

VIT HOSTEL SERVICES

'PROJECT WORK'

FINAL REPORT

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Prepared for:

SOFTWARE ENGINEERING (CSE3001)

PROJECT COMPONENT

Submitted To:

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CONCLUSION
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Software Process Model and Software Project Manage

for

"VIT HOSTEL SERVICES"

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COURSE: SOFTWARE ENGINEERING

LAB SECTION: L45+L46 (CSE3001)

DATE: 18-03-2021



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1. Objective of the project

At present, the main problem in VIT Hostels, is improper and insufficient method to record the data of complaints in VIT hostels. Such inefficiency in maintaining proper records of complaints leads to complaints not been looked into properly and so number of pending complaints remain gets increased. The hostel authorities face numerous issues regarding fixing the complaints and to keep in track of solved complaints. Hence, we are creating a web-based application to resolve this problem where this website will satisfy all the needs that the manual complaint registering system failed to satisfy. We are aiming to make this website in very compatible and user-friendly way with an attractive interface. This project, VIT HOSTEL SERVICES is an application software which it is very helpful for the students who wants to access the services provided in the hostel without any manual process there by saving lot of time and effort.

We are planning to use 4 different actors in this project, thereby three different modules:

- (i) Student Module
- (ii) Hostel Admin Module
- (iii) Mess Admin Module
- (iv) VHS Admin Module

In student module there is an option to register a complaint in different categories ranging from Wi-Fi related, mess, hygiene complaints etc.

The hostel staff module can only be accessed by hostel staff and respective complaints are only assigned to that particular hostel block. Their job is to look into the complaints and resolve it as soon as possible and when it is resolved from there side the complaint is updated as resolved in the website and student can verify the same.

Mess staff module is the same as the above except the complaints are related to mess. Additionally, the updates in the changes of mess timetable are posted by the mess staff such that students can see the changes in their login.

The project we are planning can help to save time in many aspects and it will be much useful for students who are in a need to fix the problems at a faster rate. With this project, we aim at making a less time-consuming way to register complaints in an organized and systematic manner.

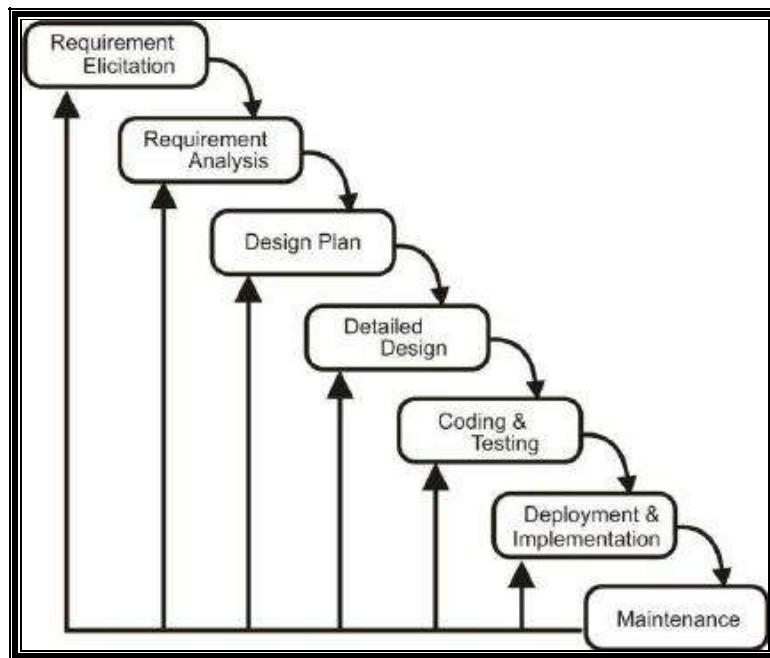
We are creating a website in such a way that there is a provision to file any kind of hostel related complaints in the website. While registering a complaint, a student will have to choose the type of complaint.

The type of complaints include: -

- (i) Wi-Fi related Complaints
- (ii) Hygiene Complaints (Room cleaning)
- (iii) Architectural Complaints
- (iv) Mess related Complaints
- (v) Security complaints (Theft related)
- (vi) Health Issues (Medicines required, Emergency cases, etc.)
- (vii) Electrical Complaints
- (viii) Washroom Complaints

2. Process Model Chosen

"ITERATIVE WATERFALL MODEL" because all requirements are well known upfront.



2.1 Justification for choosing iterative waterfall model:

Initially in ITERATIVE WATERFALL MODEL, a partial implementation of the system is constructed and it will be in a deliverable state. Some extra functionalities are added to the previous state. If any defects are found from the prior delivery, they get fixed and the working product is delivered. This cyclic process is repeated until the development of entire product gets completed. These cyclic repetitions of these processes are called iterations. At the end of each and every iteration, a product increment is delivered and defects in this delivery gets solved and extra functionalities added to it to deliver it as next product increment.

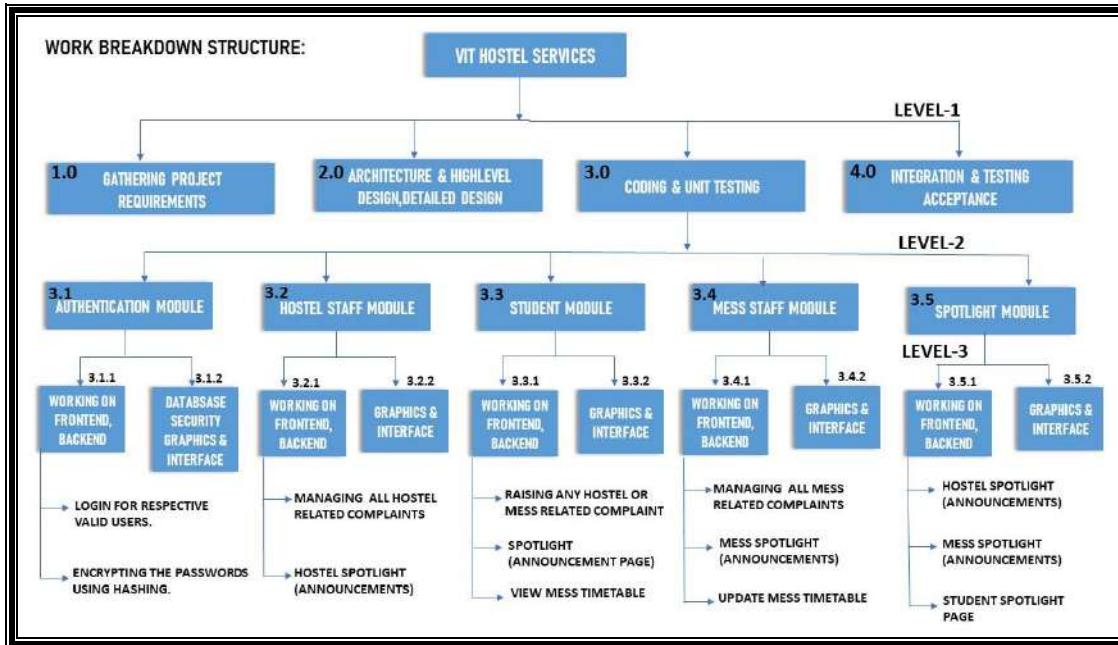
Iterative waterfall model is very simple to use and understand. Iterative waterfall model has the feedback path from one phase to its preceding phase which allows us in correcting the errors that are committed and these changes are reflected in the later phases. customer involvement is not required during the software development of Iterative waterfall model, which is an added advantage for our project because we i.e., students will become the actual customers once this project gets completed and hence any other customer involvement

is not necessary for this particular project. Although this model is not suitable if requirements are not clear, but this is not a hurdle for this particular project as all the requirement are clear and almost fixed prior to the beginning of the project. In this model we can develop prioritized requirements first, which is an added advantage for this project.

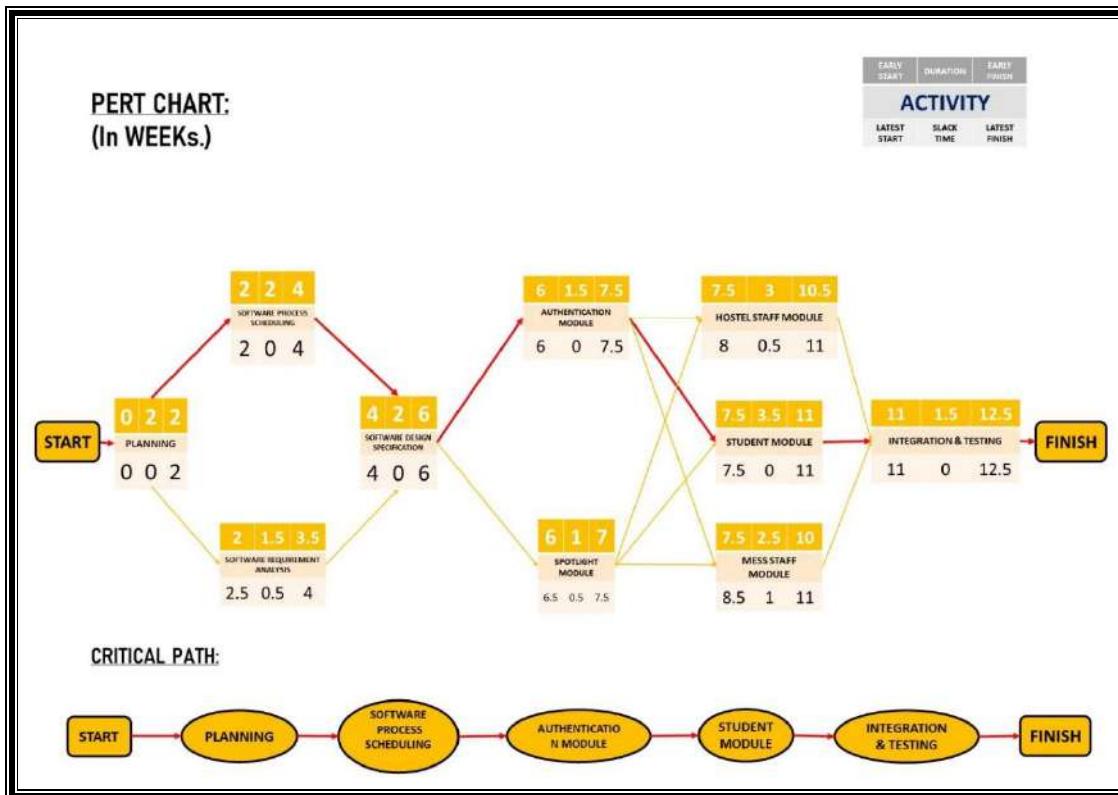
This model mainly focuses on customer priority first and releases that particular module which is more important to them like for example hostel authorities need more access to hostel login compared to student, mess logins, and students need access to student login so it provides more access to it to them, etc. In this model initial product delivery is faster, no need to wait until the end of the project, after creating one particular login for hostel authorities we can give access to them and later work on the other requirements later like mess login, staff login, etc.

3. Software Project Management

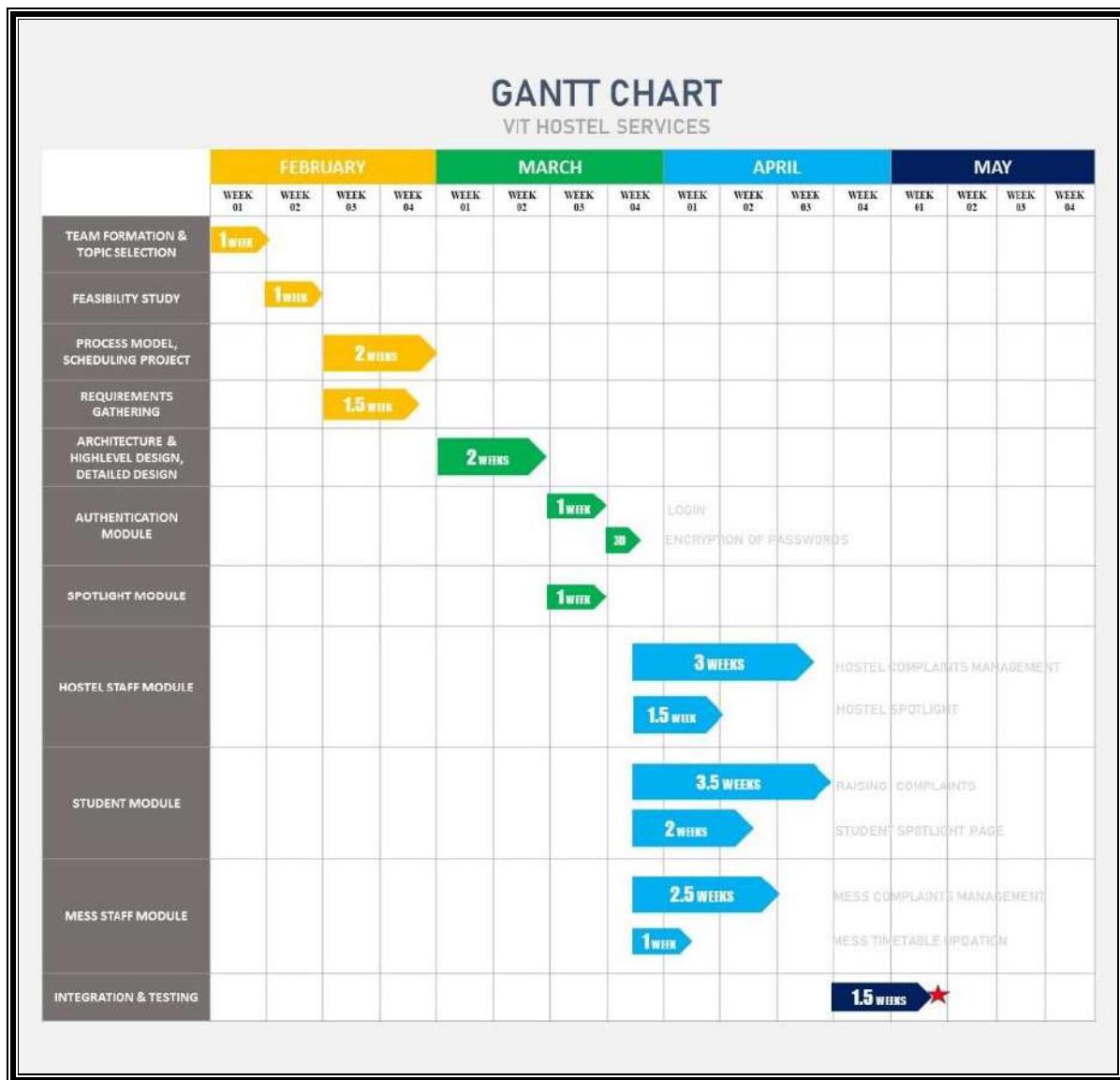
3.1 Work Break-down Structure:



3.2 Pert Diagram:



3.3 Gantt Chart:



4. Conclusion

In order to solve all the issues related to mess & hostel like Wi-Fi related complaints, washroom complaints, electrical complaints, health issues (medical emergency), room hygiene complaint issues, security complaints etc., we are planning to design a hostel services website and we also provided all process management structures like Work breakdown structure, PERT diagram, Gantt chart along with this document, which include authentication module, hostel staff module, student module, mess staff module, spotlight module and implemented using iterative waterfall model in order to reduce the cost of the project and develop the website, which will be more convenient for this particular project. In this website, student interact with the website and solve their issues in any domain within very less time through the unique login IDs given to them, and Hostel staff and Mess staff can solve this issue by interacting with the website through the unique hostel staff login, mess login respectively.

