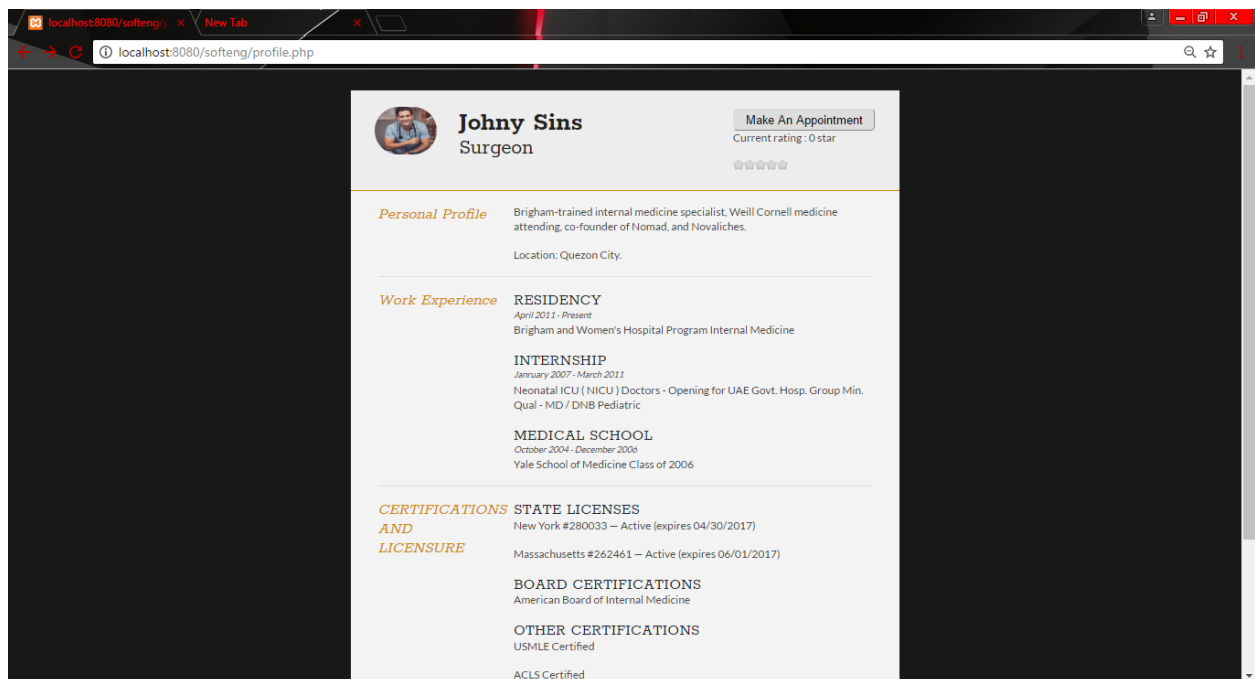
UID 4.0 Doctal



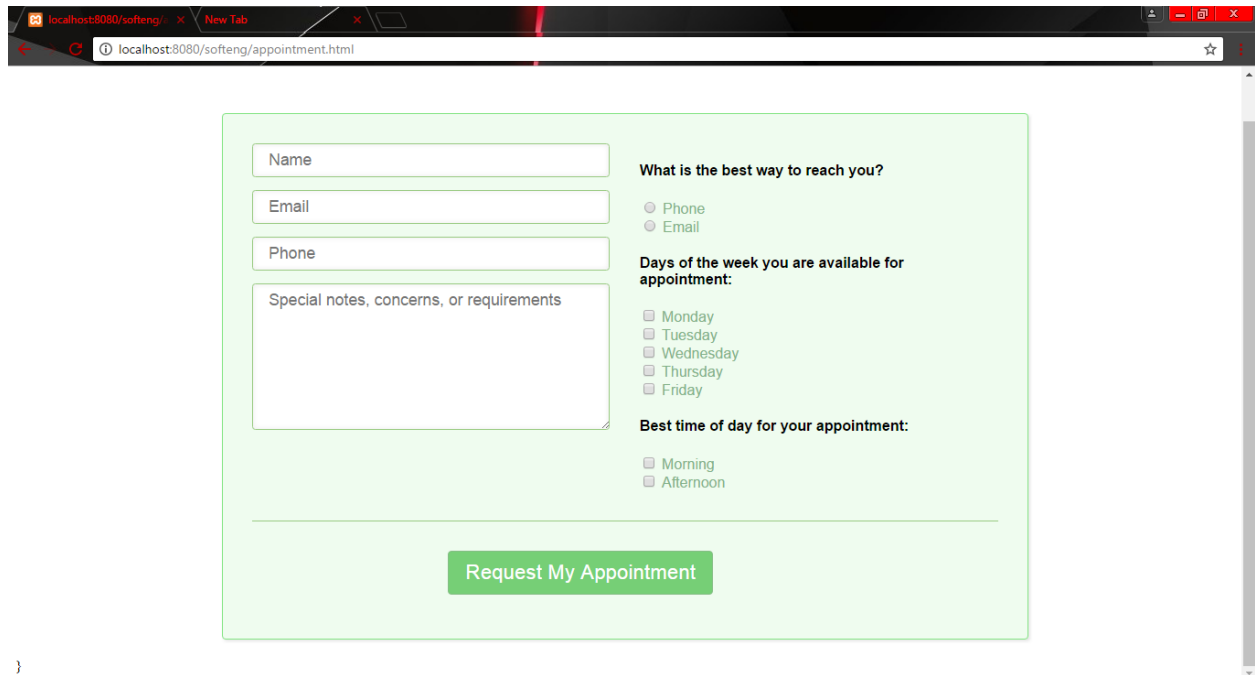
UID 5.0 Find A Doctor



UID 6.0 Doctor's Profile



UID 7.0 Make an Appointment



localhost:8080/softeng/ - x New Tab x

localhost:8080/softeng/appointment.html

Name

Email

Phone

Special notes, concerns, or requirements

What is the best way to reach you?

☐ Phone

☐ Email

Days of the week you are available for appointment:

☐ Monday

☐ Tuesday

☐ Wednesday

☐ Thursday

☐ Friday

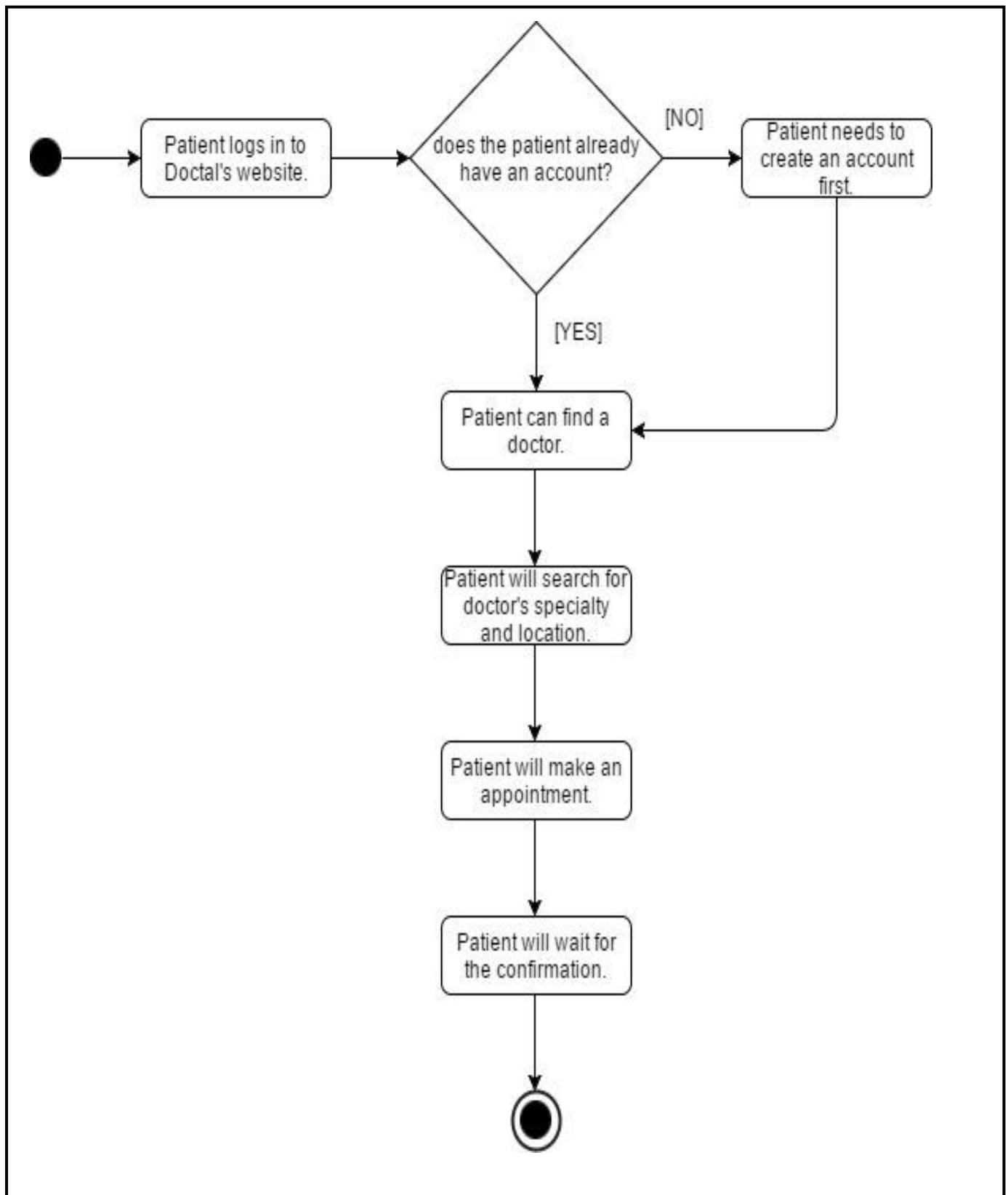
Best time of day for your appointment:

