# Chapter 5 Testing

Testing is the process of finding errors or checking whether the product works as its aspect to do that functionality or task. It tests whether it meets the user requirements. It is process of verifying or identifying errors or faults in the system.

There are different methods or process of testing

* Black box testing
* White box testing

## 5.1 Black box testing:

It may be performed by the user which does not have more knowledge of programming. It checks the functionality not with code logic of code written. It checks whether the input and output expected match or not.

Black box testing techniques are given below:

* **Equivalent testing:**

This is performed when there is similar type of values to test and test cases which helps to save time and money. Similar types of test are grouped and perform one of them for testing.

* **Boundary testing:**

This is performed to check the boundary values whether the certain range of values are acceptable or not. It is mostly suitable for the those test whose test have within ranges of values.

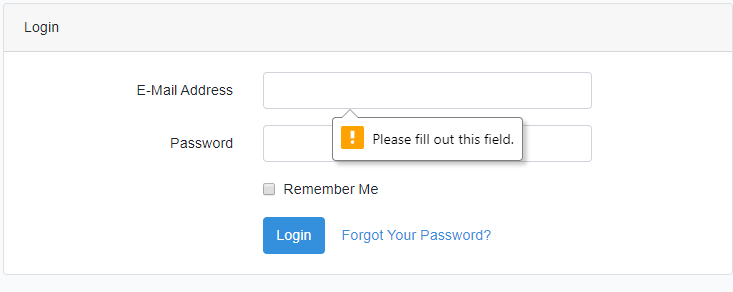
* **Decision table testing:**

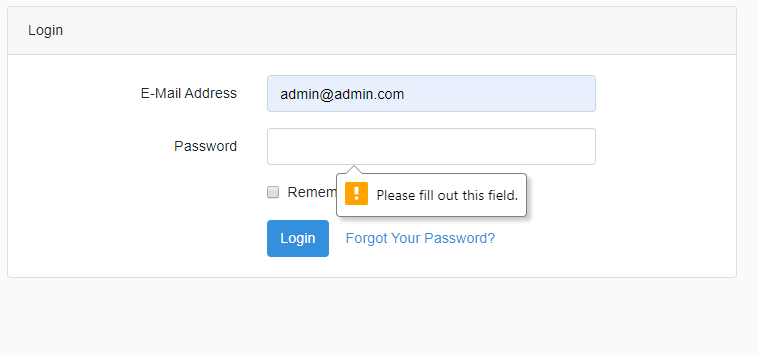
It is used to perform to test conditional statement or switch statement function testing.

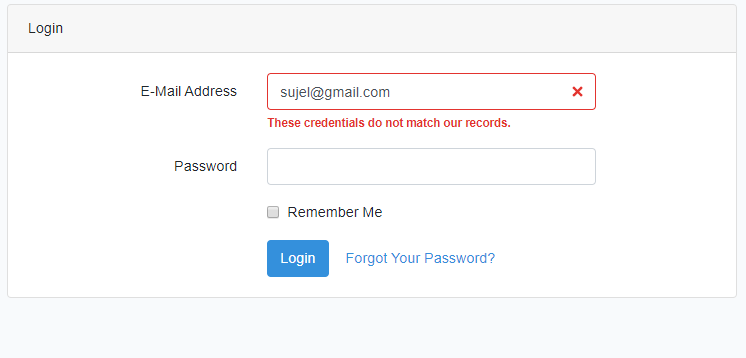
Some black box testing performed for this application are mention below:

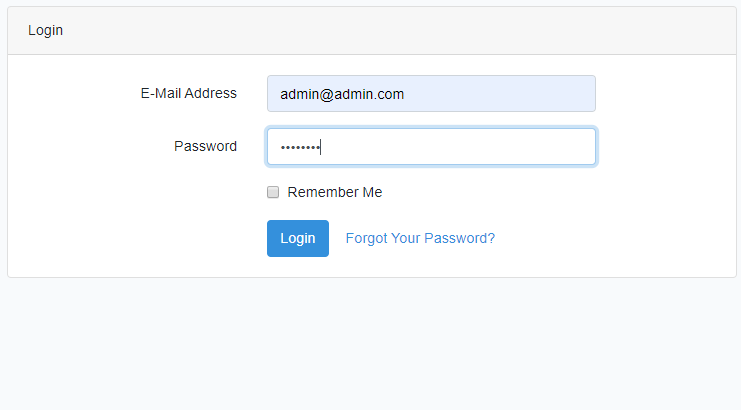
### Login for admin:

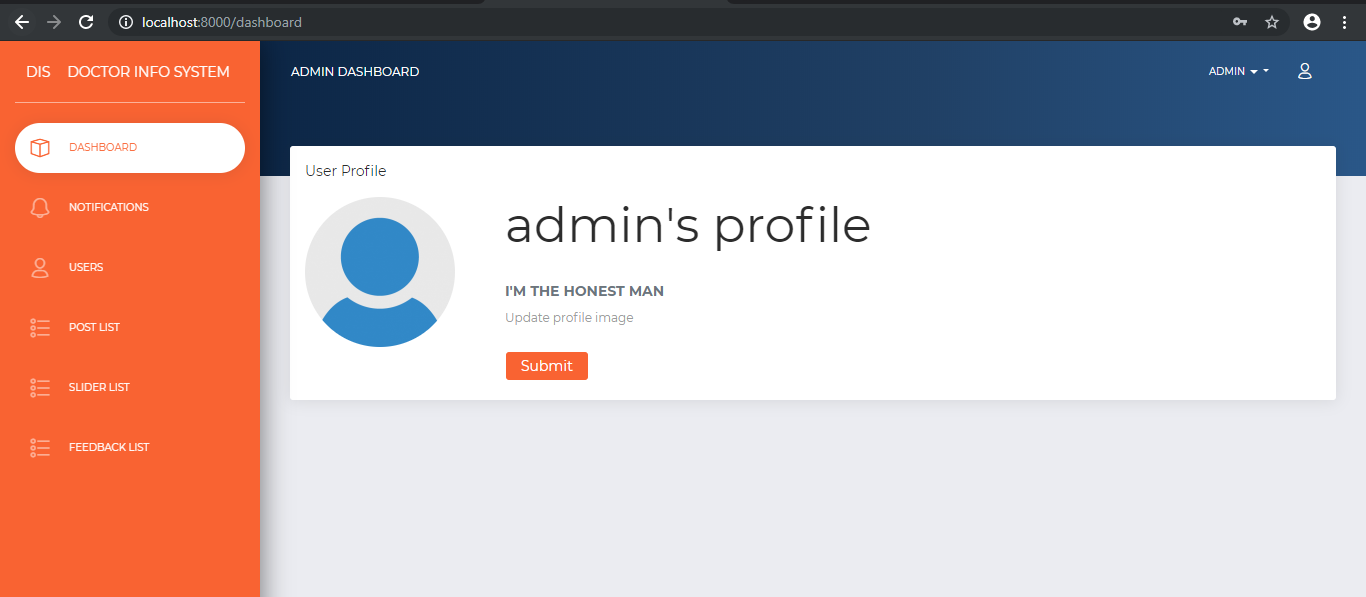
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case**  **ID** | **Test Scenario** | **Test Description** | **Test Data** | **Expected Result** | **Actual Result** | **Status** |
| T001LoginAdmin | Login validation | Without email and password | Email=””  Password=”” | Login failed message email required | Login failed message email required | pass |
| T002loginAdmin | Login validation | With email but not password | Email=[admin@admin.com](mailto:admin@admin.com)  Password=”” | Login failed message password required | Login failed message password required | pass |
| T003loginAdmin | Login validation | With invalid email and admin right password for admin | Email=[sujel@gmail.com](mailto:sujel@gmail.com)  Password=”admin123” | Message These credentials do not match our record | Message These credentials do not match our record | Pass |
| T004loginAdmin | Verification | Provide valid email and password | Email=[admin@admin.com](mailto:admin@admin.com)  Password=”admin123” | Display dashboard with user profile | Display dashboard with user profile | Pass |