Software Requirements Specification

for

“VIT HOSTEL SERVICES”

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1 Introduction

1.1 Document Purpose

The purpose of documentation is to describe the how the Hostel services system work and also to specify the performance, operations of the Hostel services system website. This document also defines the functional and non-functionally requirements of the website. This documentation describes the software requirements of our project –

“VIT HOSTEL SERVICES”.

The Purpose of this Document is:

- To describe the external behaviour of the (VIT) Hostel services system.
- To describe the operations, interfaces, performance and quality assurance of the (VIT) Hostel services system.
- To describes the functional and non-functional requirements of the (VIT) Hostel services system.
- To describe the constraints and other factors necessary to provide a complete description of the software requirements of (VIT) Hostel services system.
- To assist the Students, Hostel Staff, Mess Staff.
- To enable a Student to register a complaint, when ever needed.
- To enable a Mess staff & Hostel staff to solve the complaints, raised by students.

1.2 Product Scope

The Project's Scope is to solve the problems faced by Hostel & Mess authorities in fixing the complaints registered, and to save the time and effort of a student who wants to get a problem solved quickly, we are creating a website in such a way that there is a provision to file any kind of hostel related complaints in the website. While registering a complaint, a student will have to choose the type of complaint and fill out the respective details needed.

- This product provides the facility of registering a complaint whenever a Student wants to do so.
- Depending on the registered complaint, the respective Hostel/Mess staff will find a way to solve it.

- The system will also display Hostel and Mess announcements, made by respective Hostel and Mess staff, to respective students.
- The system will also display updated Mess Timetable, made by respective Mess staff, to respective students belonging to that particular Mess.
- The system provides login facility to the user.
- This facility is available 24x7 except when the system is either being updated or being modified.
- The system will also keep a record of the complaint history that the student has registered.

The project we are planning can help to save time in many aspects and it will be much useful for students who are in a need to fix the problems at a faster rate. With this project, we aim at making a less time-consuming way to register complaints in an organized and systematic manner. We are even planning to keep an option where student can view Today's mess menu.

1.3 Intended Audience and Document Overview

The audience of this document includes: project developers and customers, and the other users who wish to view the project requirements & project specifications. This product's main audience is the public, all Students are expected to use the product along with Hostel & Mess staff. The product is a website application because it is supposed to be used by anyone and with internet being everywhere, the product's platform is secured and the main audience who are the people will find it convenient to use the product. The Hostel & Mess staff are also the audience who use the application to check and manage the complaints made throughout the day. So, the products audiences are the Students themselves and the Hostel & Mess staff.

→Section 1:

- The SRS will provide a detailed description of the (VIT) Hostel services system.
- This document will provide the outline of the requirements, overview of the characteristics and constraints of the system.

→Section 2:

- This section of SRS will provide the general factors that affect the product and its respective requirements.
- It provides the background for those requirements.

- The items such as the product perspective, product function, user characteristics, constraints, related assumptions and dependencies and requirement subsets are described in this section.

→**Section 3:**

- This particular section of SRS contains all the software requirements mentioned in section 2 in detailed sufficient enough to enable designers to design this system to satisfy the requirements and testers to test if this system satisfies all those requirements.

1.4 Definitions, Acronyms and Abbreviations

- **Spotlight:** A brief Announcement, usually an important information, made by Hostel/Mess staff whenever it's necessary.

1.5 Document Conventions

- We have used “Arial” font size 14 with **Bold** for every Main-Heading in this Document.
- We have used “Arial” font size 12 with **Bold** for every Sub-Heading in this Document.
- We have used “Times New Roman” font size 12 for every Paragraph in this Document.
- We have maintained document text to be single spaced.
- We also have maintained ‘1’-inch borders throughout the Document.
- We also have maintained 1.5 space between every line of each paragraph throughout the Document.

1.6 References and Acknowledgments

1.6.1 Wikipedia.

1.6.2 Website Idea Help.

We would like to thank our Software Engineering (CSE3001) Faculty-

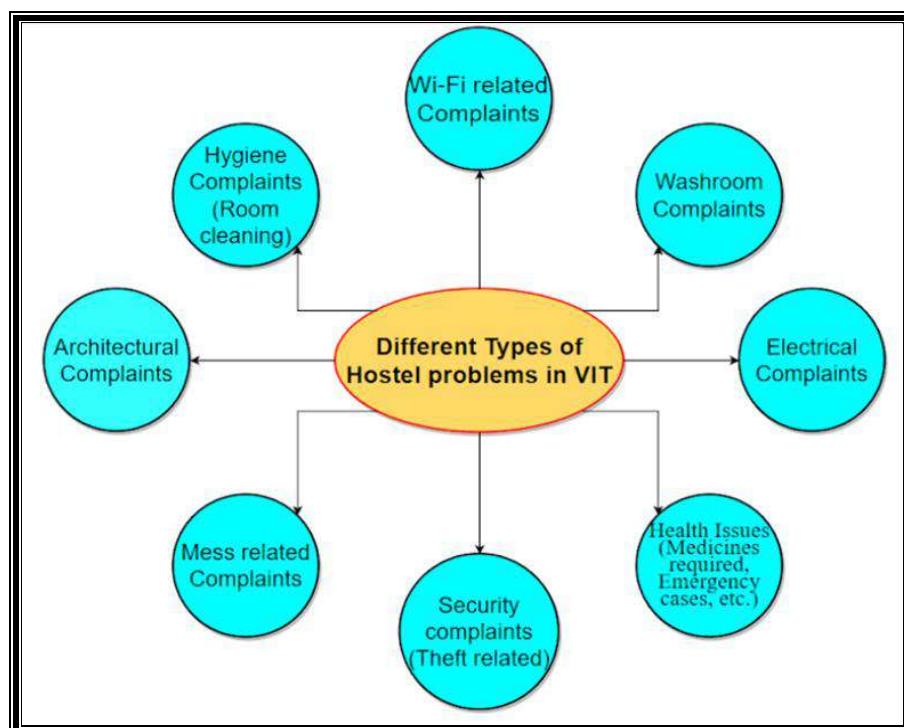
Mr. DR. WI. SURESHKUMAR sir for giving us this opportunity to present this project. We would also like to thank the Chancellor of this esteemed institution Mr. Viswanathan G (VIT Vellore) for providing a platform to express our views, opinions and ideas.

2 Overall Description

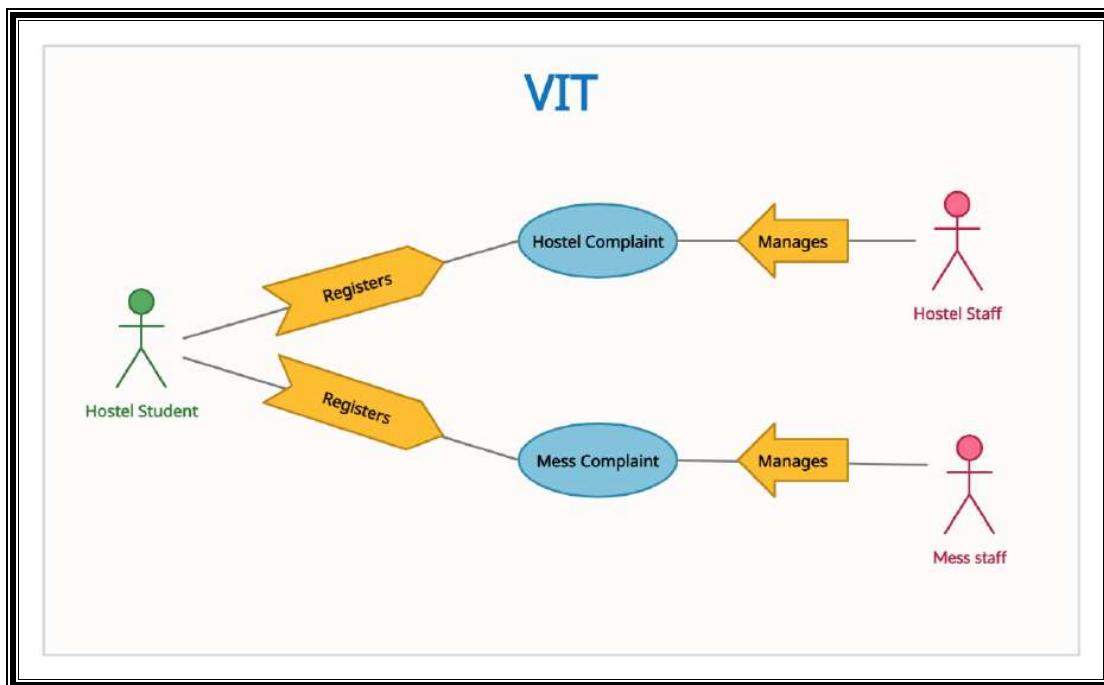
2.1 Product Perspective

Currently in VIT hostels, many types of complaints are being recorded in books. It is very difficult to keep the record of the pending complaints since it is written on different pages of a book. As the complaints are recorded in a book and it is difficult to keep track of which complaint is already solved and which is not. And even, different types of complaints altogether get recorded in the same book. When a technician belonging to a particular field goes through the entire pages of the book to fix the complaint raised, it will be hard for him to keep track of which complaints come under his respective domain. Thus, the categorization of complaints becomes the major drawback while recording them on books. As a consequence, the hostel authorities face many issues to fix the complaints registered in the hostel.

To solve the problems faced by hostel authorities in fixing the complaints registered, and to save the time and effort of a student who wants to get a problem solved quickly, we are creating a website in such a way that there is a provision to file any kind of hostel related complaints in the website. While registering a complaint, a student will have to choose the type of complaints. The type of complaints include:



A general diagram illustrating how our product interacts with the environment and in what context it is being used is:



2.2 Product Functionality

Modules:

This application consists following modules

- Student Module
- Hostel Staff Module
- Mess Staff Module

2.2.1 Student Module functionalities:

- Student Login.
- Raise a Complaint.
- View My Details.
- Spotlight.
- View Mess Timetable.

2.2.2 Hostel Staff Module functionalities:

- Hostel Staff Login.
- View Complaints.
- Add an Announcement.

2.2.3 Mess Staff Module functionalities:

- Mess Staff Login.
- View Complaints.
- Add an Announcement.
- Update Mess Timetable.

2.3 Users and Characteristics

- The users of the system can be **Student**, who raise a Hostel/Mess related complaint if necessary, he/she has nothing to do with the system, except-raising a Complaint, viewing Spotlight & Mess Timetable.
- The users of the system can be **Hostel Staff**, who can manage the complaints raised by the students of his/her hostel block, he/she has nothing to do with the system, except- managing the complaints raised by the students of his/her hostel block, adding announcements to Spotlight.
- The users of the system can be **Mess Staff**, who can manage the complaints raised by the students of his/her mess, he/she has nothing to do with the system, except- managing the complaints raised by the students of his/her mess, adding announcements to Spotlight, updating the mess timetable.
- The users of the system can be the **Administrators**, who manage the entire system.
- The administrators will have a wider knowledge of computers and the other users are assumed to have limited computer knowledge.

2.4 Operating Environment

For this System, we will launch the portal over the internet and other than the hardware specified in the hardware interface section, the software requirements are to support windows operating system with support to MySQL, apache and PHP servers.

2.4.1 Environment in which the software will operate:

- Operating System: Windows 10
- Web server: Apache
- Web Browser: Any Browser

2.4.2 The minimum hardware platform requirements of this system are listed below:

- Processor: Pentium IV or above
- Hard Disk: 250mb or above
- Ram :512mb
- CPU Speed: 2.6 GHz
- Monitor: Tft/Ips(display), 1920X1280(Recommended)
- Mouse: Optical mouse/Track Pad

2.5 Design and Implementation Constraints

- The (VIT) Hostel Services System is connected to the computer and is running 24x7.
- The users Access the (VIT) Hostel Services System from any computer that has Internet browsing capabilities and an Internet connection.
- The users must have their correct usernames and passwords to enter into the (VIT) Hostel Services System.
- One Student can only be a part of '1' particular hostel room & '1' particular mess.
- All the information about the Complaints has to be stored in the database.
- A user can view only his account.
- A user cannot use the System if he has Invalid Credentials (Not-Registered).
- If many users are using the (VIT) Hostel Services system at the same time, the system might become slow.
- A complaint cannot be managed unless it is present in the database.

2.6 User Documentation

2.6.1 User Manuals

We are planning to provide a User Manual with this Document. By looking at this User Manual, each and every type of User of the System (like Student, Hostel Staff, Mess Staff, etc.)

can know how to use the system in a faster manner, and can use the system efficiently to gets their problems solved.

2.6.2 Tutorials

We are also planning to provide a Tutorial with this Document. By view this Tutorial, each and every type of User of the System (like Student, Hostel Staff, Mess Staff, etc.) can visually understand how to use the system in a faster manner, and then they can use the system efficiently to gets their problems solved.

2.7 Assumptions and Dependencies

- Internet access is required for accessing the (VIT) Hostel Services system. An assumption is made that the device (computer) maintains Internet access throughout the entire session while using the system. i.e., Internet connection is available to all the users who use this system.
- User (Students, Hostel & Mess Authorities) has basic knowledge of computers.
- User (Students, Hostel & Mess Authorities) have sufficient knowledge of English since the system interface will be in English.
- The system is fast.
- The user (Student) is assumed to give system correct information about his complaint and also details regarding the complaint.
- The system will have simple and easy to use interfaces.
- The system provides accurate data.