☐ Morning

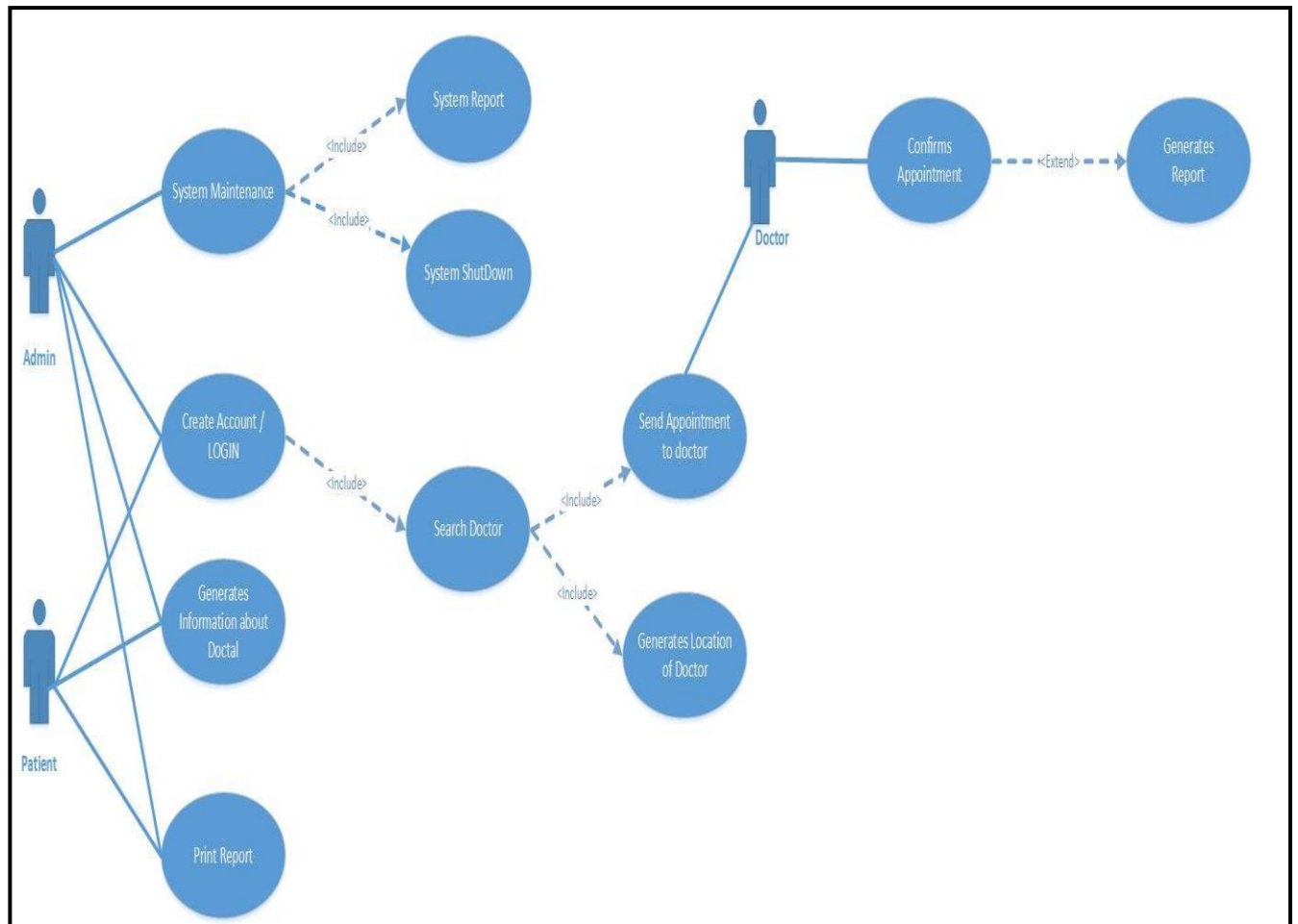
☐ Afternoon

Request My Appointment

ACTIVITY DIAGRAM

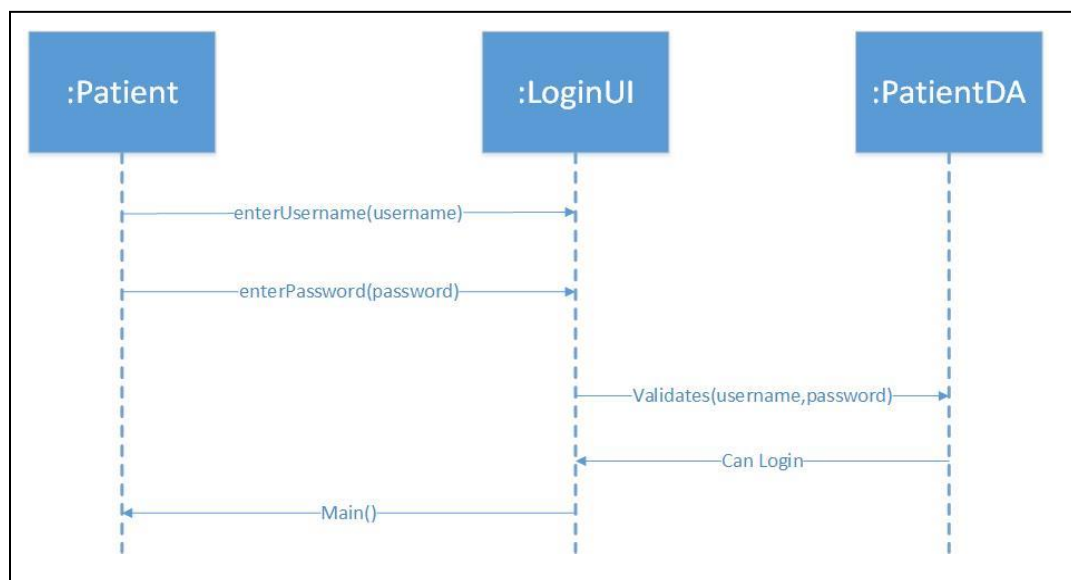


USE CASE DIAGRAM

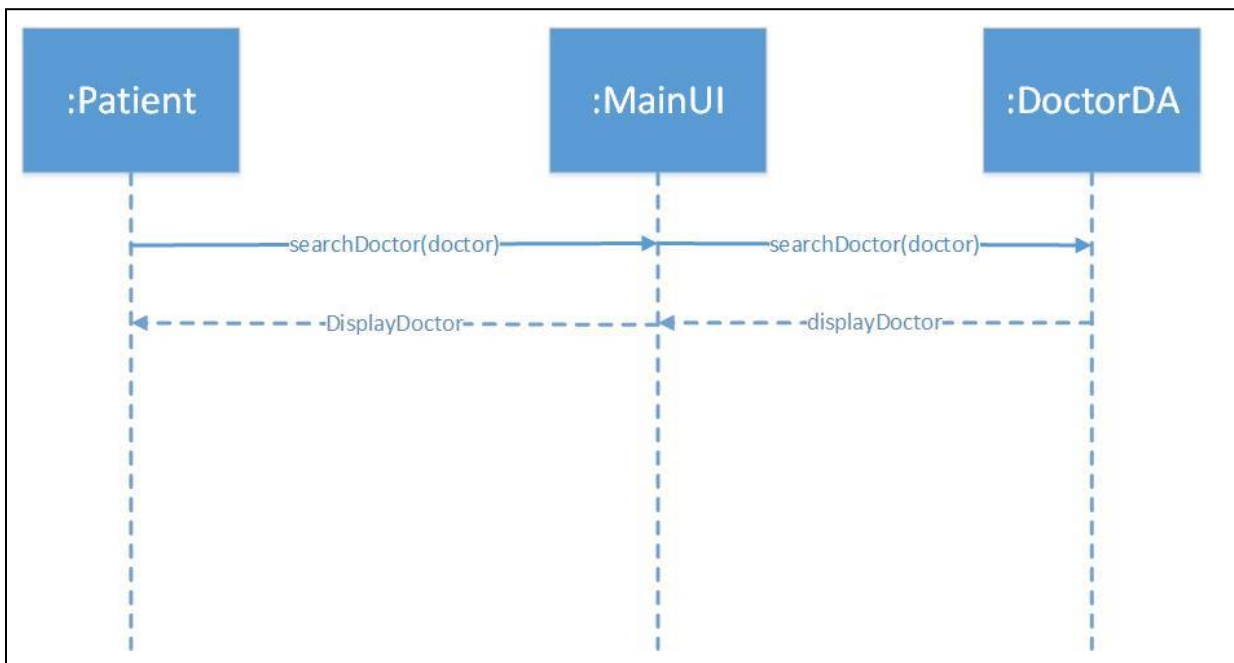


SEQUENCE DIAGRAM

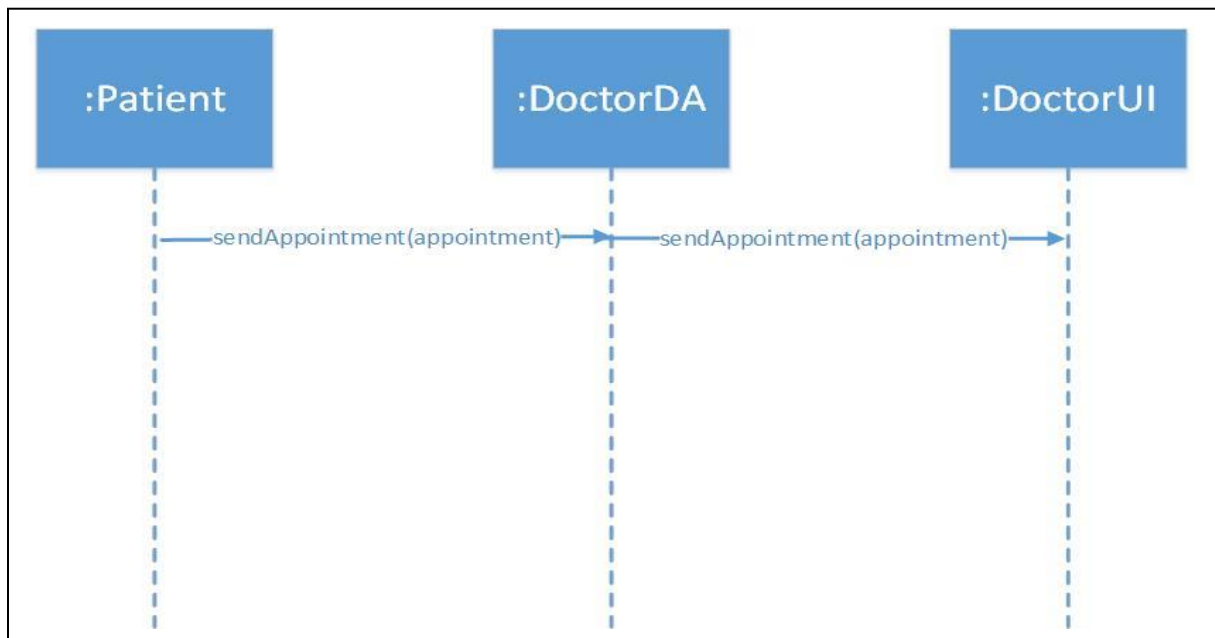
User Login



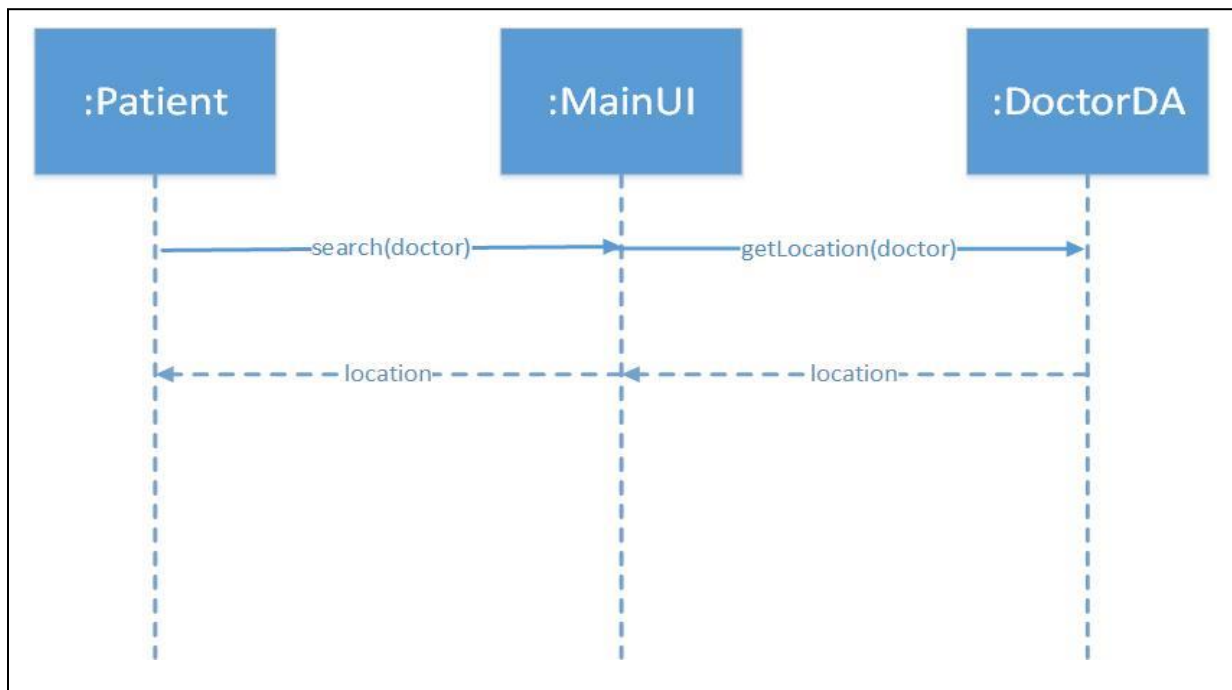
Search Doctor



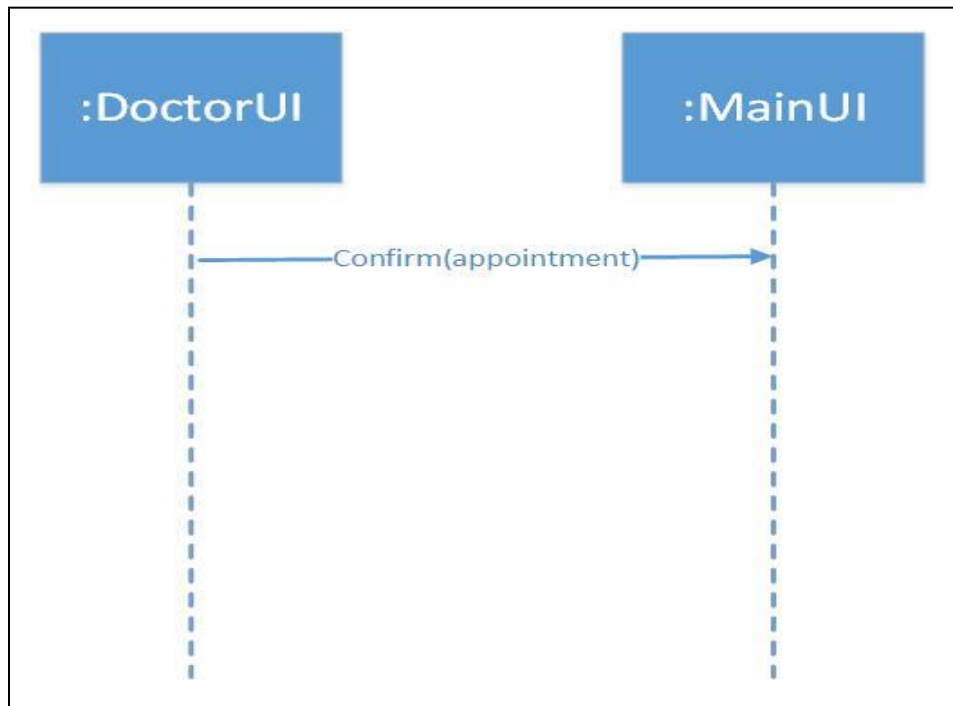
Send appointment to doctor



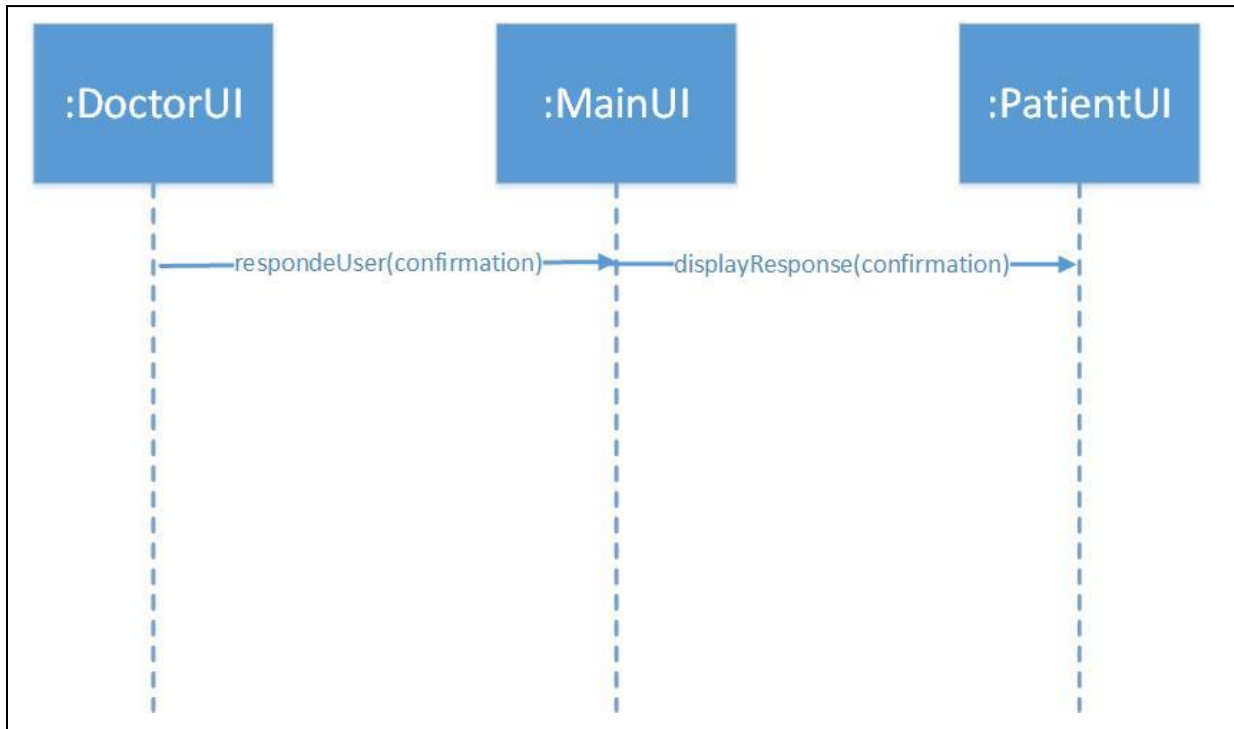
Generates Doctor Location



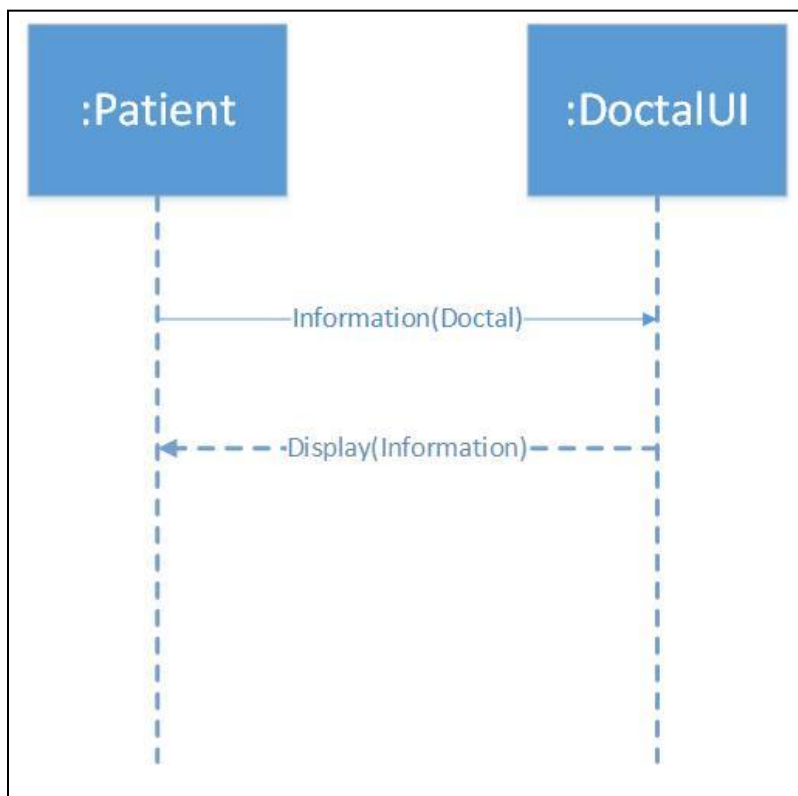