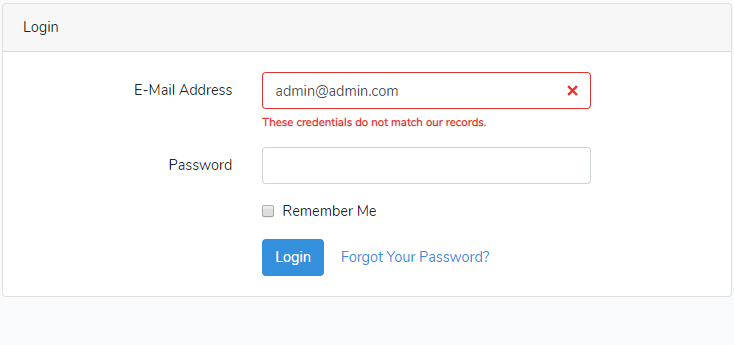


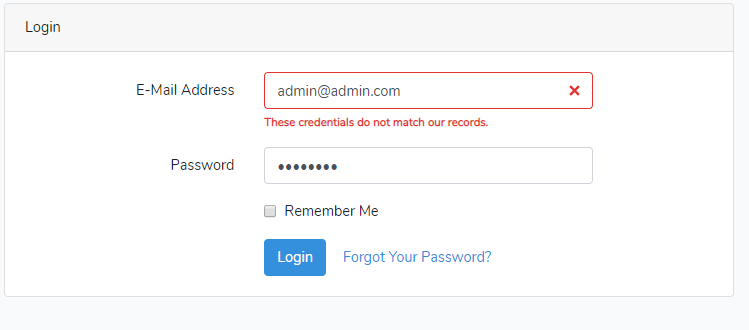


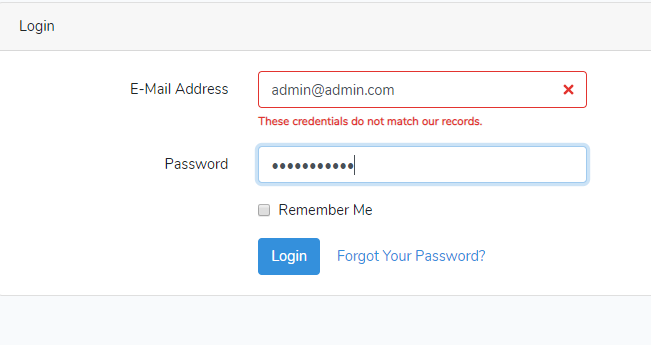


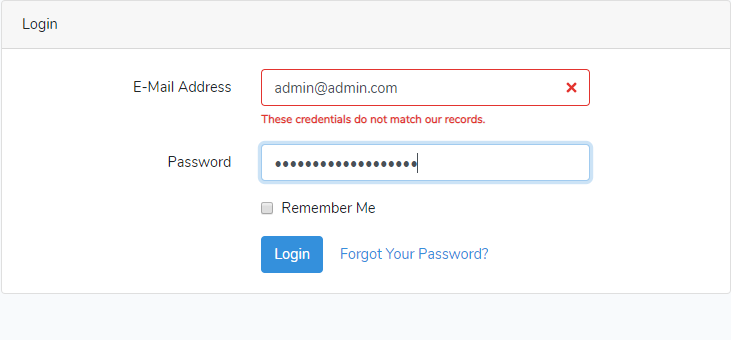
### Login Attempt:

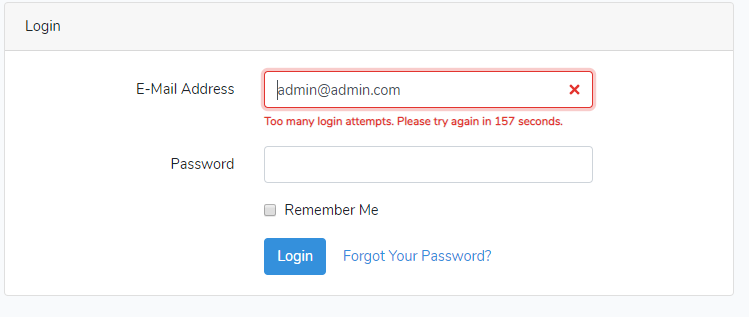
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T005loginattempt | Verification | Provide right email but password wrong | Email=[admin@admin.com](mailto:admin@admin.com)  Password=”amen12345” | Message These credentials do not match our record | Message These credentials do not match our record | pass |
| T006loginattempt | verification | Provide wrong password for 2 time | Email=[admin@admin.com](mailto:admin@admin.com)  Password=”jahir123” | Message These credentials do not match our record | Message These credentials do not match our record | Pass |
| T007loginattempt | verification | Provide wrong password for 3 time | Email=[admin@admin.com](mailto:admin@admin.com)  Password=”johncean997” | Message These credentials do not match our record | Message These credentials do not match our record | Pass |
| T008loginattempt | verification | Provide wrong password for 4 time | Email=[admin@admin.com](mailto:admin@admin.com)  Password=”sethfreakingrollens” | Message too many login attempt please try in 157 seconds | Message too many login attempt please try in 157 seconds | Pass |