3 Specific Requirements

3.1 External Interface Requirements

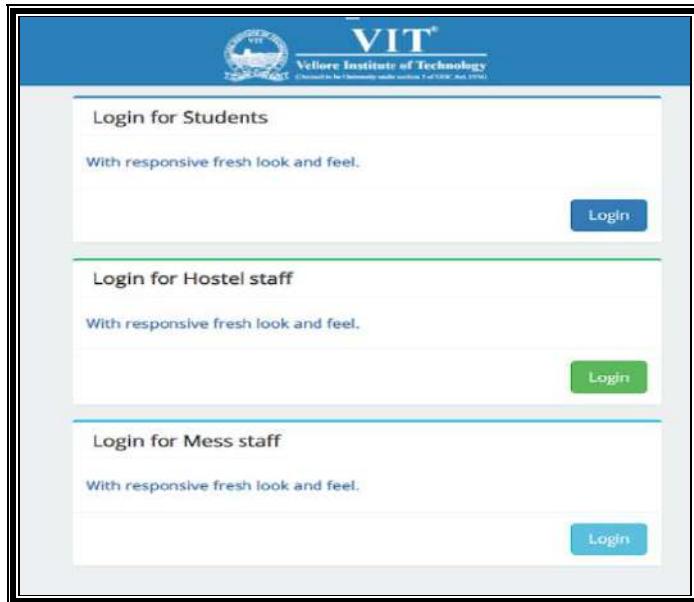
3.1.1 User Interfaces

The User interface includes various forms and windows. The main window will consist of the different login options for different users. The interface will visualize the various features and functionalities listed in this document for this prototype as the included below:

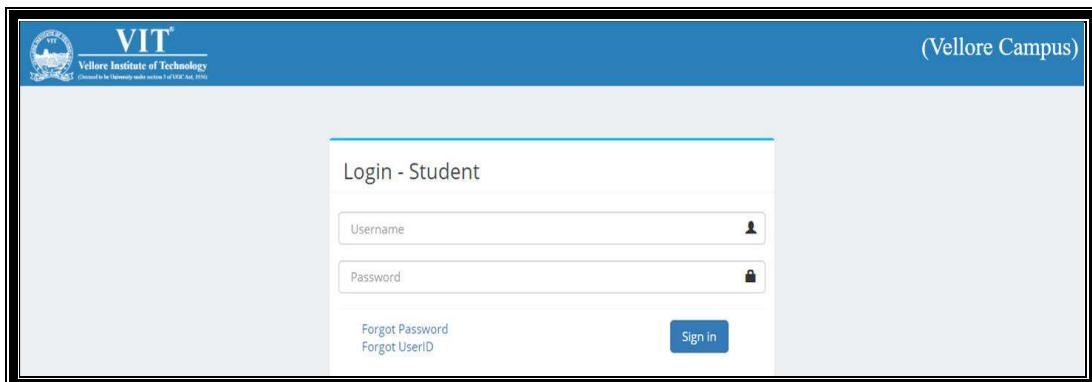
- Drop down menu for various option selection.
- Selection list for filtering Hostel/mess related complaints.
- Push buttons for student raising complaints.
- Help button, etc.

The design in this project contains three sides; they are **Student side**, **Hostel Staff side**, **Mess Staff side**.

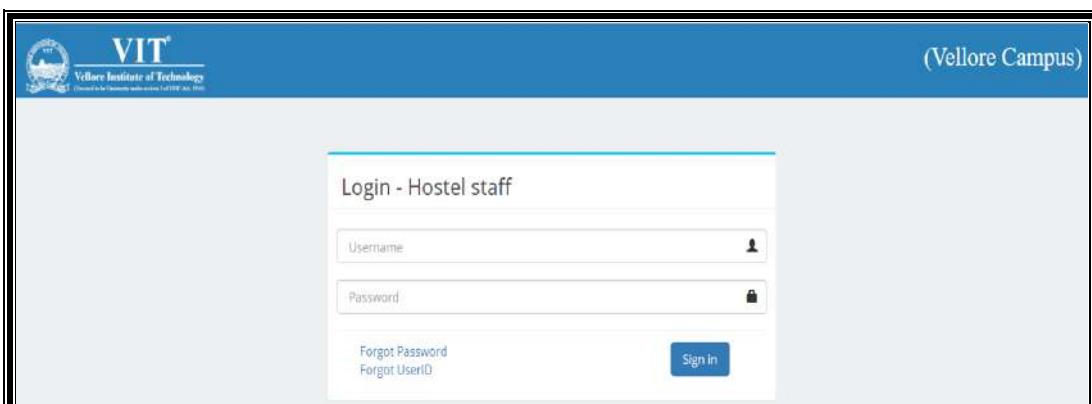
- **Student side** contains or has the privileges of login, Raising Hostel/Mess related Complaints, Viewing Spotlight Page, Viewing mess Timetable.
- **Hostel Staff side** have the facilities to login, view the complaints raised by the students of his/her particular hostel block, add new announcements to spotlight page of students of his/her particular hostel block.
- **Mess Staff side** contains the options to login, view the complaints raised by the students of his/her particular mess, add new announcements to spotlight page of students of his/her particular mess, update the mess timetable.



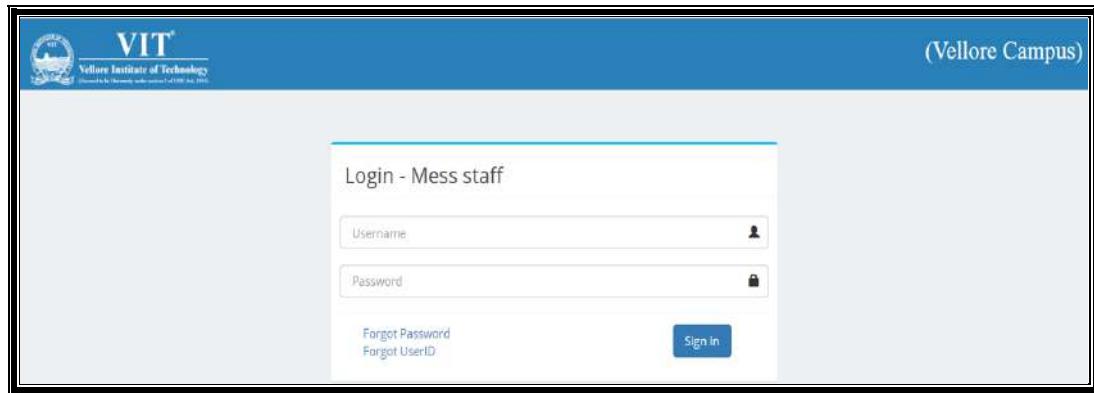
(Sample Graphical User Interface screenshot of Login Page)



(Sample Graphical User Interface screenshot of Login Page for a Student)



(Sample Graphical User Interface screenshot of Login Page for a Hostel Staff)



(Sample Graphical User Interface screenshot of Login Page for a Mess Staff)

3.1.2 Hardware Interfaces

The hardware interfaces that we are used in this project include web server, operating systems and network band.

We are using some hardware Interface listed below:

- Processor: Pentium IV or above
- Hard Disk: 250mb or above
- Ram :512mb
- CPU Speed: 2.6 GHz
- Monitor: Tft/Ips(display), 1920X1280(Recommended)
- Mouse: Optical mouse/Track Pad

The (VIT) Hostel services system makes extensive use of several hardware devices. These devices include:

- MySQL database server with intensive use of the memory space.
- PHP server with high performance and intensive use for CPU usage.
- Windows and Linux user's computers.

3.1.3 Software Interfaces

For the system, we will launch the portal over the internet and other than the hardware specified in the hardware interface section, the software requirements are to support windows operating system with support to MySQL, apache and PHP servers.

3.1.3.1 Inputs

The software will receive input from source of user interface. The user interface (Student) will supply the keywords (Details of complaints) to the Software. The user interface (Hostel Staff) will supply the keywords (Status of Complaints, Announcements) to the Software. The user interface (Mess Staff) will supply the keywords (Status of Complaints, Announcements, New Mess Timetable) to the Software.

3.1.3.2 Outputs

The output will appear on user interface (Student) Like: Status of Complaints, Spotlight, New Mess Timetable. The output will appear on user interface (Hostel Staff) Like: Complaints raised by the student of that particular hostel block. The output will appear on user interface (Mess Staff) Like: Complaints raised by the student of that particular mess.

3.1.3.3 Operating System

The software will run on the Windows operating system (preferably Windows 10).

3.1.3.4 We are using some software interfaces listed below

- Operating System: Windows 10
- IDE Tool: Notepad++, Atom, sub lime text editor
- For Scripting: HTML, CSS
- Database: MySQL
- Web Requirements: PhpMyadmin
- Web server: Apache
- Web Browser: Any Browser
- Software interfaces that we are used in this project include:- Mysql, PhpMyAdmin, Sublime text editor, Microsoft Visual studio. For creating the database, we have used Mysql. We have coded the HTML part in the sub lime text editor. Scripts related with PHP are coded in the Microsoft visual studio. We have managed the database by using the PhpMyAdmin.

3.1.4 Communications Interfaces

An Internet connection and a web browser are required in order to make use of several functions and to be executed such as searching, viewing and downloading. The communication interfaces that we are used in this system are the Simple HTTP server for loading the files & images to show on the web page. The Student's details like phone number and Mail-ID are used for the communication purposes. To communicate with the Student's, we will use both the mobile number and Mail-ID.

Even we are using Encryption to Secure the passwords in the database. So, even if a database leak takes place, the original passwords doesn't get leaked. We are planning to use PHP Encryption algorithms to achieve so. PHP Encryption is nothing but achieving the encryption code with the help of some algorithms, called as hashing algorithms and they usually work with by taking a string (input) and then it will help in creating a unique fingerprint from that input string. This Encryption involves changing the particular text into some different coded text just to make the data secure without any exposure to most of all the people except to some who have the valid access (Administrator). In particular, we are planning to use the Hashing Algorithm of the PHP Programming Language, which usually takes one input value and later transforms it into one message digest.

3.2 Functional Requirements

3.2.1 Student Module Functional Requirements:

This module deals with all the Functional requirements of VIT Students. By using this module, a student can raise any Hostel/Mess related complaint whenever necessary.

This module consists following Functional Requirements:

- **Student Login:** By using this functionality, A Student can Login into system using his set of valid Username and Password.
- **Raise a Complaint:** By using this functionality, A student can select the type of complaint he/she wants to rise and then fill out all the necessary details to get the complaint registered.
- **View My Details:** By using this functionality, A student can view his Hostel & Mess Details like: Hostel Block, Mess Name, Hostel Room No, Hostel Room Type (A/c or Non-A/c), etc.

- **Spotlight:** By using this functionality, A student can view the announcement's made his particular Hostel Block and Mess respectively.
- **View Mess Timetable:** By using this functionality, A student can view the updated Mess Timetable, made by his/her respective Mess management.

3.2.2 Hostel Staff Module Functional Requirements:

This module deals with all the Functional requirements of VIT Hostel authorities. By using this module, a Hostel authority can view the complaints raised by his/her respective hostel block student's and can further manage them accordingly.

This module consists following Functional Requirements:

- **Hostel Staff Login:** By using this functionality, A Hostel authority can Login into system using his set of valid Username and Password.
- **View Complaints:** By using this functionality, a Hostel authority can view the complaints raised by his/her respective hostel block student's and can further manage them accordingly.
- **Add an Announcement:** By using this functionality, A Hostel Staff can add the announcement's if necessary and further these announcements get reflected in the login page of students of this particular Hostel block.

3.2.3 Mess Staff Module Functional Requirements:

This module deals with all the Functional requirements of VIT Mess authorities. By using this module, a mess authority can view the complaints raised by his/her respective mess student's and can further manage them accordingly.

This module consists following functionalities Functional Requirements:

- **Mess Staff Login:** By using this functionality, A Mess authority can Login into system using his set of valid Username and Password.
- **View Complaints:** By using this functionality, a Mess authority can view the complaints raised by his/her respective mess student's and can further manage them accordingly.

- **Add an Announcement:** By using this functionality, A Mess Staff can add the announcement's if necessary and further these announcements get reflected in the login page of students of this particular mess.
- **Update Mess Timetable:** By using this functionality, A Mess Staff can update the Mess Timetable whenever necessary.

3.2.4 Administrator Functional Requirements:

- Administrator can delete any complaints raised by students.
- Administrator can block any Student from raising a complaint.

3.3 Behaviour Requirements

3.3.1 Use Case View

This software will serve as a tool of registering complaints from the Student point of view, managing complaints from the management (Hostel & Mess) point of view.

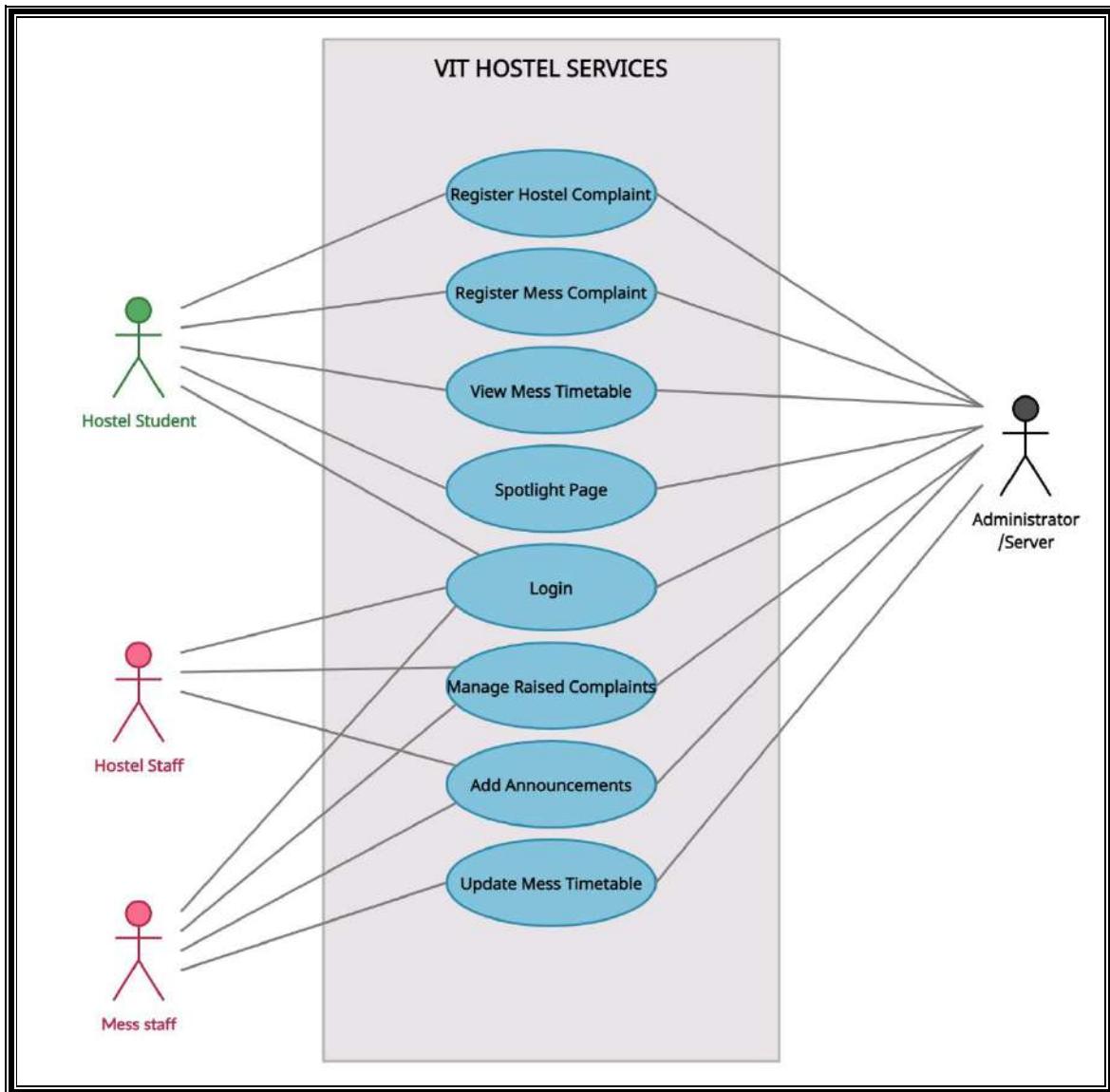
The Primary actors of our system are:

- Hostel Student.
- Hostel Staff.
- Mess Staff.