Confirms Appointment



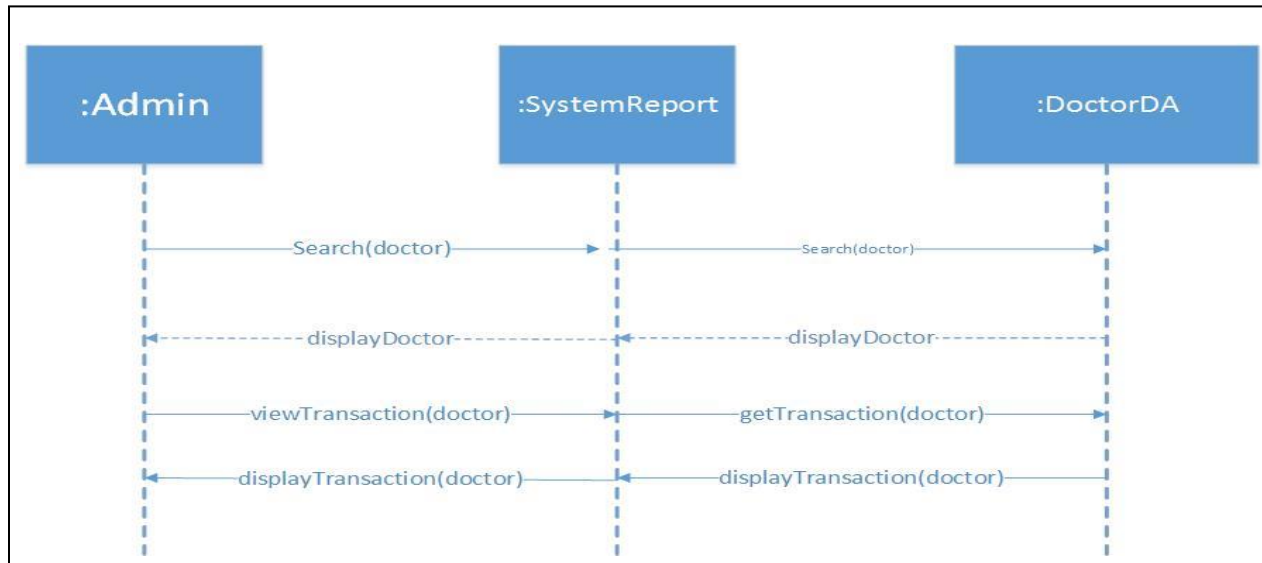
Generates Report



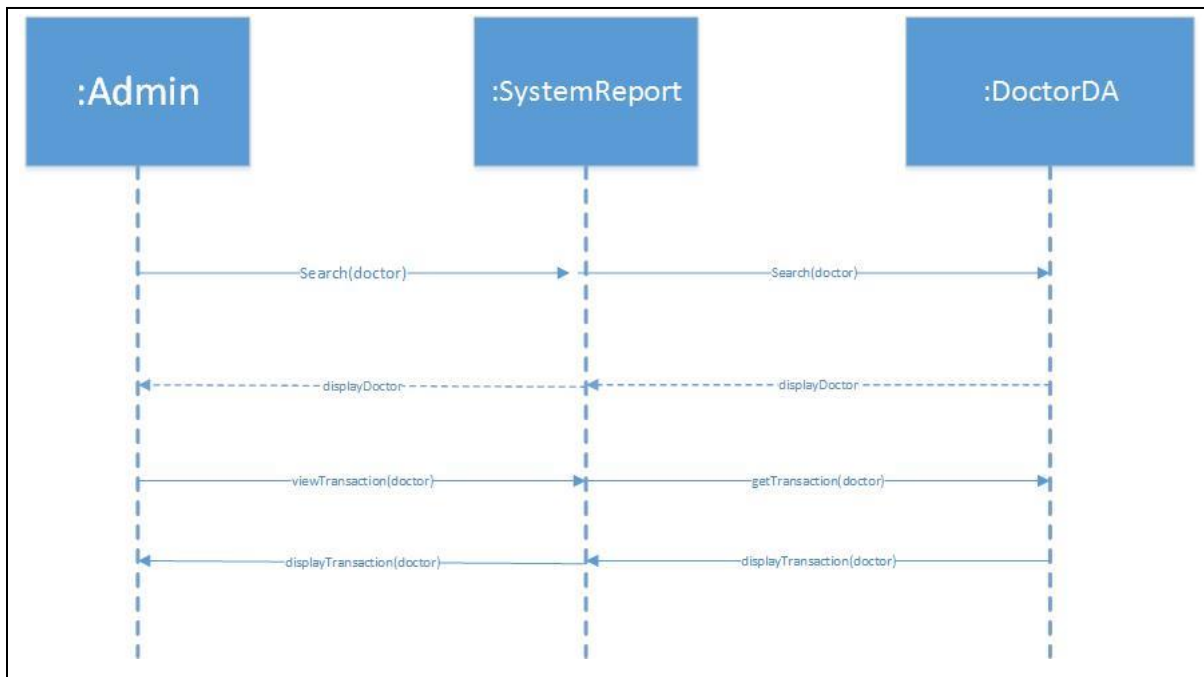
Generates Information about DOCTAL



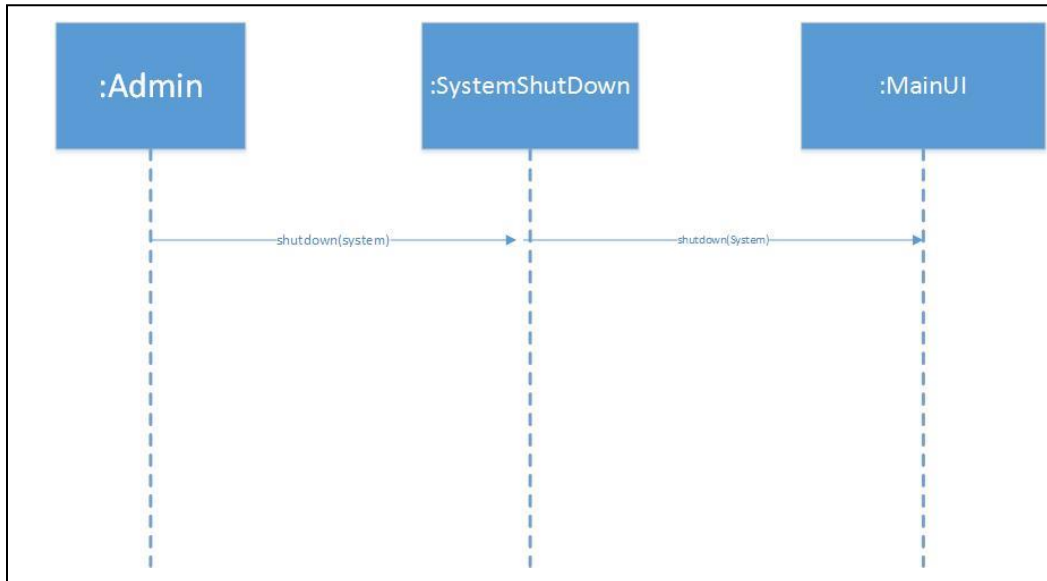
System Maintenance



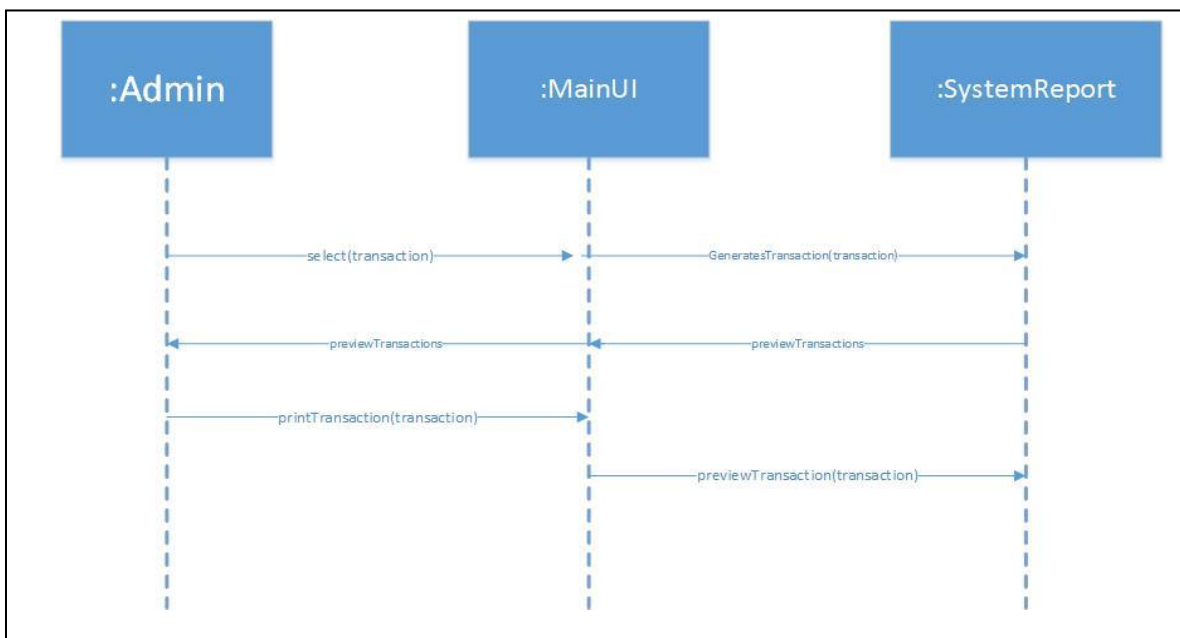
System Report



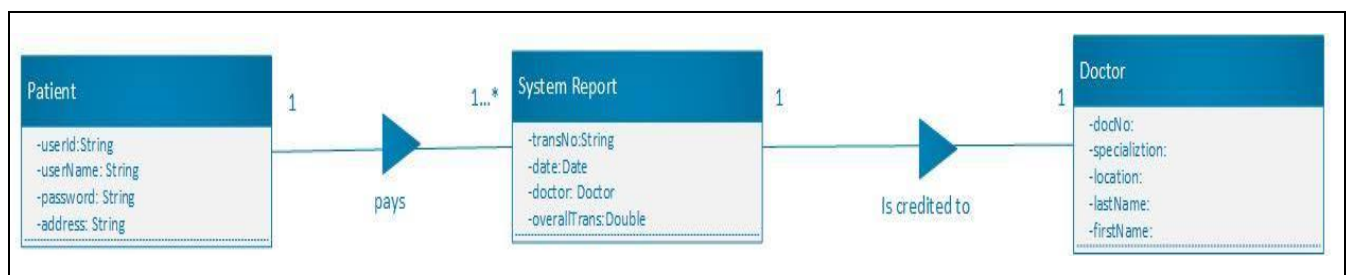
System Shutdown



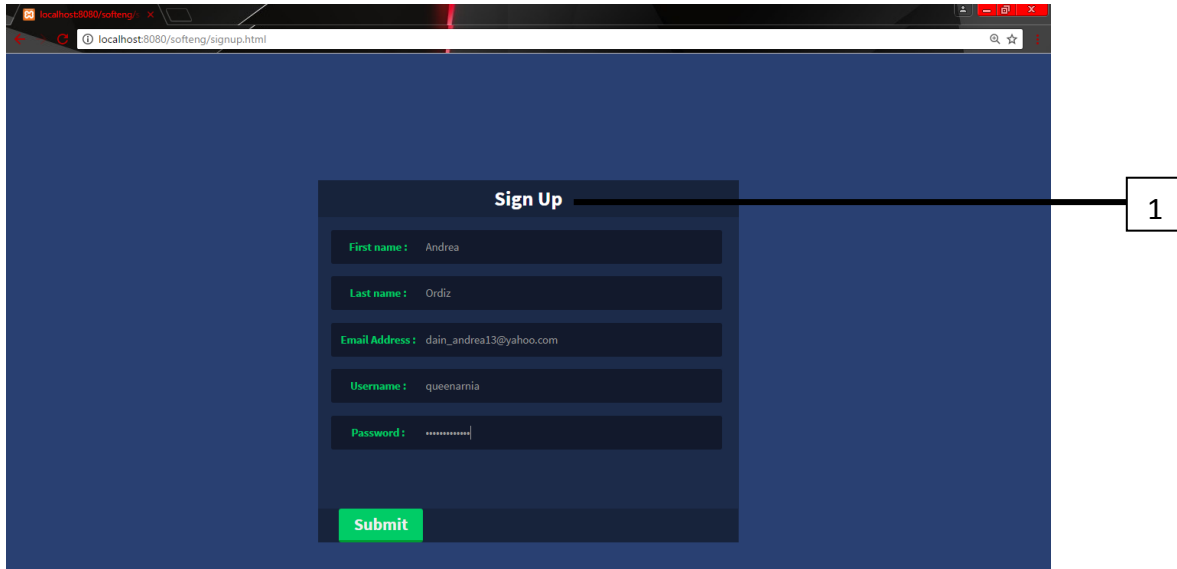
Print Report



CLASS DIAGRAM



USER MANUAL



A screenshot of a web browser displaying a "Sign Up" form. The browser's address bar shows "localhost:8080/softeng/signup.html". The form is centered on a dark blue background. It has a title "Sign Up" at the top. Below the title are five input fields: "First name" with the value "Andrea", "Last name" with "Ordiz", "Email Address" with "dain_andrea13@yahoo.com", "Username" with "queenarnia", and "Password" with masked characters. A green "Submit" button is at the bottom of the form. A black line points from a box containing the number "1" to the "Sign Up" title.

localhost:8080/softeng/signup.html

Sign Up

First name : Andrea

Last name : Ordiz

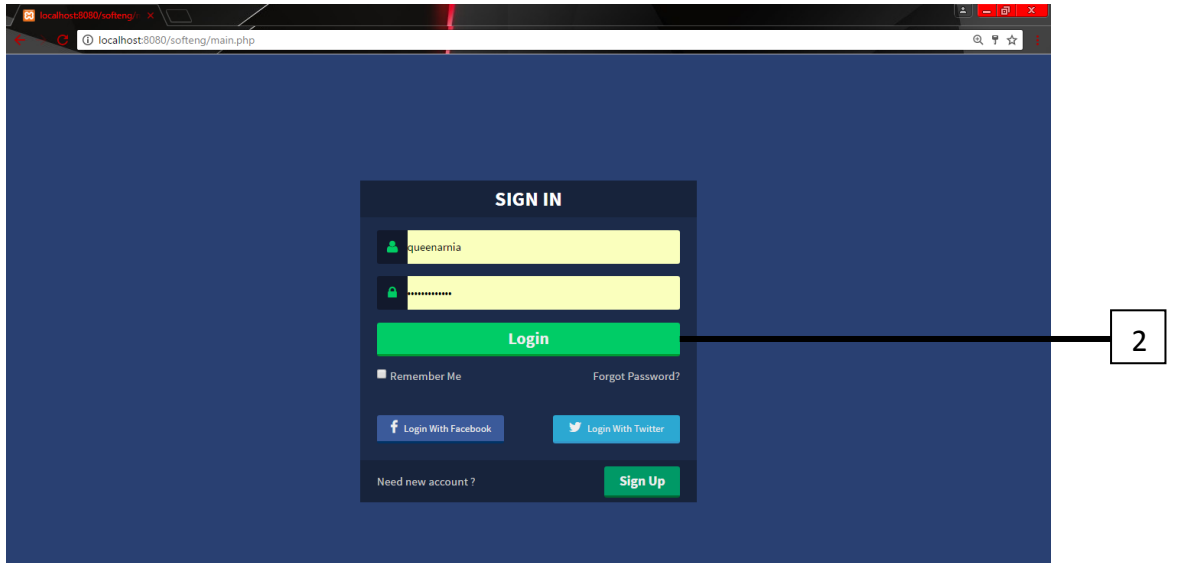
Email Address : dain_andrea13@yahoo.com

Username : queenarnia

Password :

Submit

1



A screenshot of a web browser displaying a "SIGN IN" form. The browser's address bar shows "localhost:8080/softeng/main.php". The form is centered on a dark blue background. It has a title "SIGN IN" at the top. Below the title are two input fields: a username field with the value "queenarnia" and a password field with masked characters. A green "Login" button is below these fields. Below