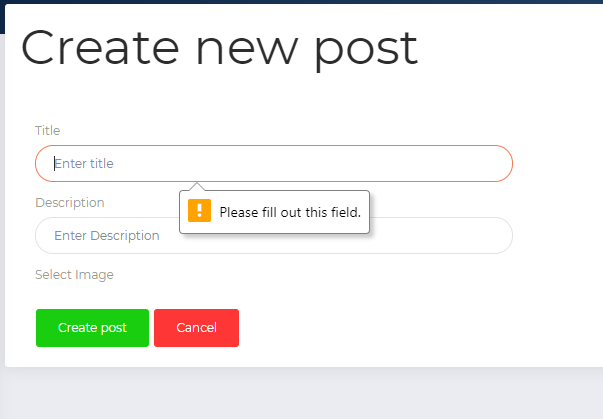


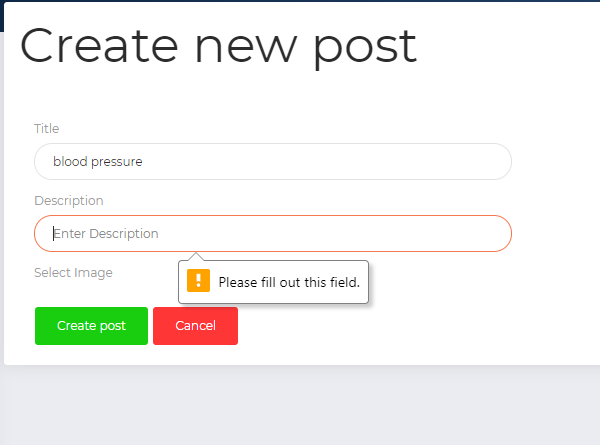


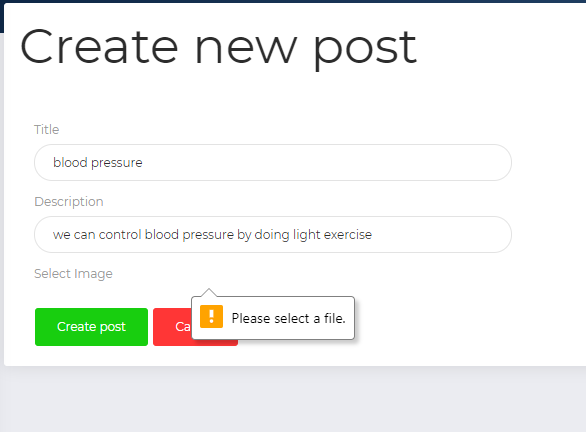


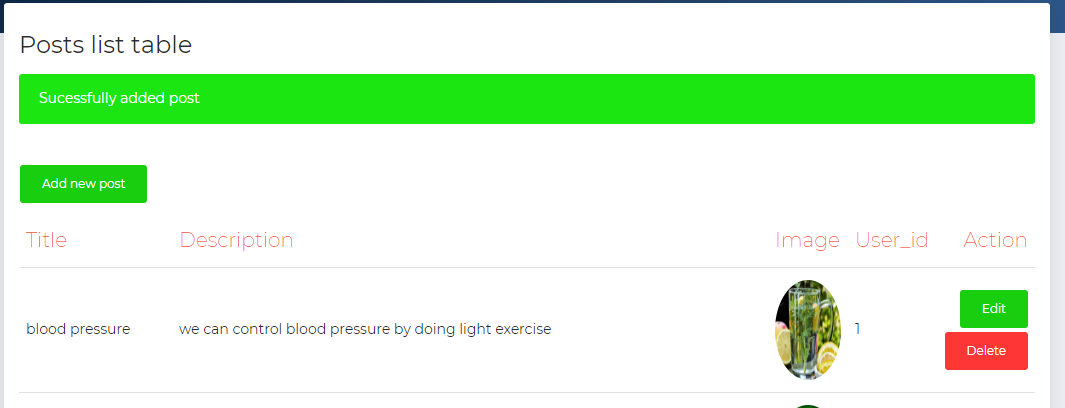
### Create post:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T009createpost | Validation of field required | Click on submit without providing any field | Title=””  Description=””  Image=”” | Message title required | Message title required | Pass |
| T010createpost | Validation of field required | Provided title only | Title=”blood pressure”  Description=””  Image=”” | Message description required | Message description required | Pass |
| T011createpost | Validation of field required | Provided title and description but not image | Title=”blood pressure”  Description=” we can control blood pressure by doing light exercise”  Image=”” | Message image required | Message image required | Pass |
| T011createpost | Validation of field required | Provided all fields | Title=”blood pressure”  Description=” we can control blood pressure by doing light exercise”  Image=” tee-3809474\_640.jpg” | Message successfully added post | Message successfully added post | Pass |





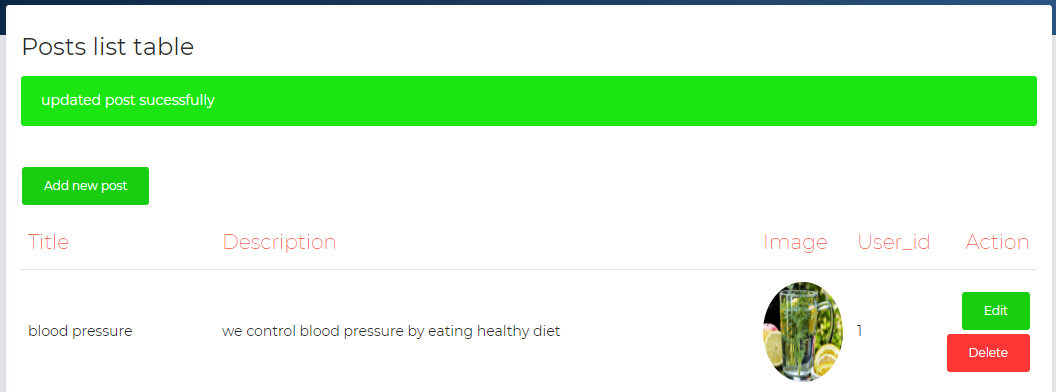


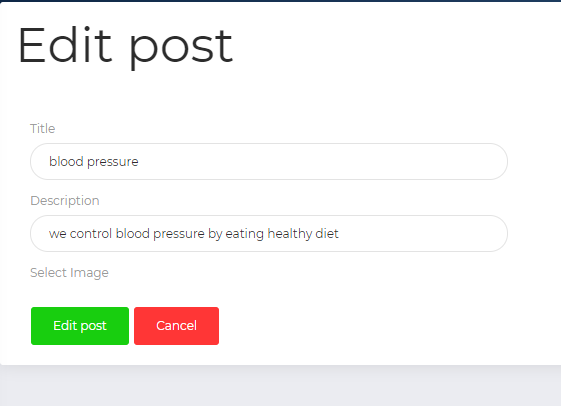


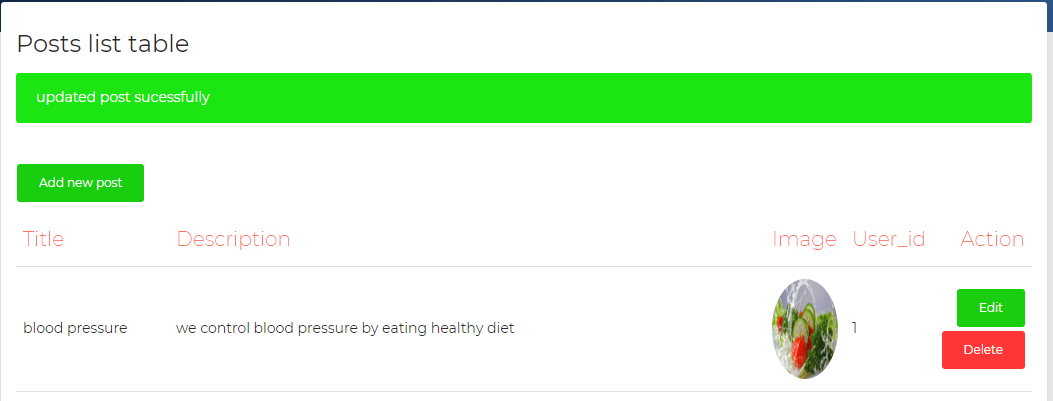
### Update post

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T013updatepost | Changes the descriptions | Make changes in only description | Title=”blood pressure”  Description=” we control blood pressure by eating healthy diet “ image=”” | Message updated successfully | Message updated successfully | Pass |
| T014updatepost | Changes the descriptions and images | Make changes in description and image | Title=”blood pressure”  Description=” we control blood pressure by eating healthy diet “ image=” eat-2834549\_640.jpg” | Message updated successfully | Message updated successfully | Pass |