The Secondary actor of our system are:

- Administrator/Server.

Use Case diagram for our Prototype is:



(The Description about these use cases is already presented in **3.2 section** of this Document.)

4 Other Non-functional Requirements

4.1 Performance Requirements

4.1.1 Response time:

The response time will be less than 10 secs for almost all the processes performed in the system.

4.1.2 Real-Time:

The software will provide up to date information, the output should display the latest results at all the times, and if it lags behind, the user should be notified immediately.

4.1.3 System Resource Consumption:

Resource consumption of this system should not reach an amount that renders the device (computer/mobile) unusable. The System should be capable of operating in the background when the user wishes to do so, i.e., when he/she wants to utilize the other applications.

4.1.4 No Traffic:

The system should be compatible enough to hold the entire general traffic. It should not get hang. It should not show some other problems arising out due to large no of concurrent users. The system should be fast enough to meet the customer's expectations.

4.1.5 Temperature independent performance:

The high and low temperature of the Environment should not affect the performance of the device.

4.1.6 Throughput:

The throughput should be as high as possible. We should be able to attain maximum output in minimum time.

4.1.7 Capacity:

We should try to make it accessible to a maximum number of users at a time.

4.2 Safety and Security Requirements

4.2.1 Security

4.2.1.1 Login requirements

- The testers and project managers will be provided access to the system once they are registered into the database.
- While logging in the system for the first time, the testers and project managers will be provided a Username and a password to that User.
- After logging in, they can set a new password.

4.2.1.2 Password requirements

- Password must be case-sensitive.
- Password must have at least 8 characters.
- Password must have numbers and special characters.
- Password must be encrypted and stored in the database.

4.2.2 Safety Requirements

- Both data and the software should be backed up periodically.
- An off-site back up is necessary for recovery from major failures & disasters to ensure the continuity.

4.3 Software Quality Attributes

4.3.1 Reliability:

This System should be highly reliable and it should generate all the updated information in correct order.

We are planning to achieve Higher Reliability by using better development process, risk management process, configuration management process, etc.

4.3.2 Availability:

Any raised complaint or announcement (spotlight) should be quickly available from any computer to the authorized user. The previously solved complaints must not be cleared.

We are planning to achieve Higher Availability by using Application Management Software, reducing single points of failure, etc.

4.3.3 Maintainability:

This System should be maintainable in such a manner that if any new requirement is required, then it should be easily incorporated in an individual module.

We are planning to achieve Higher Maintainability by writing readable code as it is easy to understand, by using refactor code to improve its understandability, by providing relevant documentation helps developers in understanding the software, by continuous integration as it makes the code easier to build and test, etc.

4.3.4 Portability:

This System should be portable on any windows-based system. It should not be machine specific.

We are planning to achieve Higher Portability by building executable programs for different platforms from source code, including the use of standard languages, system interface standards, libraries which are portable and compilers, etc.

4.3.5 Correctness:

This System should be correct in terms of its functionality, calculations. This means application should adhere to functional requirements.

We are planning to achieve Higher Correctness by defining the problem in complete manner, by developing the algorithm and then the program logic, by re-using the proved models as much as possible, etc.

Appendix

Project Strategy:

Our project will be online and with further link with complaint database and more security added, we can work on real time usage of the product.

Software Design Specification

for

“VIT HOSTEL SERVICES”

Prepared by:

Name	Registration No.	Mail ID
KOTHA V V S AAKASH	19BCE0186	kothav.vsaakash2019@vitstudent.ac.in
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INSTRUCTOR: DR. WI. SURESHKUMAR sir

COURSE: SOFTWARE ENGINEERING

LAB SECTION: L45+L46 (CSE3001)

DATE: 10-04-2021



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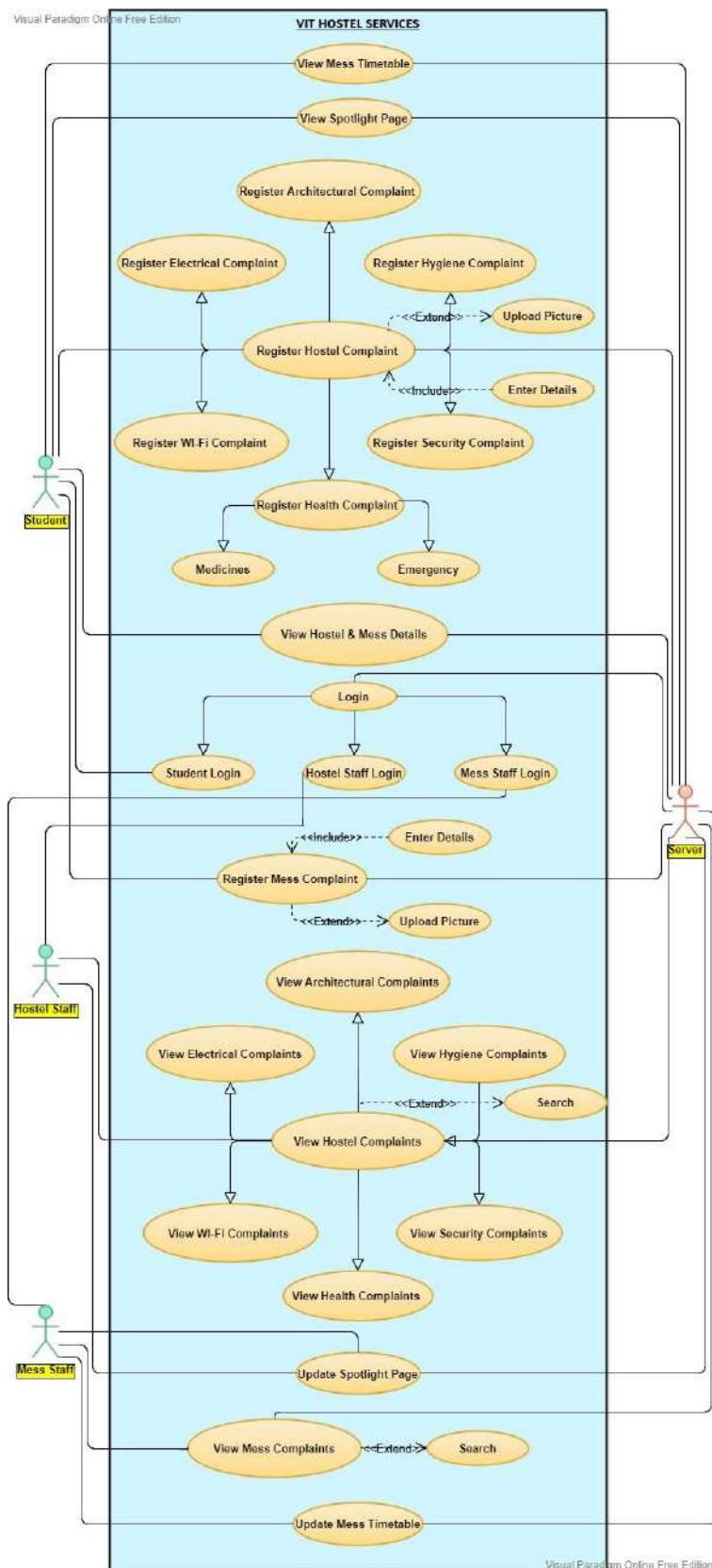
(Deemed to be University under section 3 of UGC Act, 1956)

Contents

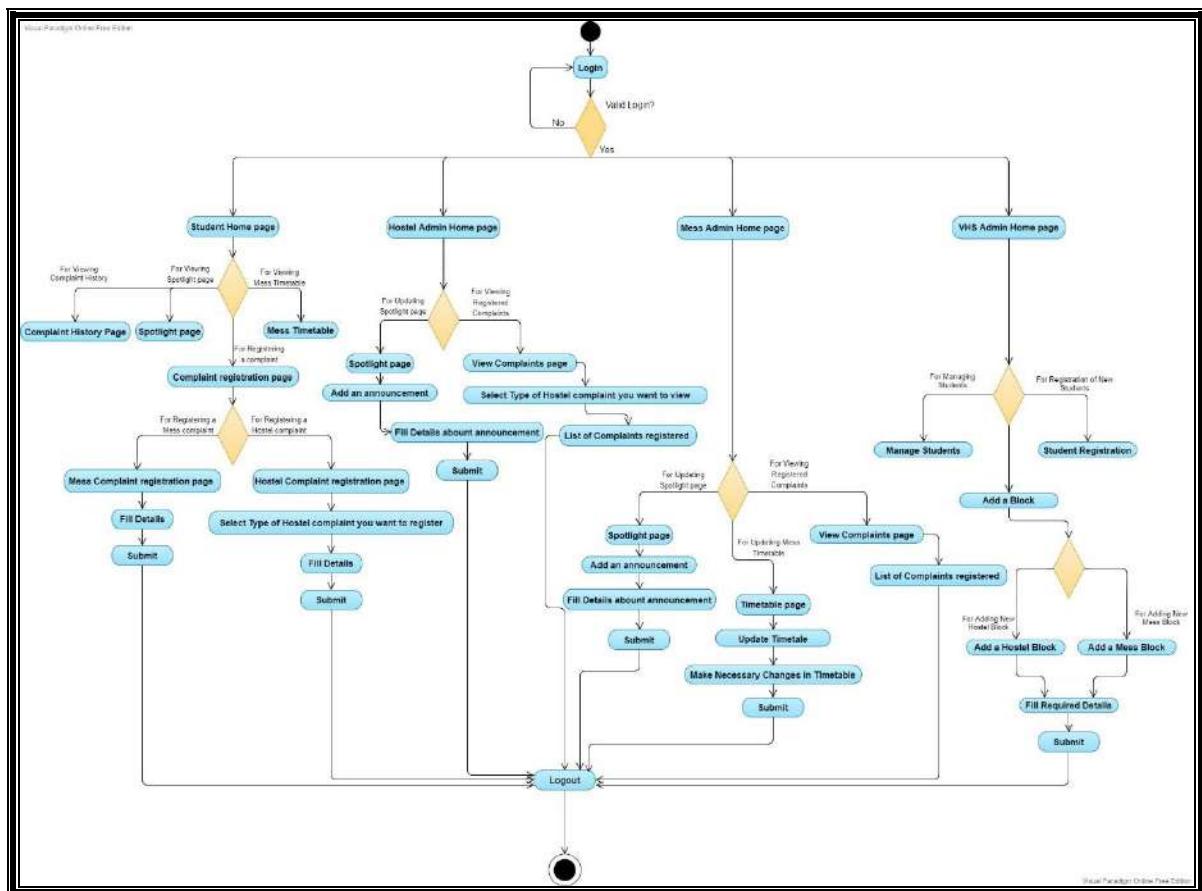
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1 Software Design Specification