the "Login" button are links for "Remember Me" and "Forgot Password?". At the bottom of the form are two buttons: "Login With Facebook" and "Login With Twitter". At the very bottom, there is a link "Need new account?" and a green "Sign Up" button. A black line points from a box containing the number "2" to the "Login" button.

localhost:8080/softeng/main.php

SIGN IN

queenarnia

.....

Login

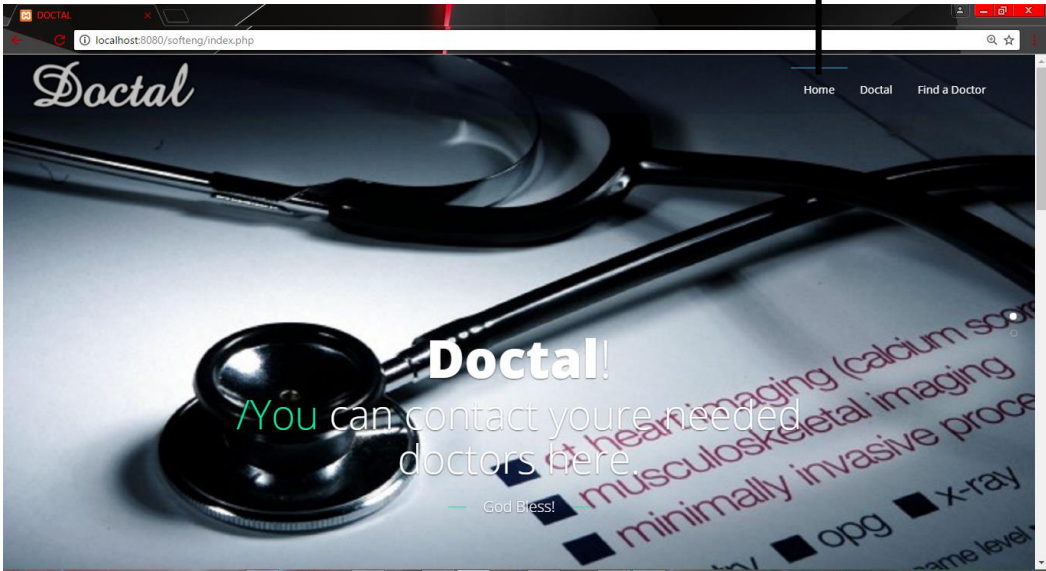
☐ Remember Me [Forgot Password?](#)

[Login With Facebook](#) [Login With Twitter](#)