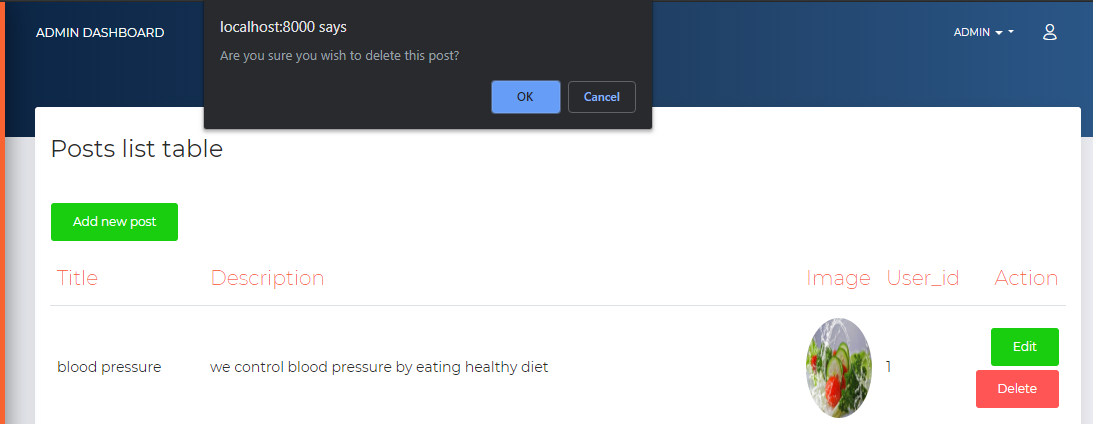


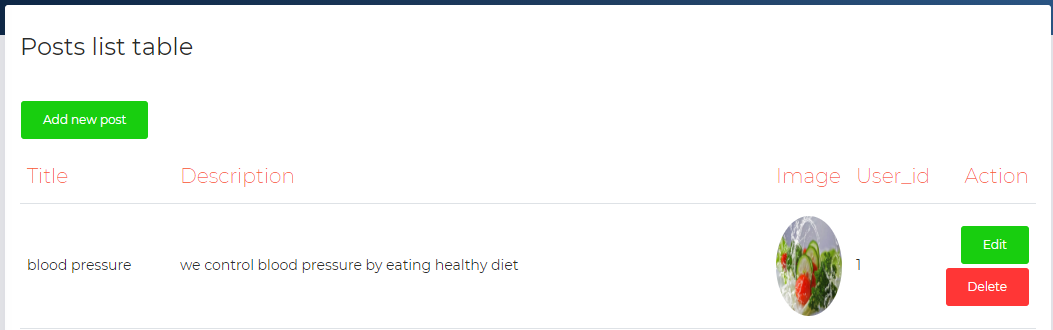


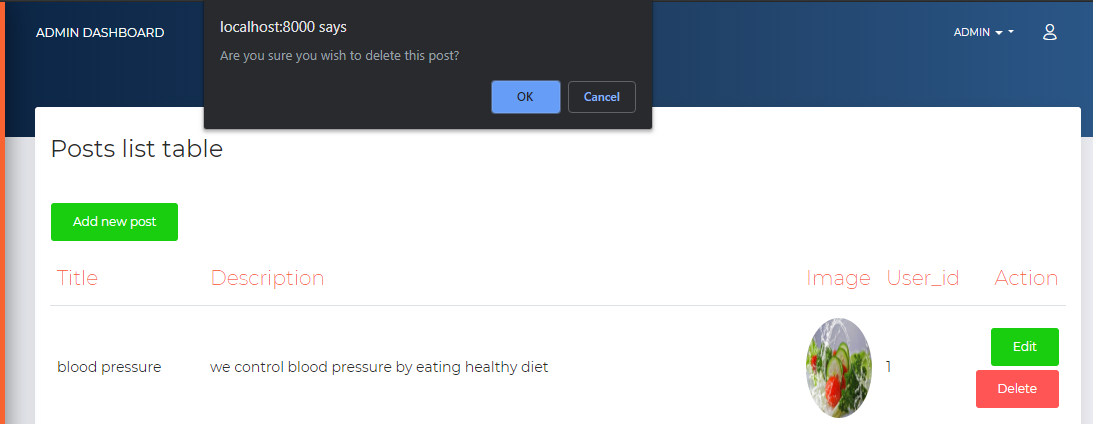


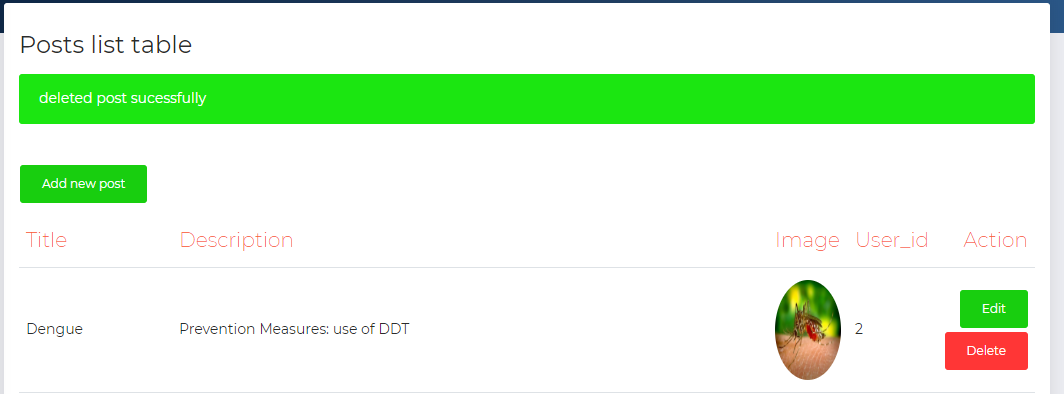
### Delete post

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T015deletepost | confirmation | Click on delete and select cancel | Confirmation  cancel | Return to post index page | Return to post index page | pass |
| T016deletepost | confirmation | Click on delete and select delete | Confirmation  Yes | Return to post index page with successfully delete post | Return to post index page with successfully delete post | pass |