1.1 Use case diagram

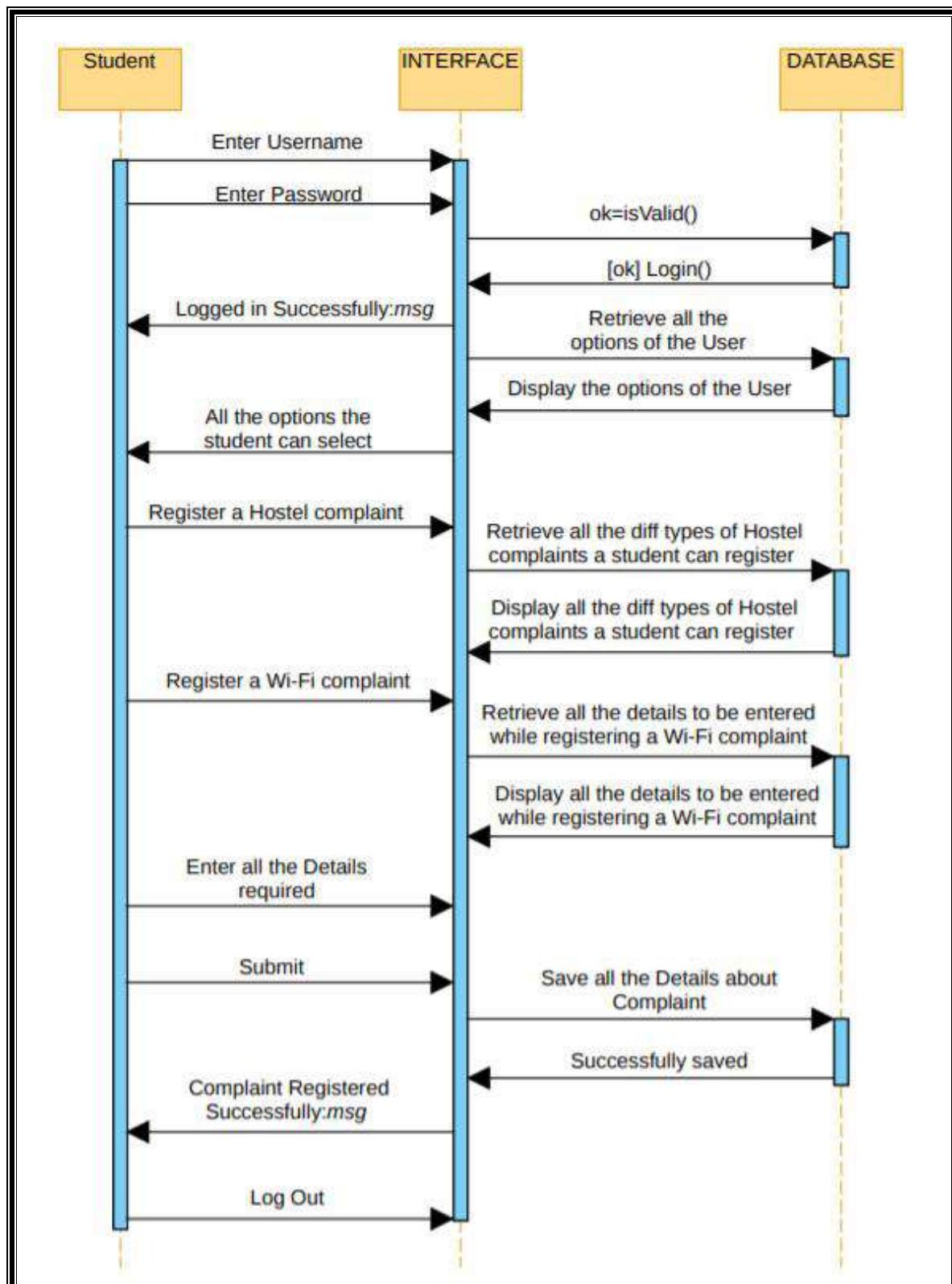


1.2 Activity diagram

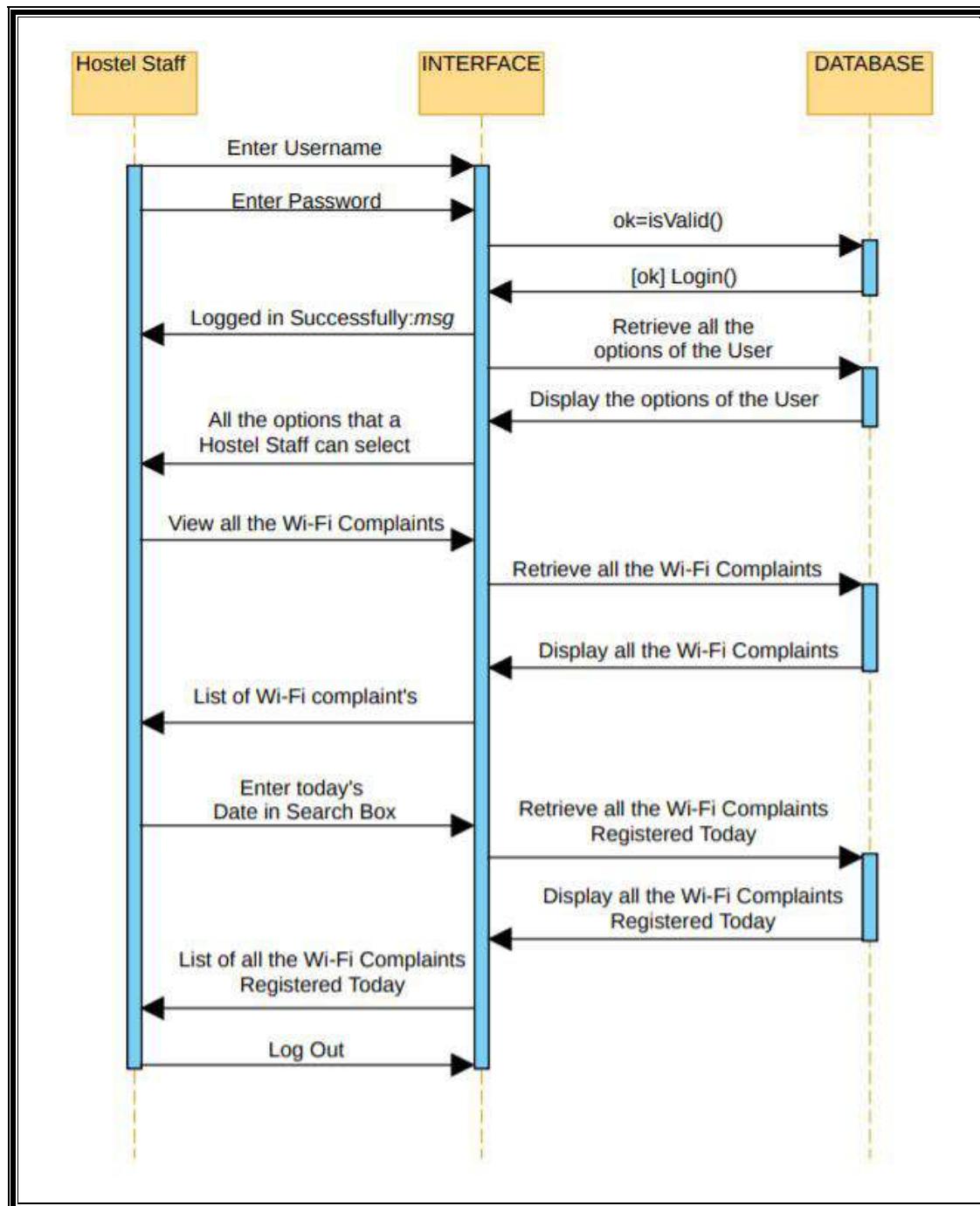


1.3 Sequence diagram

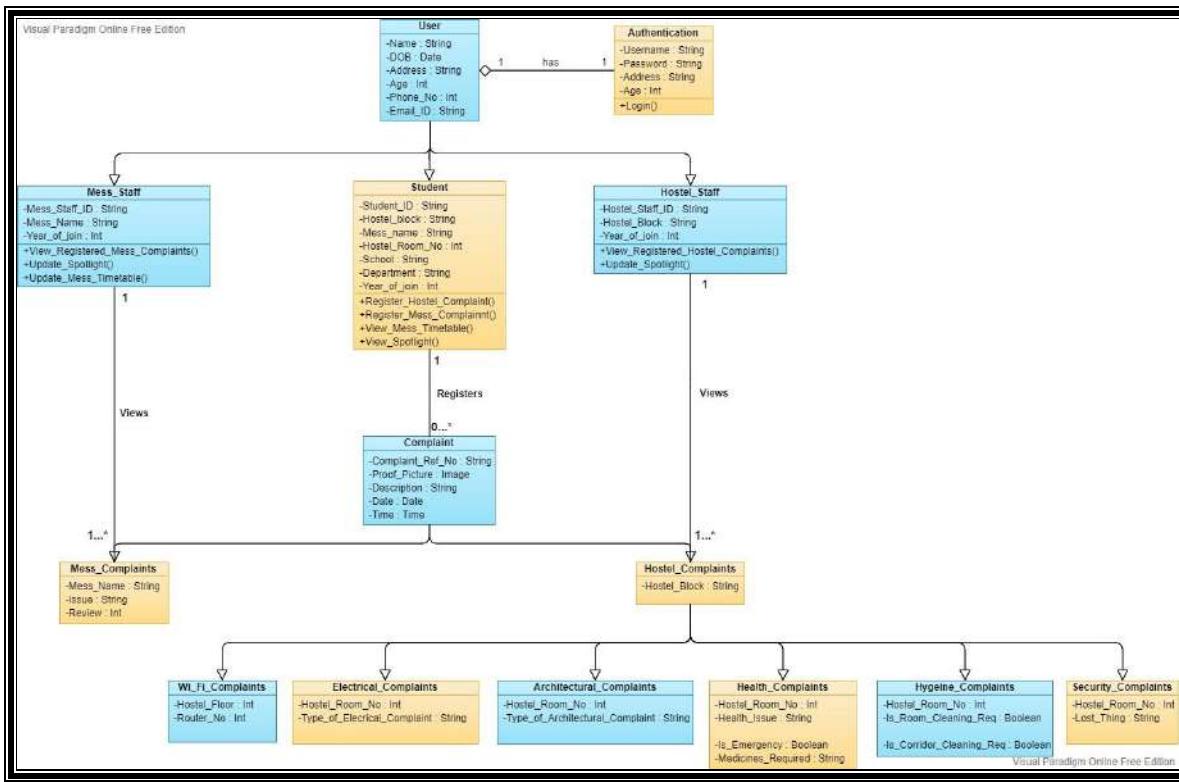
- Sequence diagram for a 'Student' while registering a Wi-Fi Complaint:



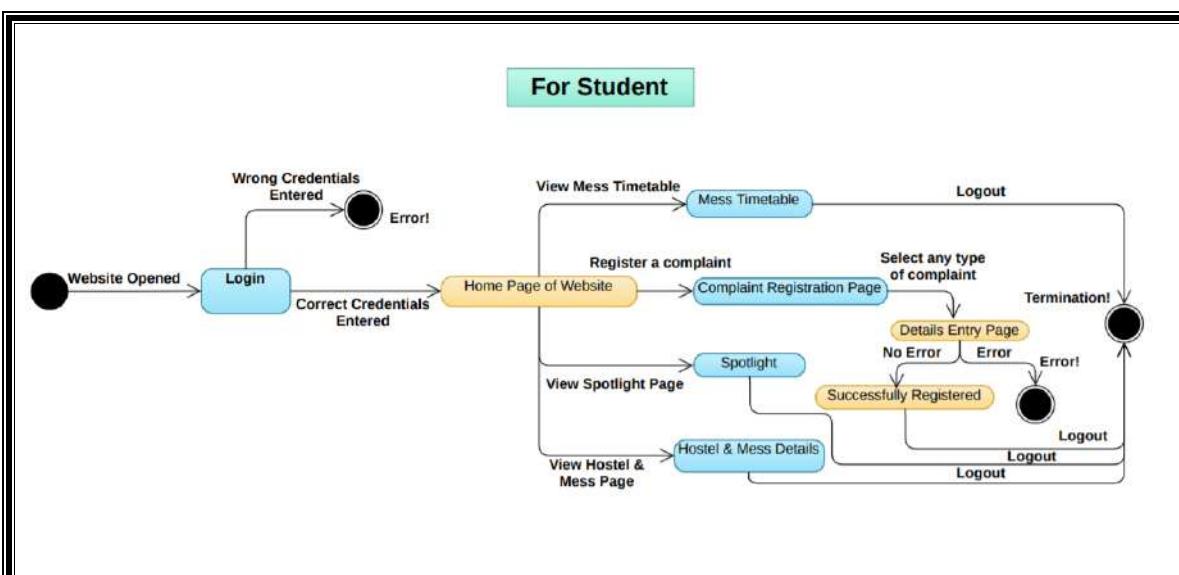
- Sequence diagram for a 'Hostel Staff' while viewing all the Wi-Fi Complaint's registered on a particular day:



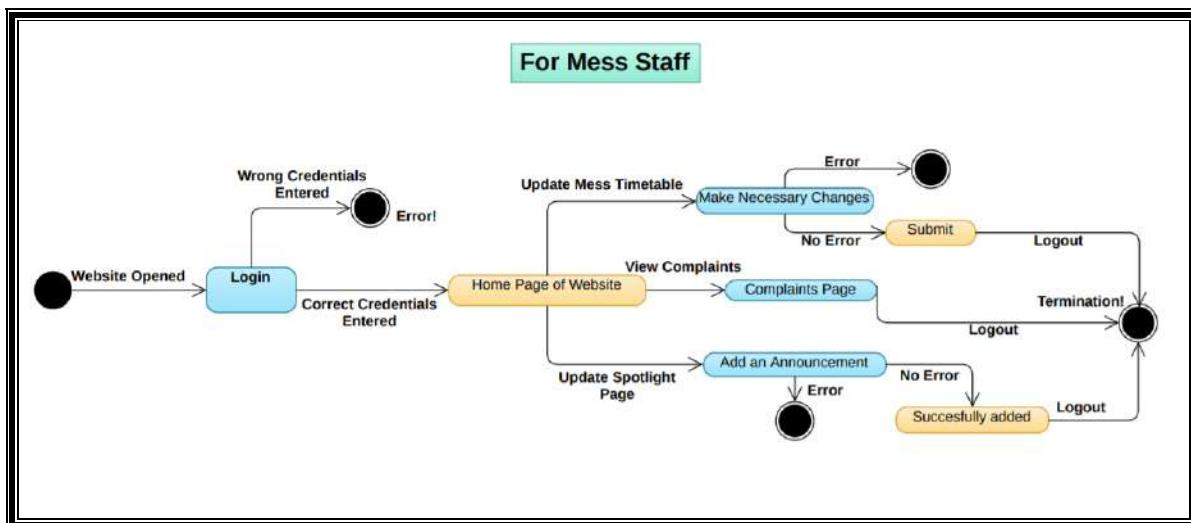
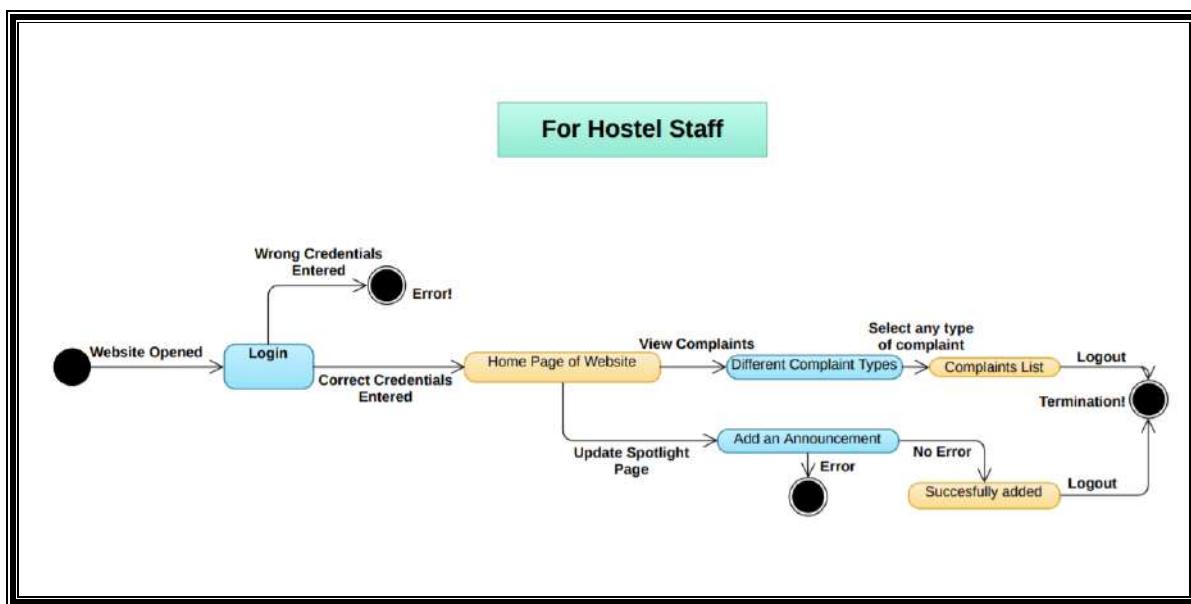
1.4 Class diagram



1.5 State Transition diagram



(P.T.O)



User Interface Design

for

“VIT HOSTEL SERVICES”

Prepared by:

Name	Registration No.	Mail ID
KOTHA V V S AAKASH	19BCE0186	kothav.vsaakash2019@vitstudent.ac.in
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KOTHAMASU KARTHIK	19BCI0141	kothamasu.karthik2019@vitstudent.ac.in
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INSTRUCTOR: DR. WI. SURESHKUMAR sir