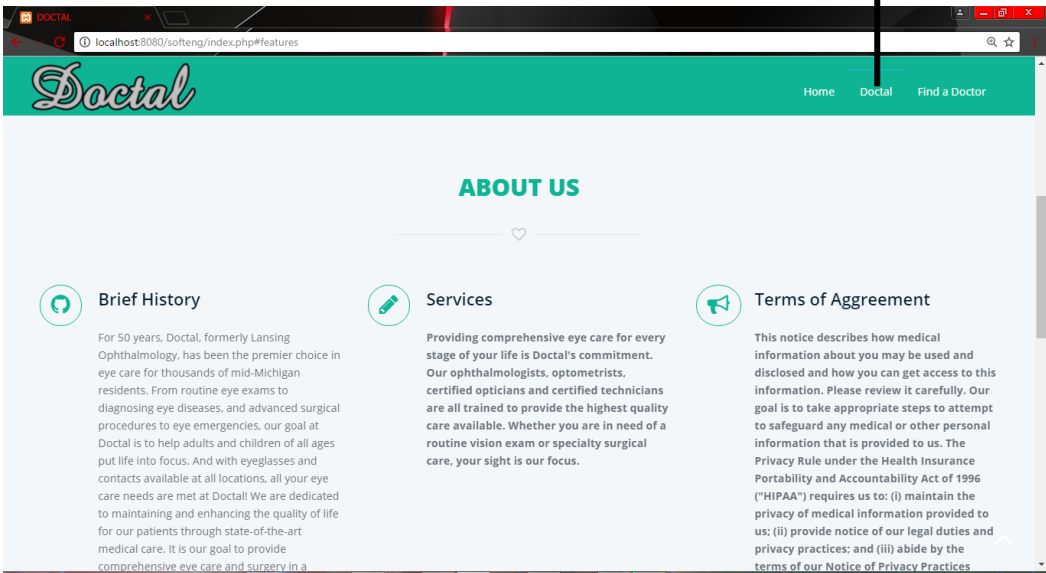
[Need new account?](#) [Sign Up](#)

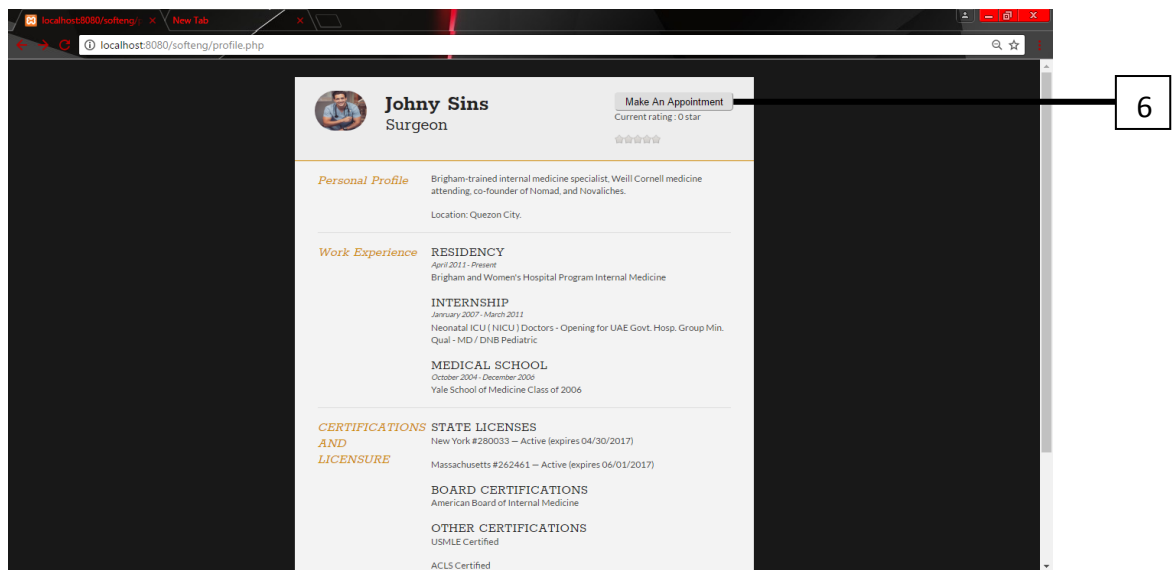
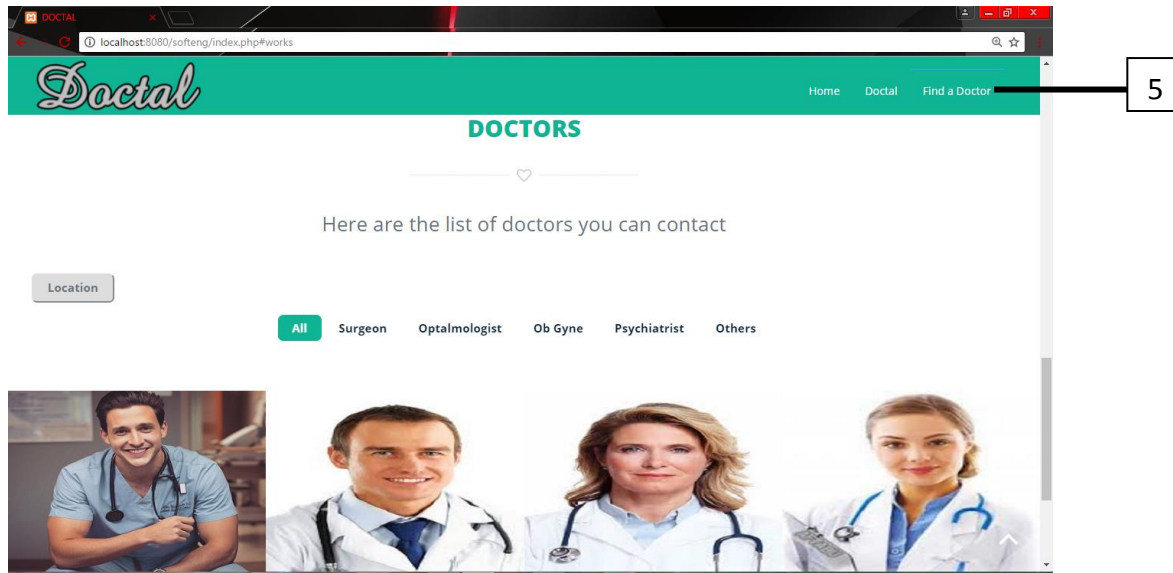
2

3



4





localhost:5080/softeng/appointment.html

Name

Email

Phone

Special notes, concerns, or requirements

What is the best way to reach you?

☐ Phone

☐ Email

Days of the week you are available for appointment:

☐ Monday

☐ Tuesday

☐ Wednesday

☐ Thursday

☐ Friday

Best time of day for your appointment:

☐ Morning

☐ Afternoon

7

1. **Sign Up** - User will fill up the form that will be submitted.
2. **Login** - User will use the username and password created to access the webpage.
3. **Home** - Views the home page.
4. **Doctal** - Information about the webpage.
5. **Find a doctor** - Display the information about the doctors (Specialization, Location, certifications)
6. **Make an appointment** - Display the form to be filled up.
7. **Request my Appointment** - Sends the information of the user.

TEST SCRIPT

Scenarios	Sub Levels	Complexity	Date of Execution	Status	Defect Description
Log In Page	Log In	Medium	03/04/2017	Passed	
Main Menu	Search for a Doctor	Medium	03/28/2017	Passed	
Sub Menu	Choose a Doctor	Complex	04/01/2017	Not yet executed	
	Make an appointment	Complex	04/01/2017	Not yet executed	