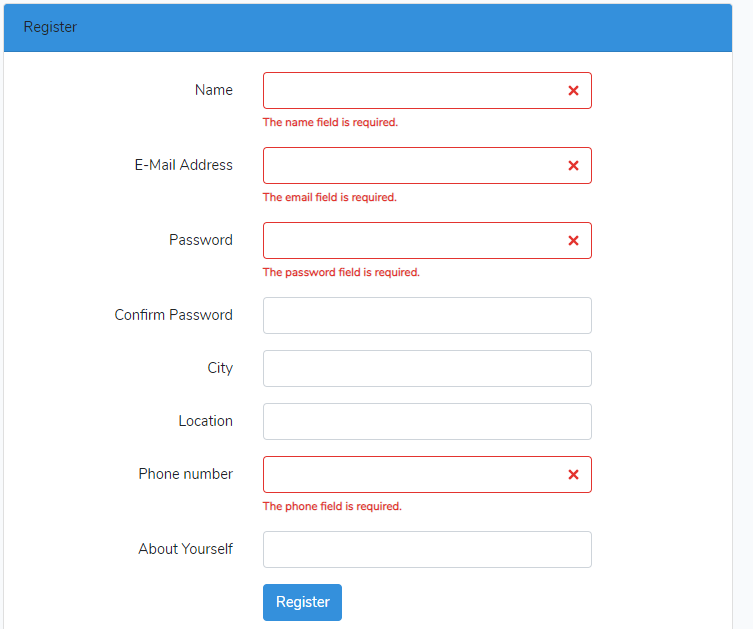


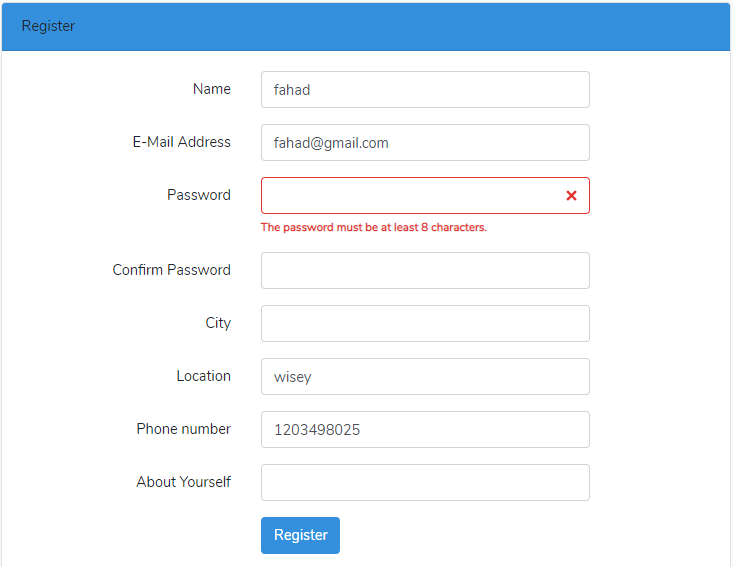


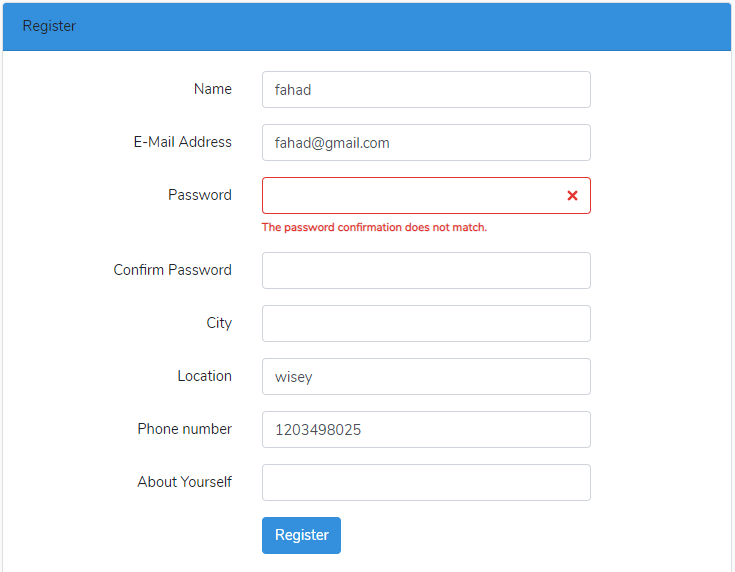


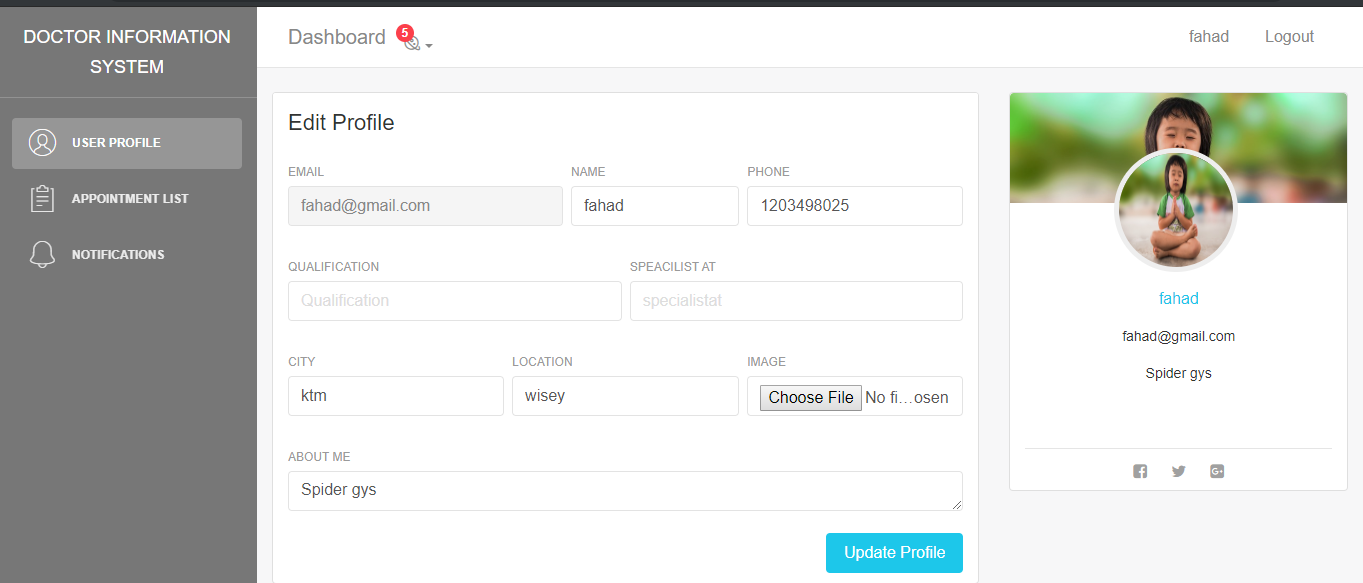


|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T017reguser | Validation | Without input all field | Email=”” password=””  Confirm password=”” and other too | Message error for required field | Message error for required field | Pass |
| T018reguser | Validation | Field all require field but password only 5 character | Email=[fahad@gmail.com](mailto:fahad@gmail.com)  password=”fahad”  Confirm password=”” and other similarly | Message error for password must be 8 character | Message error for password must be 8 character | Pass |
| T019reguser | Validation | Field all require field but password confirmation and password different | Email=[fahad@gmail.com](mailto:fahad@gmail.com) password=”fahad123”  Confirm password=”fahad” and other too | Message error for password should match with confirm password | Message error for password should match with confirm password | Pass |
| T020reguser | Validation | Filled all field properly | Email=[fahad@gmail.com](mailto:fahad@gmail.com) password=”fahad123”  Confirm password=”fahad123” and other too | View the home page  With profile | View the home page  with profile | Pass |