COURSE: SOFTWARE ENGINEERING

LAB SECTION: L45+L46 (CSE3001)

DATE: 23-05-2021



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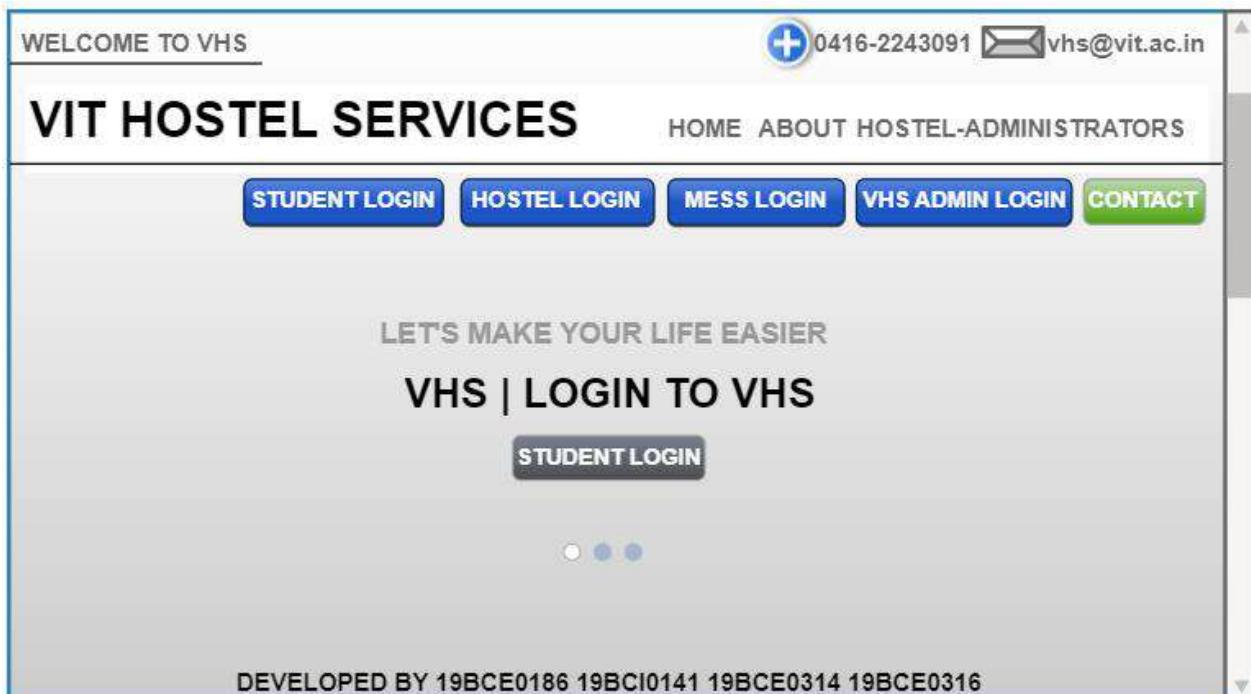
(Deemed to be University under section 3 of UGC Act, 1956)

Contents

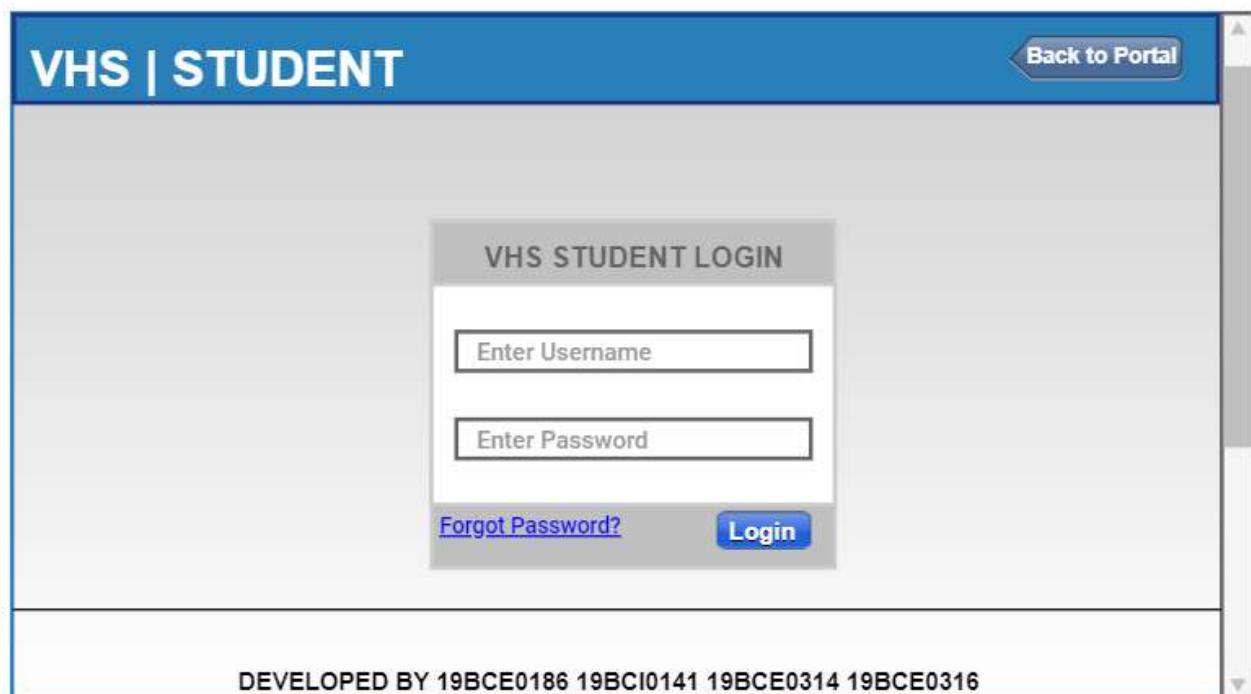
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1. GUI Prototyping

1.1 VHS Home Page:



1.2 Student Login Page:



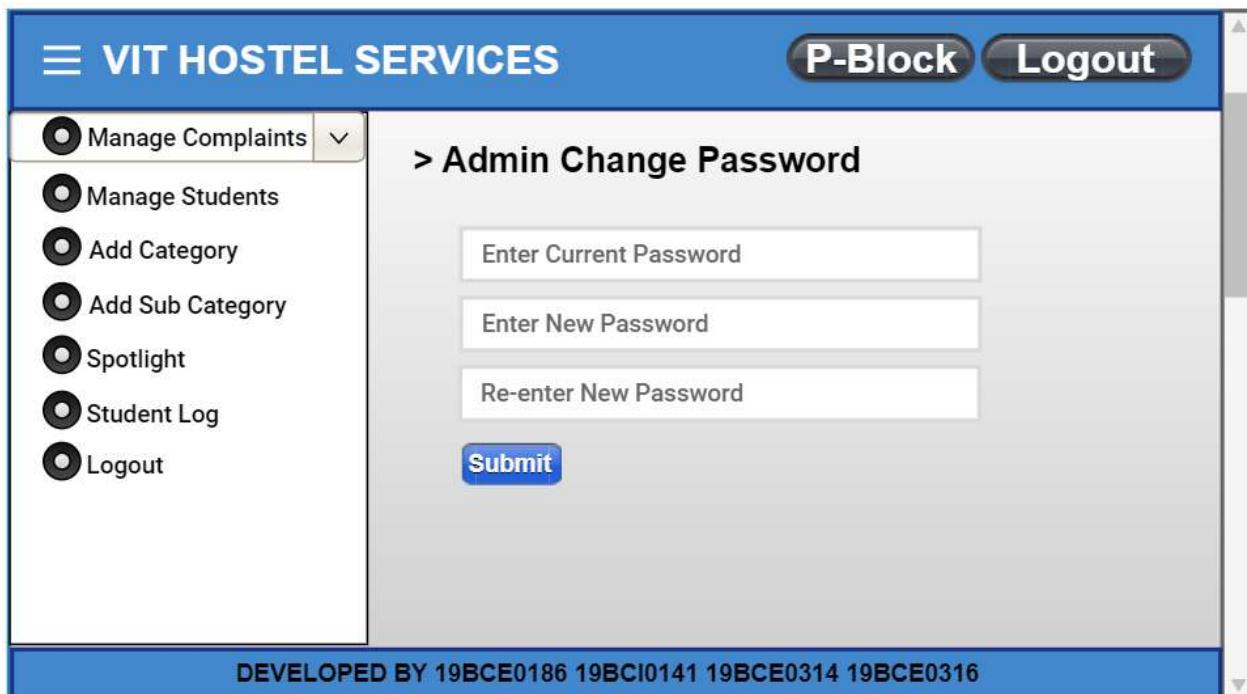
1.3 Student Home Page:

The screenshot displays the Student Home Page of the VIT Hostel Services system. At the top, there's a blue header bar with the title "VIT HOSTEL SERVICES" and the student ID "19BCE0186". To the right of the ID is a "Logout" button. Below the header, on the left, is a sidebar containing a user icon and six menu items: "Spotlight", "Mess Timetable", "Complaint Status", "Lodge a Complaint", "Complaint History", and "Account Settings". The main content area has a heading "> Spotlight" followed by a table showing announcements. The table has two columns: "Announcement By" and "Announcement". It lists two entries: one from "P-Block" saying "Hi Students!" and one from "P-Mess" saying "Hello Students!". At the bottom of the page, there's a blue footer bar with the text "DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316".

1.4 Hostel Admin Login Page:

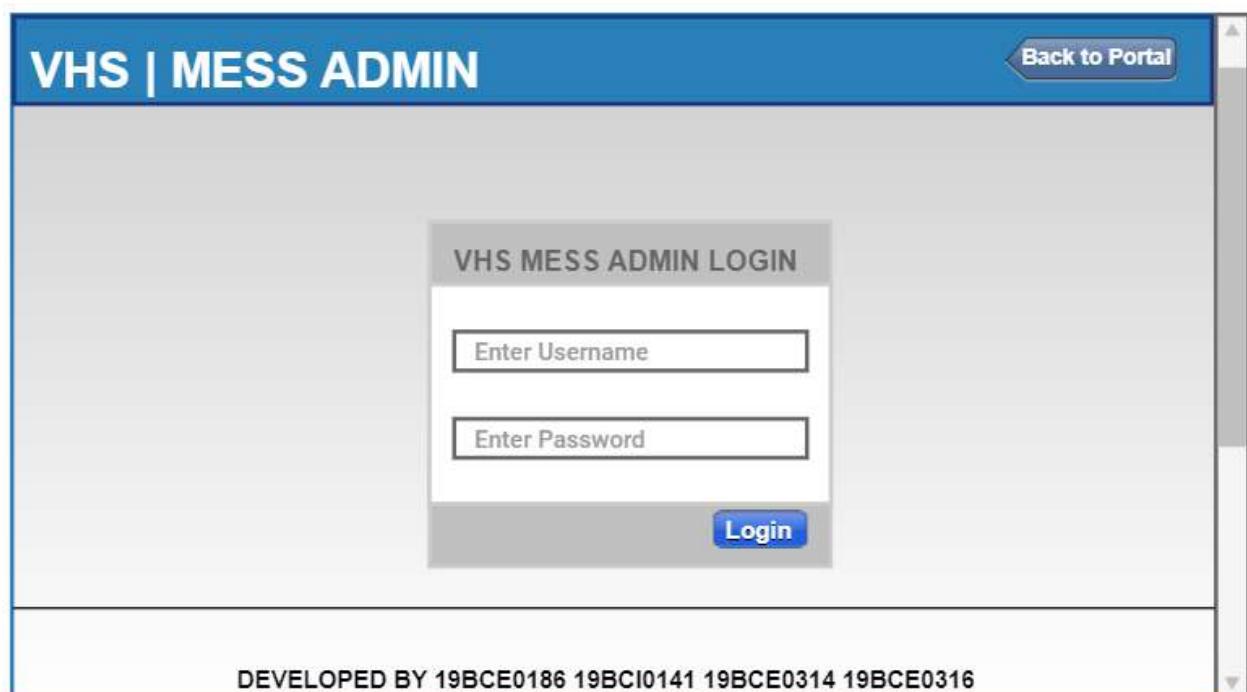
The screenshot shows the Hostel Admin Login page. The top navigation bar includes the title "VHS | HOSTEL ADMIN" and a "Back to Portal" link. The main area is a login form titled "VHS HOSTEL ADMIN LOGIN", which consists of two input fields ("Enter Username" and "Enter Password") and a "Login" button. At the bottom of the page, there's a blue footer bar with the text "DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316".

1.5 Hostel Admin Home Page:



The screenshot shows the 'VIT HOSTEL SERVICES' Admin Home Page. At the top right are 'P-Block' and 'Logout' buttons. On the left is a sidebar with a dropdown menu containing 'Manage Complaints', 'Manage Students', 'Add Category', 'Add Sub Category', 'Spotlight', 'Student Log', and 'Logout'. The main content area is titled '> Admin Change Password' and contains three input fields: 'Enter Current Password', 'Enter New Password', and 'Re-enter New Password'. A blue 'Submit' button is located below these fields. At the bottom of the page is a footer bar with the text 'DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316'.

1.6 Mess Admin Login Page:



The screenshot shows the 'VHS | MESS ADMIN' Login Page. At the top right is a 'Back to Portal' button. The main content area is titled 'VHS MESS ADMIN LOGIN' and contains two input fields: 'Enter Username' and 'Enter Password'. Below these fields is a blue 'Login' button. At the bottom of the page is a footer bar with the text 'DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316'.

1.7 Mess Admin Home Page:

The screenshot shows the 'VIT HOSTEL SERVICES' Mess Admin Home Page. At the top right are buttons for 'P-Mess' and 'Logout'. On the left is a sidebar with icons for 'Manage Complaints' (selected), 'Manage Students', 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area has a title '>> Admin Change Password' and three input fields: 'Enter Current Password', 'Enter New Password', and 'Re-enter New Password'. A blue 'Submit' button is below them. At the bottom of the page is a footer bar with the text 'DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316'.

1.8 VHS Admin Login Page:

The screenshot shows the 'VHS | ADMIN' Login Page. At the top right is a 'Back to Portal' button. The main area contains a 'VHS ADMIN LOGIN' form with two input fields: 'Enter Username' and 'Enter Password', and a blue 'Login' button. At the bottom of the page is a footer bar with the text 'DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316'.

1.9 VHS Admin Home Page:

The screenshot shows the Admin Home Page of the VIT Hostel Services system. At the top, there is a blue header bar with the title "VIT HOSTEL SERVICES" and user information "Admin1" and "Logout". Below the header, on the left, is a sidebar menu with the following options: "Manage Students", "Student Registration", "Add Hostel Block", "Add Mess Block", "Students Log", and "Logout". On the right, the main content area is titled "> Admin Change Password" and contains three input fields: "Enter Current Password", "Enter New Password", and "Re-enter New Password". A blue "Submit" button is located below these fields. At the bottom of the page, a blue footer bar displays the text "DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316".