CODE LISTING

Sign-up HTML

```
<!DOCTYPE html>

<html lang="en-us">

<meta charset="utf-8" />

<head>

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<!-- <link rel="stylesheet" href="css/styles.css"> -->

<script type="text/javascript" src="jquery-3.2.0.min.js"></script>

<script type="text/javascript" src="script.js"></script>

<style>

@import url("http://maxcdn.bootstrapcdn.com/font-awesome/4.3.0/css/font-awesome.min.css");

@import url("http://fonts.googleapis.com/css?family=Source+Sans+Pro:400,700");

*{margin:0; padding:0}

body{background:#294072; font-family: 'Source Sans Pro', sans-serif}

.form{width:500px; margin:0 auto; background:#1C2B4A; margin-top:150px}

.header{height:44px; background:#17233B}

.header h2{height:44px; line-height:44px; color:#fff; text-align:center}

.login{padding:0 15px}

.login span.un{width:24%; text-align:center; color:#0C6; border-radius:3px 0 0 3px}

.text{background:#12192C; width:75%; border-radius:0 3px 3px 0; border:none; outline:none; color:#999; font-family: 'Source Sans Pro', sans-serif}

.text,.login span.un{display:inline-block; vertical-align:top; height:40px; line-height:40px; background:#12192C;}

ul li{height:40px; margin:15px 0; list-style:none}

.ch{display:inline-block; width:50%; color:#CCC}

.ch a{color:#CCC; text-decoration:none}

.ch:nth-child(2){text-align:right}

.sign{width:90%; padding:0 5%; height:40px; display:table; background:#17233B}

.sign div{display:inline-block; width:10%; line-height:15px; color:#ccc; font-size:14px}
```

```
.up{text-align:right}
```

```
.btn{height:40px;border:none; width: 100px; background:#0C6; outline:none; font-family: 'Source Sans Pro', sans-serif; font-size:20px; font-weight:bold; color:#eee; border-bottom:solid 3px #093; text-align:center; border-radius:3px; cursor:pointer}
```

```
@media(max-width:480px){.form{width:100%}}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="form">
```

```
<div class="header"><h2>Sign Up</h2></div>
```

```
<div class="login">
```

```
<form method = 'post'>
```

```
<ul>
```

```
<li>
```

```
<span class="un"><H5>First name : </H5></span><input type="text" id="fn" name = 'firstname' required class="text" placeholder="DSDSD"/></li>
```

```
<li>
```

```
<span class="un"><H5>Last name : </H5></span><input type="text" id="ln" name = 'lastname' required class="text" placeholder="" /></li>
```

```
<li>
```

```
<span class="un"><H5>Email Address : </H5></span><input type="text" id="email" name = 'email' required class="text" placeholder="" /></li>
```

```
<li>
```

```
<span class="un"><H5>Username : </H5></span><input type="text" id="un" name = 'username' required class="text" placeholder="" /></li>
```

```
<li>
```

```
<span class="un"><H5>Password : </H5></span><input type="password" id="ps" name = 'dsdssd' required class="text" placeholder="" /></li>
```

```
<li>
```

```
</li>
```

```
</ul>
```

```
</div>
```

```
<div class="sign">

<input id="add" type="button" class="btn btn-primary" value="Submit">

</form>

</div>

</div>

</body>

</html>
```

Appointment HTML

```
<html>

<head>

    <title></title>

<link rel="stylesheet" href="css/appointment.css">

</head>

<body>

<div class="landing-page"><div class="form-appointment"><div class="wpcf7" id="wpcf7-f560-p590-o1"><form
action="http://localhost:8080/softeng/index.php" method="post" class="wpcf7-form" novalidate="novalidate"
_ipchecked="1">

<div style="display: none;">

<input type="hidden" name="_wpcf7" value="560">

<input type="hidden" name="_wpcf7_version" value="3.5">

<input type="hidden" name="_wpcf7_locale" value="">

<input type="hidden" name="_wpcf7_unit_tag" value="wpcf7-f560-p590-o1">

<input type="hidden" name="_wpnonce" value="dbb28877d5">

</div>

<div class="group">

<div style="width: 48%; float: left;">

<span class="wpcf7-form-control-wrap text-680"><input type="text" name="text-680" value="" size="45" class="wpcf7-form-
control wpcf7-text wpcf7-validates-as-required" aria-required="true" placeholder="Name"></span><br>
```


<input type="email" name="email-680" value="" size="45" class="wpcf7-form-control wpcf7-text wpcf7-email wpcf7-validates-as-required wpcf7-validates-as-email" aria-required="true" placeholder="Email">

<input type="tel" name="tel-630" value="" size="45" class="wpcf7-form-control wpcf7-text wpcf7-tel wpcf7-validates-as-required wpcf7-validates-as-tel" aria-required="true" placeholder="Phone">

<textarea name="textarea-398" cols="40" rows="10" class="wpcf7-form-control wpcf7-textarea" placeholder="Special notes, concerns, or requirements"></textarea></div>

<div style="width: 48%; float: right;">

<h4>What is the best way to reach you?</h4>

<p><label><input type="radio" name="radio-98" value="Phone"> Phone</label><label><input type="radio" name="radio-98" value="Email"> Email</label></p>

<h4>Days of the week you are available for appointment:</h4>

<p><label><input type="checkbox" name="checkbox-465[]" value="Monday"> Monday</label><label><input type="checkbox" name="checkbox-465[]" value="Tuesday"> Tuesday</label><label><input type="checkbox" name="checkbox-465[]" value="Wednesday"> Wednesday</label><label><input type="checkbox" name="checkbox-465[]" value="Thursday"> Thursday</label><label><input type="checkbox" name="checkbox-465[]" value="Friday"> Friday</label></p>

<h4>Best time of day for your appointment:</h4>

<p><label><input type="checkbox" name="checkbox-246[]" value="Morning"> Morning</label><label><input type="checkbox" name="checkbox-246[]" value="Afternoon"> Afternoon</label></p></div>

</div>

<div style="text-align: center; padding-top: 2em; border-top: 1px solid rgb(153, 202, 129); margin-top: 1em;"><input type="submit" value="Request My Appointment" class="wpcf7-form-control wpcf7-submit" onclick = "myFunction()"></div>

<div class="wpcf7-response-output wpcf7-display-none"></div></form></div></div></div>

</body>

<script type="text/javascript">

function myFunction()

```
{  
  
    alert("Your request has been process!");  
  
}  
  
</script>  
  
}  
  
</html>
```

Appointment CSS

```
.group:after {  
  
    content: "";  
  
    display: block;  
  
    clear: both;  
  
}
```

```
.landing-page {  
  
    width: 882px;  
  
    margin: 100px auto 0;  
  
}
```

```
.landing-page *,  
.landing-page *:before,  
.landing-page *:after {  
  
    -webkit-box-sizing: border-box;  
  
    -moz-box-sizing: border-box;  
  
    box-sizing: border-box;  
  
}
```

```
.landing-page .module {  
  
    border: 1px solid rgb(219, 219, 219);  
  
}
```

```
border-radius: 4px;

float: left;

padding: 2em;

width: 48%;

}
```

```
.landing-page .module > *:last-child,

.landing-page .module > *:last-child > *:last-child,

.landing-page .module > *:last-child > *:last-child > *:last-child {

    margin: 0;

    padding: 0;

}
```

```
.landing-page .note {

    background-color: rgb(236, 248, 236);

    border: 1px dashed;

    border-radius: 4px;

    color: rgb(115, 136, 96);

    font-family: georgia;

    font-size: .9em;

    font-style: italic;

    margin: 20px auto;

    padding: 2em;

}
```

```
.form-appointment {

    padding: 2em;

    background-color: rgb(239, 252, 239);

    border-radius: 4px;
```

```
border: 1px solid rgb(130, 228, 130);

box-shadow: 2px 2px 4px 0px rgba(0, 0, 0, 0.1);

font-family: 'PT Sans', Arial, sans-serif;

margin: 20px auto;

}
```

```
.form-appointment input[type=text],
.form-appointment input[type=email],
.form-appointment input[type=tel],
.form-appointment textarea {

    border: 1px solid rgb(153, 202, 129);

    border-radius: .2em;

    font-family: 'PT Sans', Arial, sans-serif;

    font-size: 1.1em;

    padding: .4em 1em;

    margin: 0 0 .8em;

    width: 100%;

    box-shadow: 0 0 8px rgba(0,0,0,.08) inset;

}
```

```
.form-appointment input[type=text],
.form-appointment input[type=email],
.form-appointment input[type=tel],
.form-appointment input[type=submit],
.form-appointment textarea {

    -webkit-transition: all .2s ease-in-out;

    -moz-transition: all .2s ease-in-out;

    transition: all .2s ease-in-out;

}
```

```
.form-appointment input[type=text]:active,
.form-appointment input[type=text]:focus,
.form-appointment input[type=email]:active,
.form-appointment input[type=email]:focus,
.form-appointment input[type=tel]:active,
.form-appointment input[type=tel]:focus,
.form-appointment textarea:active,
.form-appointment textarea:focus {
    outline: 0;
    box-shadow: 0 0 6px rgb(176, 226, 188);
}

.form-appointment textarea {
    height: 160px;
}

.form-appointment input[type=submit] {
    background-color: rgb(118, 207, 118);
    border: 1px solid rgb(134, 189, 134);
    border-radius: 4px;
    color: rgb(255, 255, 255);
    cursor: pointer;
    font-family: inherit;
    font-size: 1.4em;
    padding: 10px 18px;
}

.form-appointment input[type=submit]:hover {
    background-color: white;
    color: rgb(118, 207, 118);
}
```

```
}  
  
.form-appointment .wpcf7-list-item-label {  
    color: rgb(130, 178, 136);  
}  
  
span.wpcf7-list-item {  
    display: block;  
    margin-left: -.02em;  
}
```