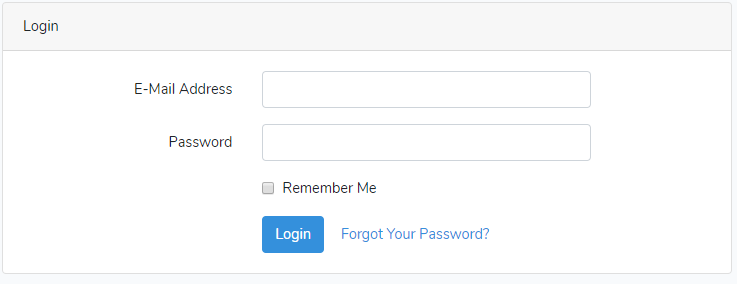


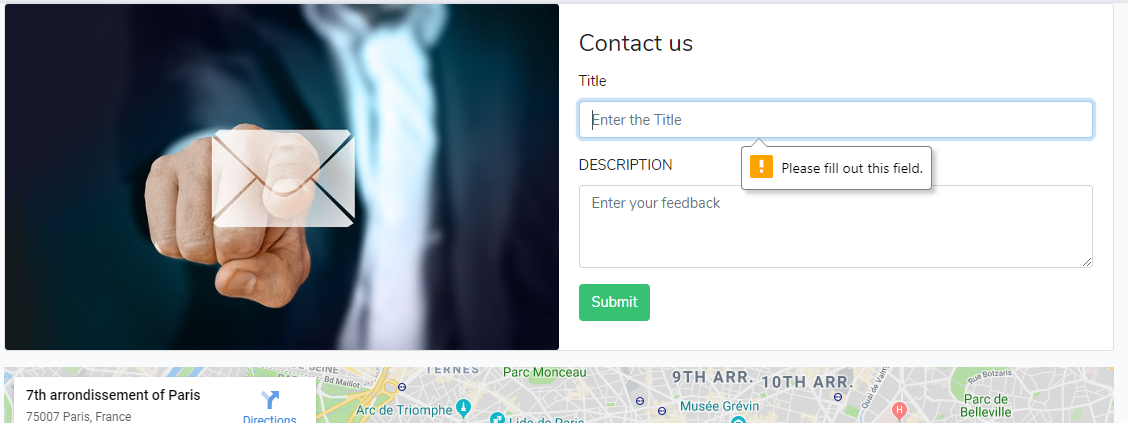


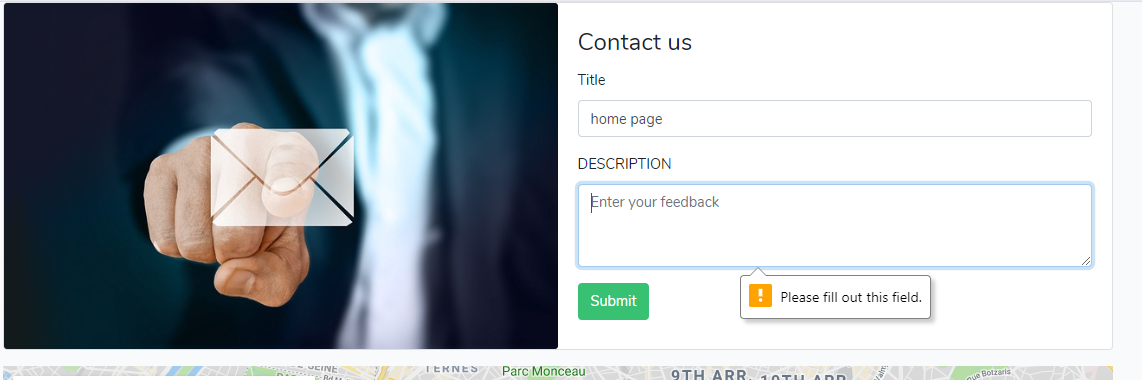


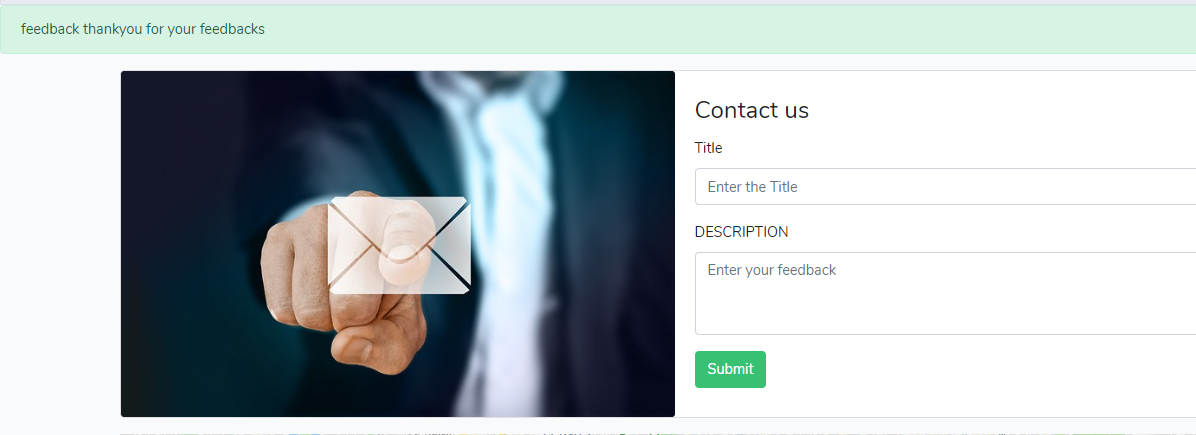
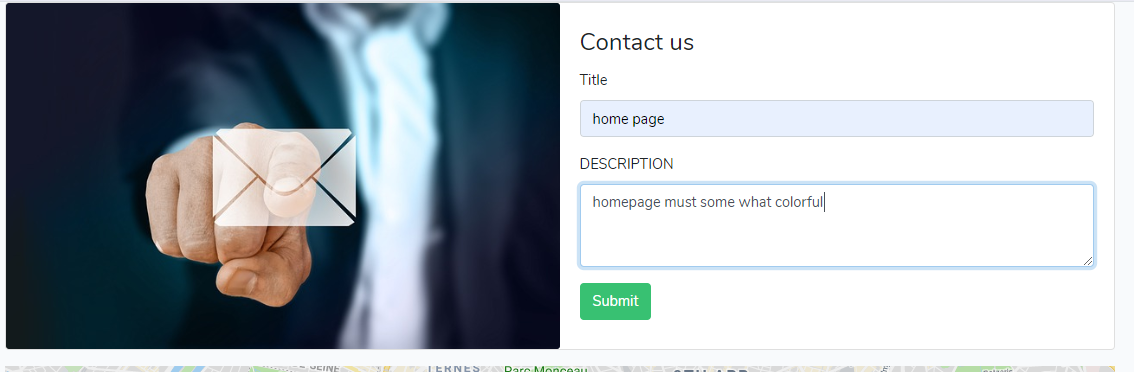
### Provide feedback

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T021feedback | Validation of field | Click on submit empty all field | Title=””  Description=”” | Message filled title required | Message filled title required | Pass |
| T022feedback | Validation of field | Filled only title | Title=”home page”  Description=”” | Message filled title required | Message filled title required | Pass |
| T023feedback | Validation of field | Filled all filed | Title=”home page”  Description=” homepage must some what colorful” | Message thank you for your feedback | Message thank you for your feedback | Pass |



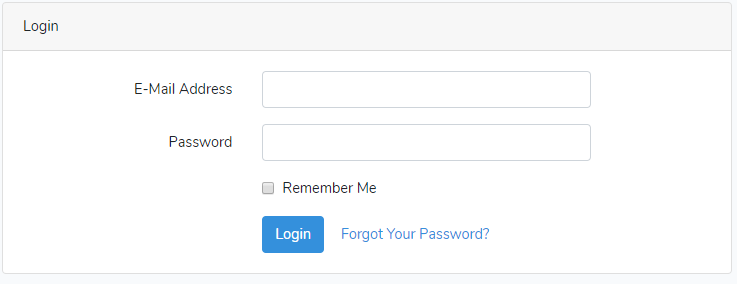


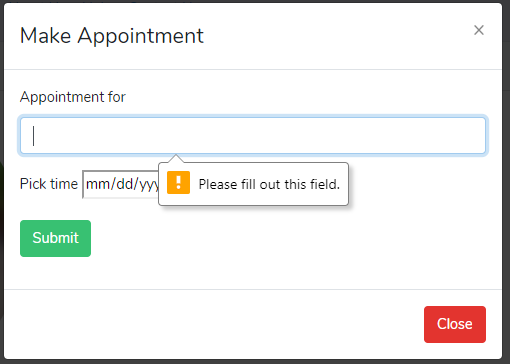


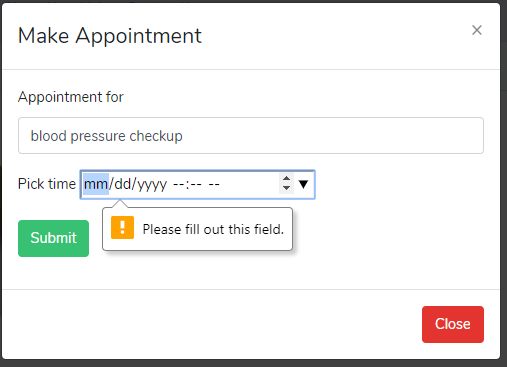


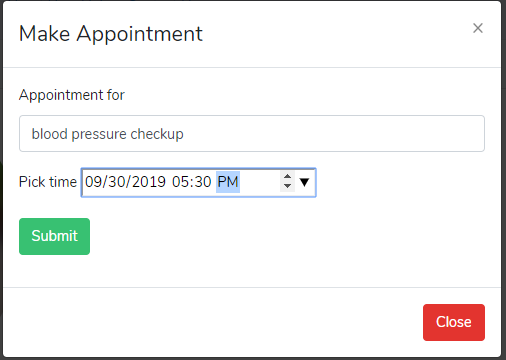
### Make appointment:

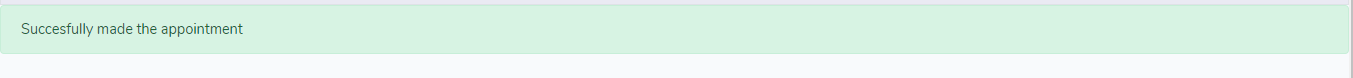
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T024appointment | Check for login | Without login click on make appointment | Click on make appointment | Redirect to login page | Redirect to login page | Pass |
| T025appointment | Validation of field | Login and click submit without providing any detail | Title=””  Datetime=”” | Message title not filled | Message title not filled | Pass |
| T026appointment | Validation of field | Provide title for appointment | Title=”blood pressure checkup”  Datetime=”” | Message time not selected | Message time not selected | Pass |
| T027appointment | Validation of field | Provide time and appointment title | Title=”blood pressure checkup”  Datetime=”9/30/2019 5:30 PM” | Message successfully made appointment | Message successfully made appointment | Pass |