> Admin Change Password

Enter Current Password

Enter New Password

Re-enter New Password

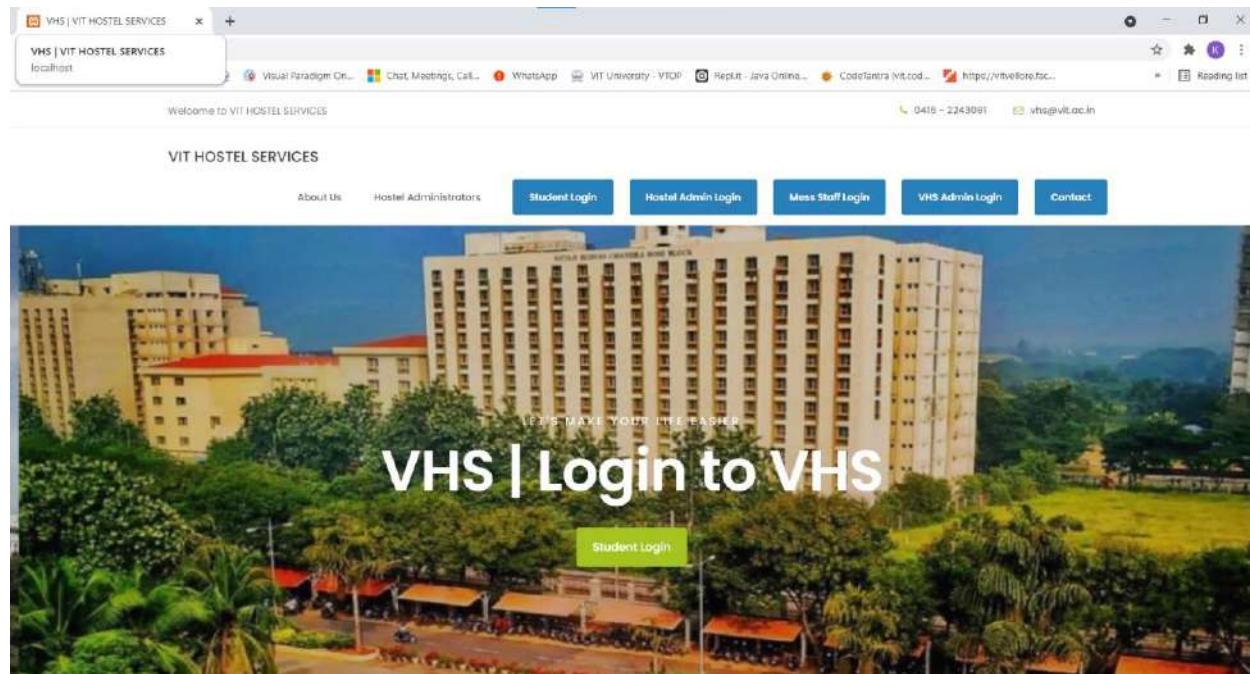
Submit

DEVELOPED BY 19BCE0186 19BCI0141 19BCE0314 19BCE0316

2. Implementation

2.1 VHS Home Page

2.1.1 Home Page



2.1.2 'About' Section in 'Home Page'

A screenshot of the 'About' section on the VHS home page. On the right side, there is a large portrait of a man with glasses and a grey shirt. On the left, there is a heading 'Welcome to VIT Hostel Services' and two paragraphs of text describing the portal's purpose. Below this, there is a list of four staff members with their names, profile pictures, and student IDs. The names are KOTHA V V S AAKASH, KOTHAMASU KARTHIK, A MADHUGNEA SAI, and MAHANKALI SAI SHARATH CHANDRA. Each entry also includes a small profile picture and a student ID (e.g., 19BCE018, 19BCE0141, 19BCE0314, 19BCE0316).

2.1.3 'Hostel Administrators' Section in 'Home Page'

Our HOSTEL ADMINISTRATOR's



Prof. S. Prabakar
director.mh@vit.ac.in

0416 - 220 5999
director.mh@vit.ac.in

Dr. S. Sumathy
Director, Ladies Hostels

0416 - 220 2711
director.lh@vit.ac.in

Mr . R. Pathy
Administrative Officer - Hostels

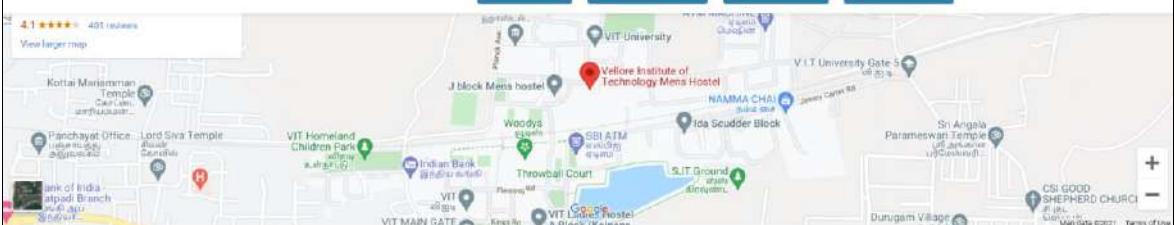
0416 - 2202636
ao.hostel@vit.ac.in

2.1.4 'Contact Us Section in 'Home Page'

VIT HOSTEL SERVICES

About Us Hostel Administrators Student Login Hostel Admin Login Mess Staff Login VHS Admin Login Contact

4.1 ★★★★☆ 401 reviews View larger map



Contact Info
You can contact us 24x7.

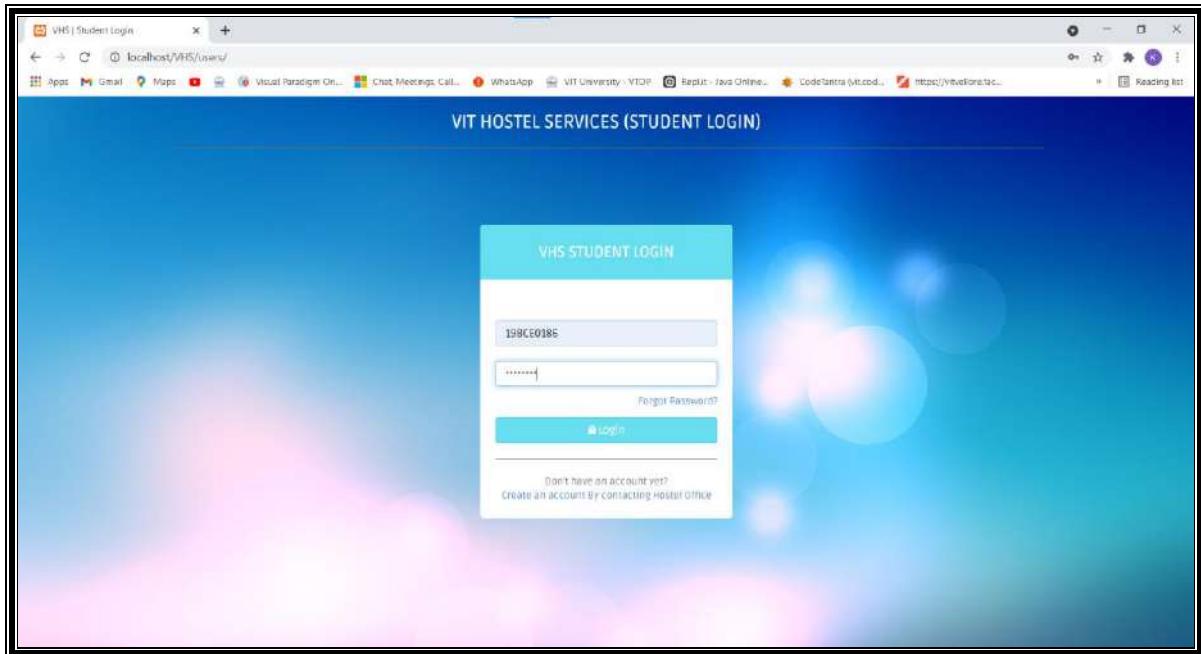
0416 - 2243091
vhs@vit.ac.in

Address Info
VIT
Vellore - 632014
Tamil Nadu, India

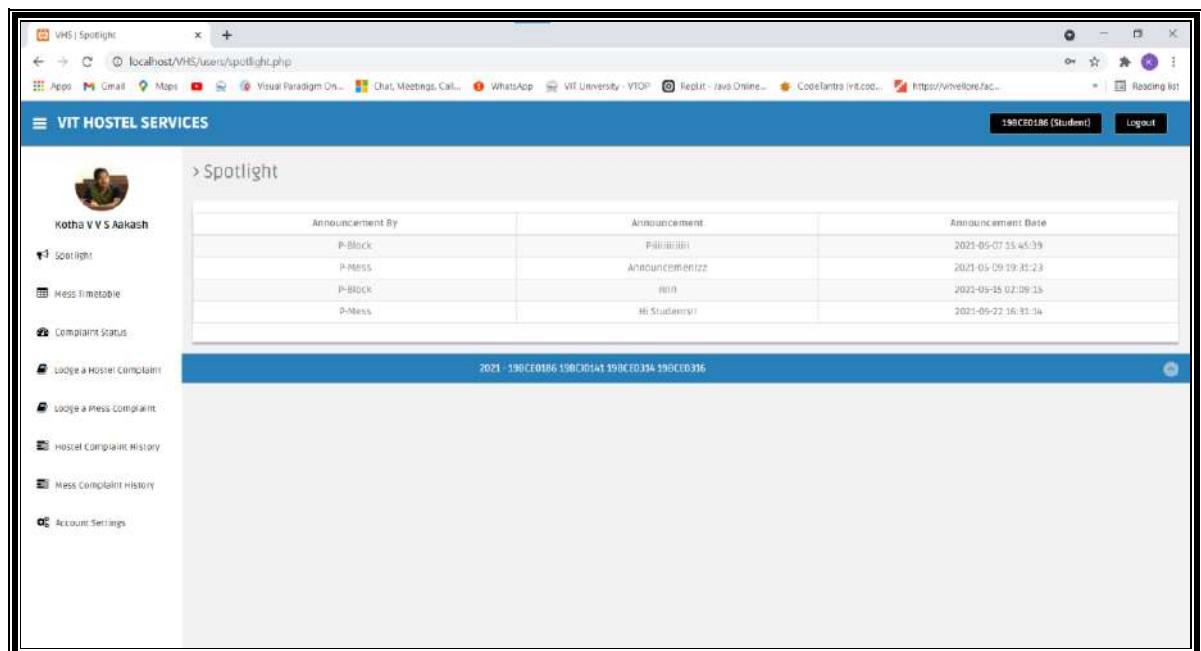
Facebook Twitter Instagram

2.2 VHS Student Module

2.2.1 Student 'Login' Page



2.2.2 Student 'Home' Page (After Login)



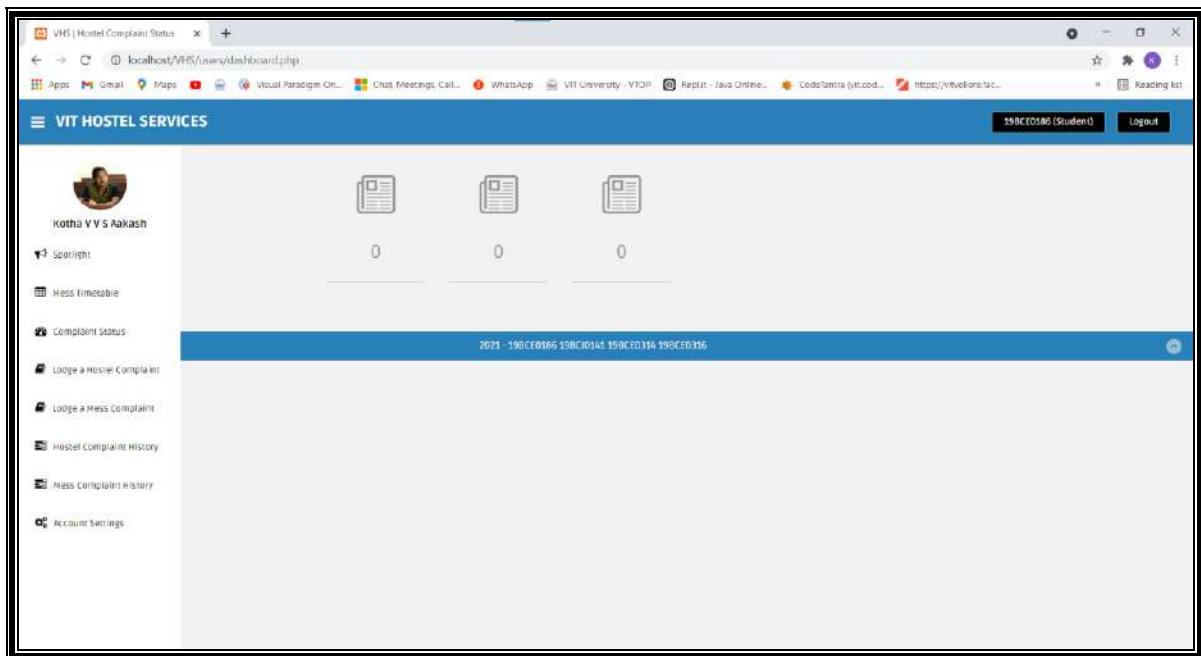
2.2.3 Student 'Spotlight' Page

Announcement By	Announcement	Announcement Date
P-Block	PBBB1111	2021-05-07 15:45:35
P-Mess	Announcement123	2021-05-09 19:35:23
P-BLOCK	BBB	2021-05-15 02:39:15
P-Mess	M Students	2021-05-22 16:31:14

2.2.4 Student 'Mess Timetable' Page

Mess Block	Day	Breakfast	Lunch	Snacks	Dinner	Last Updated At
P-MESS	Monday	IDly	Sambhar	Samosa	Curd	2021-05-22 16:32:36
P-Mess	Tuesday	Dosa	Rasam	Sandwich	Roti	2021-05-09 20:12:26
P-Mess	Wednesday	Upma	Bali	Chips	Bosu	2021-05-09 20:12:31
P-Mess	Thursday	IDly	Curd	Biscuit	Chapatti	2021-05-09 20:12:37
P-Mess	Friday	Dosa	Carrot	Duff	Rumali Roti	2021-05-09 20:12:46
P-Mess	Saturday	Dosa	Potato	Samosa	Beari	2021-05-09 20:12:51
P-Mess	Sunday	Upma	Sambhar	Chips	Roti	2021-05-09 20:12:56

2.2.5 Student 'Complaint Status' Page



2.2.6 Student 'Lodge a Hostel Complaint' Page

The screenshot shows the 'VIT HOSTEL SERVICES' 'Register Hostel Complaint' page. The page title is 'Register Hostel Complaint'. It features a sidebar with the same student profile and menu options as the previous page. The main form includes fields for Category (selected: Wi-Fi), Sub Category (selected: Wi-Fi Slow), Complaint Type (selected: Complaint), Hostel (selected: P-Block), and Nature of Complaint (selected: Wi-Fi). A large text area for 'Complaint Details (max 2000 words)' contains the text 'very slow!!!'. Below this is a file upload field labeled 'Complaint Related Doc(s) (any)' with a 'Choose File' button and a message 'No file chosen'. At the bottom is a 'Submit' button. The URL in the browser is 'localhost/VHS/users/register-complaint.php'.