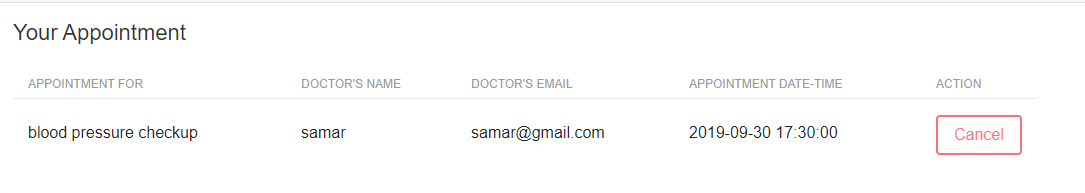






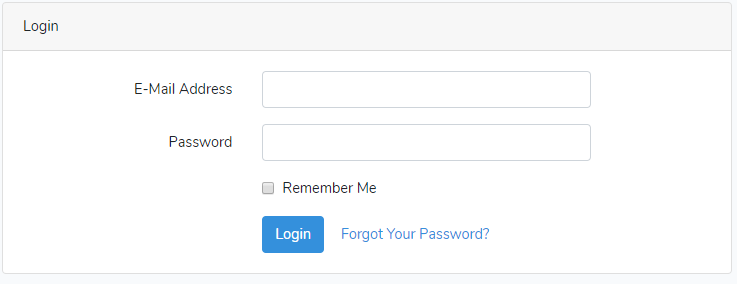


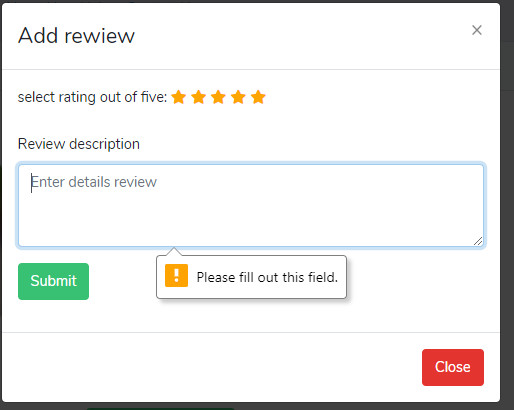


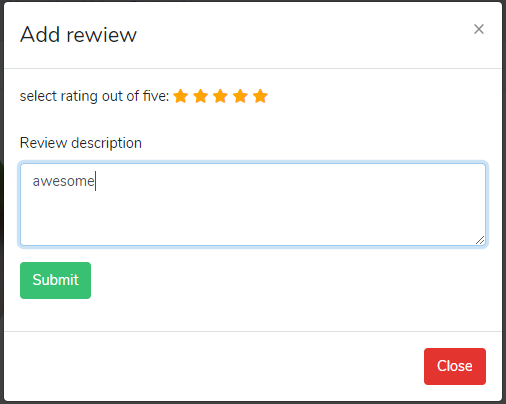


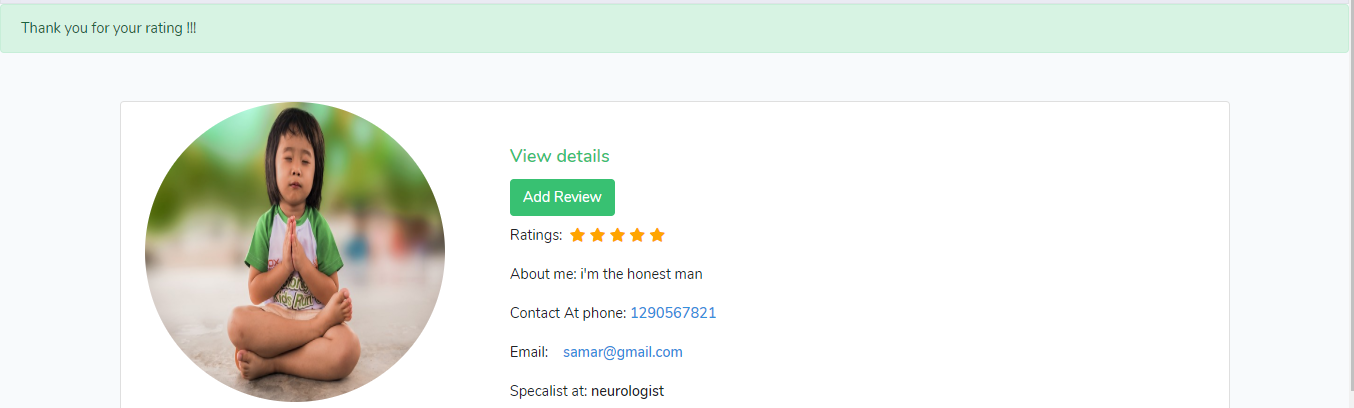
### Add review:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test scenario** | **Test description** | **Test data** | **Expected result** | **Actual result** | **Status** |
| T028rating | Check for login user | Click on add review without login | Without login try to add review | Redirect to login page | Redirect to login page | Pass |
| T029rating | Validate the field for making review | Click on star but not add review description | Stars=”5”  Description=”” | Message filled empty | Message filled empty | Pass |
| T030rating | Validate the field for making review | Provide both stars and review description | Stars=”5”  Review=”awesome” | Message successfully added review | Message successfully added review | Pass |









## 5.2 White box testing:

It is performed by tester having knowledge of programming. It mainly focuses on the logic of application. It is not only concerned with expected and actual output of the system. It symbolizes ability to see through the outer shell to inner code of the system.

There is different level of white box testing which are given below:

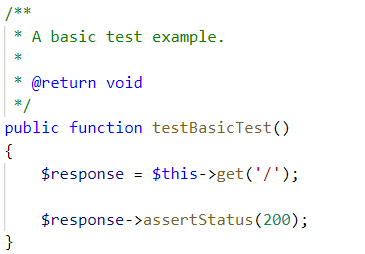
* Unit testing
* Integrated testing
* System testing

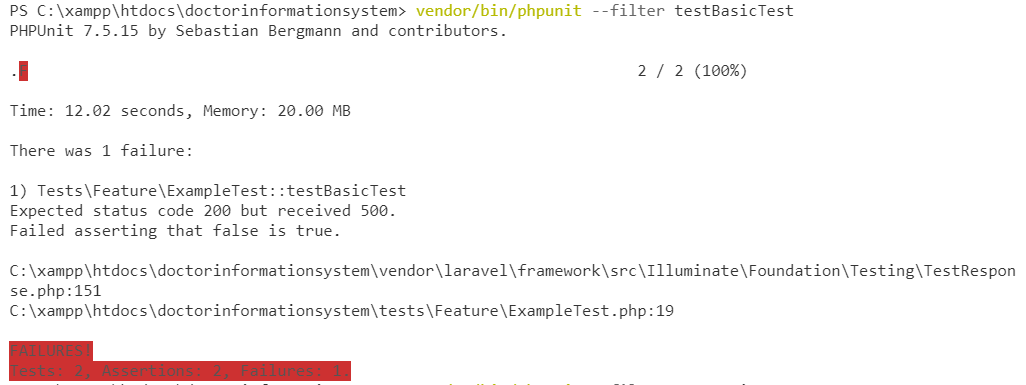
### 5.2.1 Unit testing:

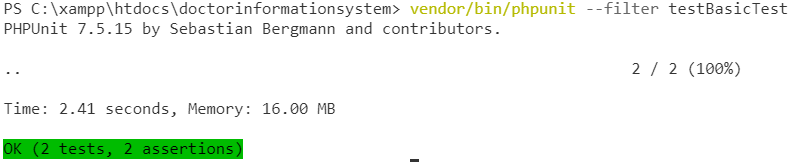
Unit testing may be defined as the level of white box testing in which every function is check individually whether the functionality/method perform as expected to work. Unit test for this application are mention below:

#### Welcome page unit testing:

**Test ID: T031welcomepage**

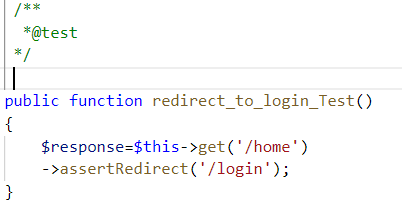
****

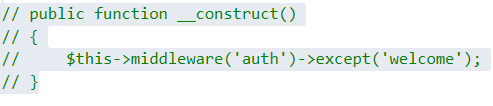
****

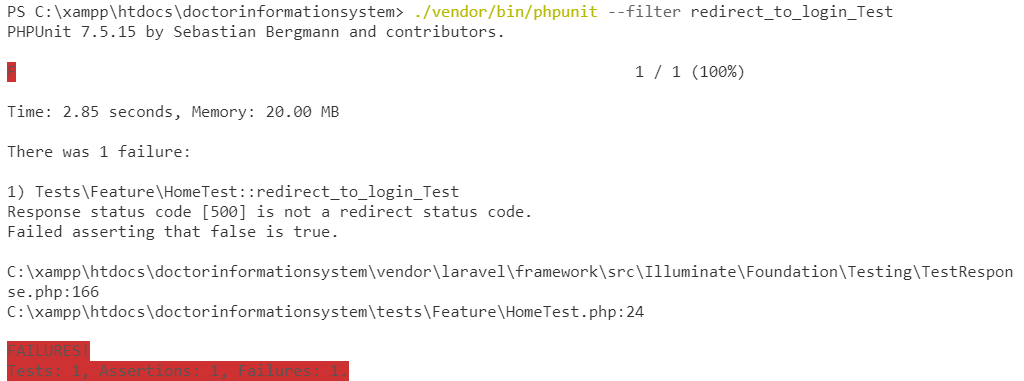
****

#### Redirect to login

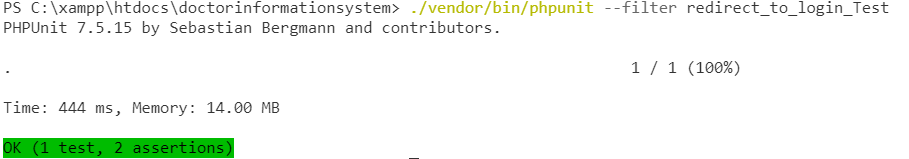
**Test ID: T032redirecttologin**

****

****

****

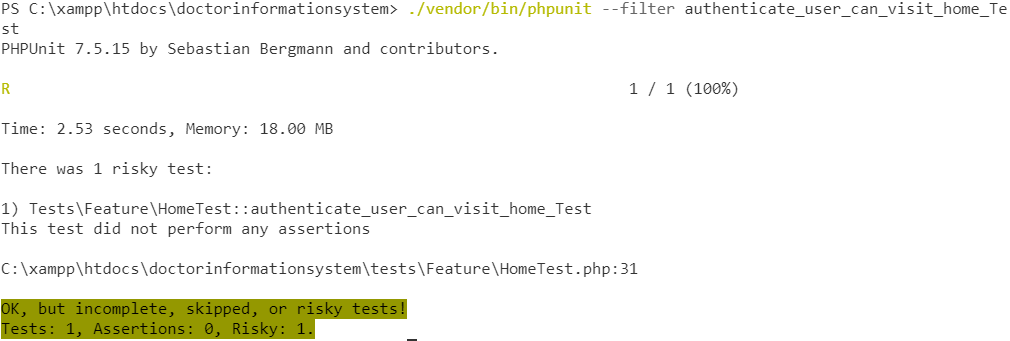
****

****

#### Unit test for login authentication to visit login page:

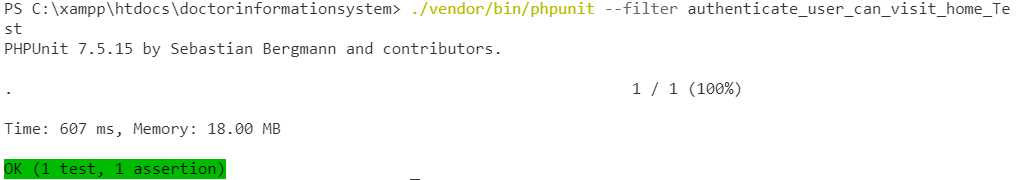
**Test ID: T032registernewuser**





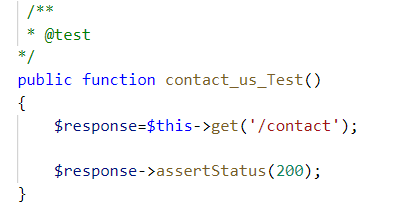


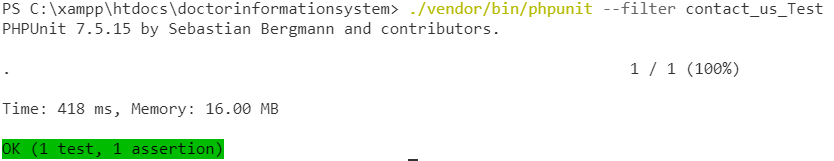




#### Unit test for contact us page view

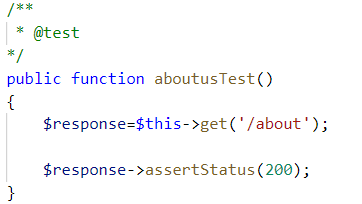
**Test ID: T033contactus**

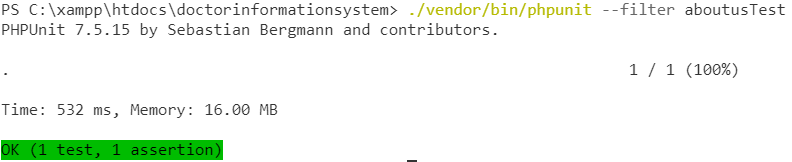




#### Unit test for about us page view

**Test ID: T034aboutus**

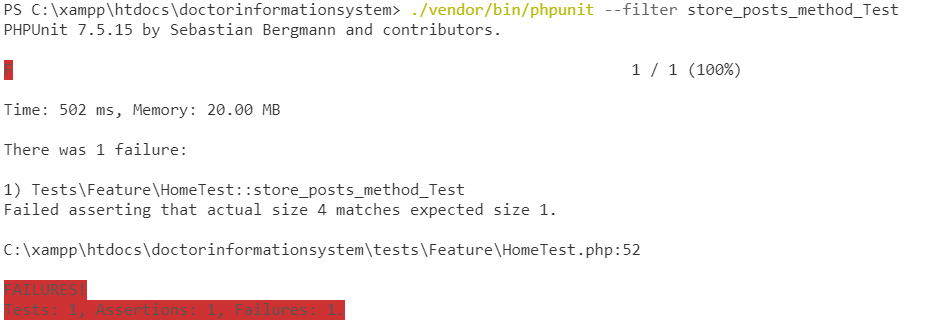


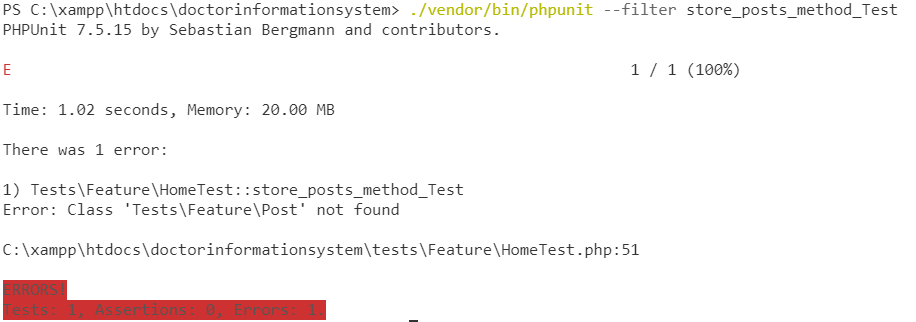


#### Unit test for store post

**Test ID: T035storepost**







### 5.2.2 Integrated testing:

It is level of white box testing in which methods are tested integrating two or more methods to check whether it function well after integrating the methods. In this testing ensures the correctness of the interface of application and performed in open environment.

### 5.2.3 Regression testing:

It is the testing level in which testing is performed after the changes of code to confirm the change code has not adversely affected existing features of code. It usually performed when requirement changes which lead to change the code, defect fixing, performance issue fixing.