2.2.7 Student 'Lodge a Mess Complaint' Page

2.2.8 Student 'Hostel Complaint History' Page

Complaint Number	Reg Date	last Updation date	Status	Action
25	2021-09-22 21:29:35	2021-09-22 21:29:35	Yet to Process	View Details

2.2.8.1 'View Details' Section in 'Hostel Complaint History' Page

The screenshot shows a web browser window titled 'VHS | Hostel Complaint Details'. The URL is 'localhost/VHS/users/complaint-details.php?cid=25'. The page header includes the 'VIT HOSTEL SERVICES' logo and the user information '19BCE0186 (Student)' and 'Logout'. On the left, there is a sidebar with icons for 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Complaint Details' and displays the following data:

Complaint Number :	25	Reg. Date :	2021-05-22 21:29:35
Category :	Wi-Fi	Sub Category :	Wi-Fi Slow
Complaint Type :	Complaint	State :	P-Block
Nature of Complaint :	Wi-Fi	File :	FII/NA
Complaint Details	very Slow!!!		
Final status :	Yet to Process		

2.2.9 Student 'Mess Complaint History' Page

The screenshot shows a web browser window titled 'VHS | Mess Complaint History'. The URL is 'localhost/VHS/users/complaint-history1.php'. The page header includes the 'VIT HOSTEL SERVICES' logo and the user information '19BCE0186 (Student)' and 'Logout'. On the left, there is a sidebar with icons for 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Your Mess Complaint History' and displays a table with one row of data:

Complaint Number	Reg Date	Last Update date	Status	Action
32	2021-05-22 21:38:24		Yet to Process	View Details

Below the table, the text '2021-19BCE0186 19BC101119BCE0314 19BCE0316' is displayed.

2.2.9.1 'View Details' Section in 'Mess Complaint History' Page

Complaint Details			
Complaint Number:	32	Reg. Date:	2021-05-22 21:38:24
Category:	Mess Cleanliness		
Complaint Type:	Complaint	State:	P-N@S
Nature of Complaint:	not clean	File:	File NA
Complaint Details	Not Clean!!!		
Final Status:	Yet to Process		

2.2.10 Student 'Profile' Page

Profile info			
Kotha VVS Aakash's Profile			
Last Updated at:	2021-05-09 20:09:46		
Full Name	Kotha VVS Aakash	Registration No.	19BCE0186
Mail-ID	kothavvsakash2019@vitstudent.ac.in	DOB	03/08/2002
Branch	CSE	Specialization	CORE
School	SCOPE		
Hostel Block	P-BLOCK	Hostel Room No.	648
Mess Block	P-Mess		
Address	Visakhapatnam	Pincode	530003

2.2.11 Student 'Change Password' Page

The screenshot shows a web browser window titled 'VHS | Student Change Password'. The URL is 'localhost/VHS/users/change-password.php'. The page has a blue header bar with the 'VIT HOSTEL SERVICES' logo and a user profile picture. Below the header, there's a sidebar with various student-related links: 'Spotlight', 'Mess Timetable', 'Complaint status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', 'Account Settings' (which is currently selected), 'Profile', and 'Change Password'. The main content area is titled 'Change Password' and contains three input fields: 'Current Password', 'New Password', and 'Confirm Password'. A 'Submit' button is located below these fields. At the bottom of the page, there's a footer with the text '2021-29BCE0186 19BCE044 19BCE0314 19BCE0356'.

2.2.12 Student 'Forgot Password' Page

The screenshot shows a web browser window titled 'VHS | Student Login'. The URL is 'localhost/VHS/users/'. The page features a large teal-colored modal dialog box with the title 'Forgot Password?'. Inside the modal, there's a message 'Enter your details below to reset your password.' followed by four input fields: 'Email', 'Contact No.', 'New Password', and 'Confirm Password'. Below these fields are two buttons: 'Cancel' and 'Submit'. At the bottom of the modal, there's a link 'Forgot my account ID?' and another link 'Create an account at its contacting client / office'. The background of the page is dark blue with some blurred circular light effects.

2.3 VHS Hostel Admin Module

2.3.1 Hostel Admin 'Login' Page

VHS | Hostel Admin Login

VHS | Hostel Admin

VHS Hostel Admin Login

P-Block

.....

Login

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2.3.2 Hostel Admin 'Home' Page (After Login)

Hostel Admin Change Password

VHS | Hostel Admin

P-Block

Admin Change Password

Current Password: Enter your current Password

New Password: Enter your new current Password

Confirm Password: Enter your new Password again

Submit

Manage Complaint

Manage Students

Add Category

Add Sub-Category

Spotlight

Students Logon Log

Logout

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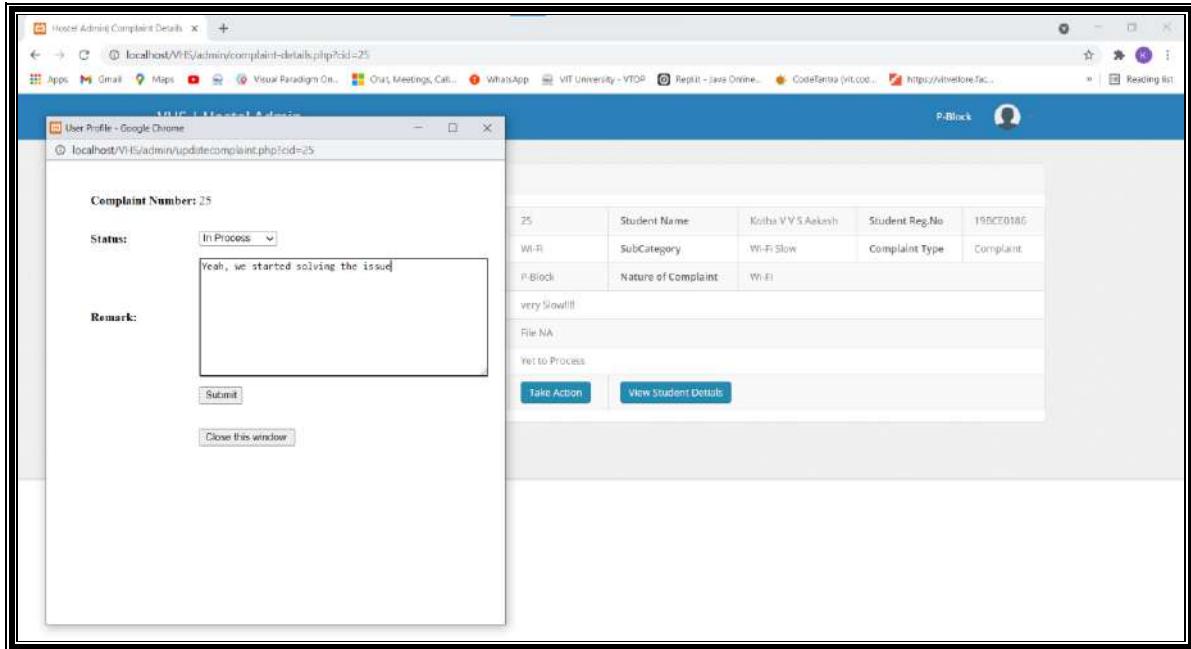
2.3.3 Hostel Admin 'Yet to Process Complaints' Page

Complaint No	Student Name	Student Reg. No	Complaint Block	Reg Date	Status	Action
25	Kotha VVS Aakash	19BCE0186	P-Block	2021-05-22 21:29:35	Yet to Process	View Details

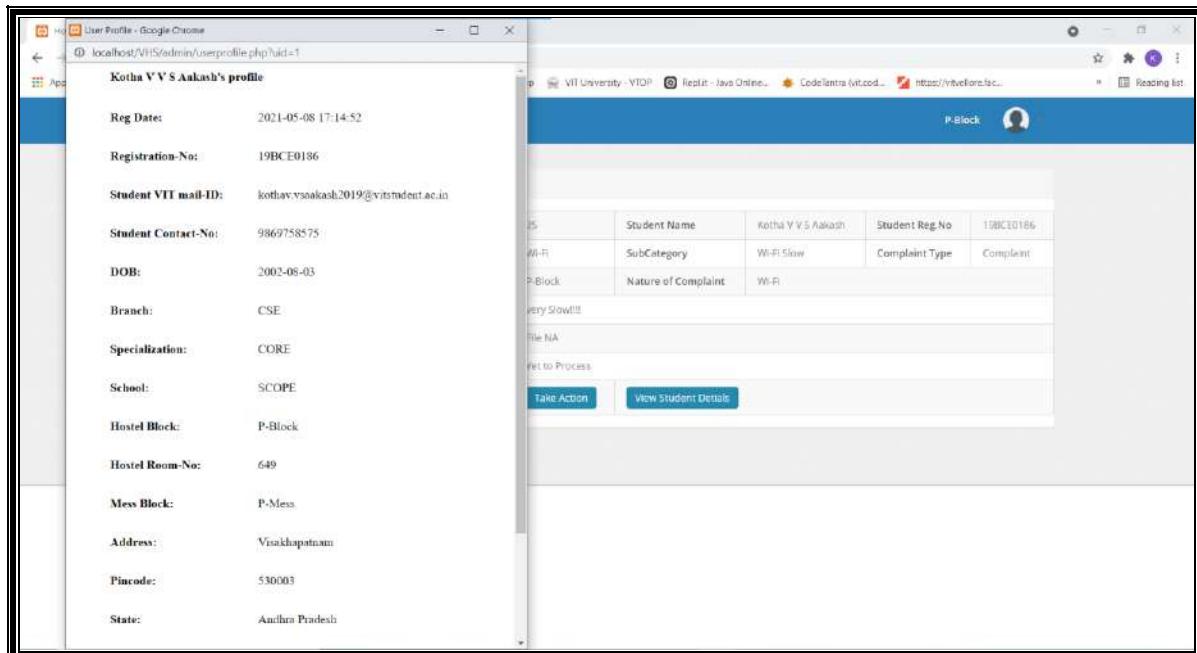
2.3.3.1 'View Details' Section in 'Yet to Process Complaints Page'

Complaint Number	25	Student Name	Kotha VVS Aakash	Student Reg.No	19BCE0186
Category	Wi-Fi	SubCategory	Wi-Fi Slow	Complaint Type	Complaint
Complaint Block	P-Block	Nature of Complaint	very Slow!!!		
Complaint Details	very Slow!!!				
File(if any)	File NA				
Final Status	Yet to Process				
Action	Take Action View Student Details				

2.3.3.1.1 'Take Action' Section in 'View Details'



2.3.3.1.2 'View Student Details' Section in 'View Details'



2.3.4 Hostel Admin 'Manage Students' Page

VHS | Hostel Admin

Manage Students

#	Name	Reg.No	Hostel Block	Contact no	Reg. Date	Action
1.	Kotha V V S Aakash	19BCE0186	P-Block	9869758575	2021-05-08 17:14:52	<button>View Details</button>
2.	Kothamasu Karthik	19BCE0141	M-Block	0	2021-05-14 22:13:49	<button>View Details</button>
3.	Mahankali Sai Sharath Chandra	19BCE0316	M-Block	8798798976	2021-05-14 22:17:46	<button>View Details</button>
4.	A Madhughneha Sai	19BCE0314	N-Block	9876789854	2021-05-14 22:20:04	<button>View Details</button>

Showing 1 to 4 of 4 entries.

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2.3.4.1 'View Details' Section in 'Manage Students Page'

Kotha V V S Aakash's profile

Reg Date: 2021-05-08 17:14:52

Registration-No: 19BCE0186

Student VIT mail-ID: kothavvsakash2019@vitstudent.ac.in

Student Contact-No: 9869758575

DOB: 2002-08-03

Branch: CSE

Specialization: CORE

School: SCOPE

Hostel Block: P-Block

Hostel Room-No: 649

Mess Block: P-Mess

VHS | Hostel Admin

Manage Students

#	Name	Reg.No	Hostel Block	Contact no	Reg. Date	Action
1.	Kotha V V S Aakash	19BCE0186	P-Block	9869758575	2021-05-08 17:14:52	<button>View Details</button>
2.	Kothamasu Karthik	19BCE0141	M-Block	0	2021-05-14 22:13:49	<button>View Details</button>
3.	Mahankali Sai Sharath Chandra	19BCE0316	M-Block	8798798976	2021-05-14 22:17:46	<button>View Details</button>
4.	A Madhughneha Sai	19BCE0314	N-Block	9876789854	2021-05-14 22:20:04	<button>View Details</button>

Showing 1 to 4 of 4 entries.

2.3.5 Hostel Admin 'Add Category' Page

Add Category

Category Name:

Description:

Add

#	Category	Description	Creation date	Last Updated	Action
1	Wi-Fi	Wi-Fi Related Complaints	2021-05-07 16:27:24	2021-05-14 23:36:43	
2	Hygiene	Cleanliness Related Complaints	2021-05-14 23:36:28		
3	Architectural	Architecture Related Complaints	2021-05-14 23:37:40		
4	Electrical	Electrical Related Complaints	2021-05-14 23:38:10		
5	Health	Health Related Complaints	2021-05-14 22:38:54		
6	Security	Security Related Complaints	2021-05-14 23:39:26		
7	Other	Other	2021-05-14 23:57:42		

Showing 1 to 7 of 7 entries

2.3.6 Hostel Admin 'Add Sub Category' Page

Add Sub-Category

Select Category:

Sub-Category Name:

Add

#	Category	Sub-Category	Creation date	Last Updated	Action
1	Wi-Fi	Wi-Fi Slow	2021-05-14 23:43:29		
2	Wi-Fi	Wi-Fi Not Working	2021-05-14 23:43:48		
3	Hygiene	Room Cleaning	2021-05-14 23:44:40		
4	Hygiene	Un-Hygiene Washrooms	2021-05-14 23:45:41		
5	Architectural	Any Damage to Property	2021-05-14 23:47:26		
6	Architectural	Any Repair Required	2021-05-14 23:47:50		

Showing 1 to 6 of 6 entries

2.3.7 Hostel Admin 'Spotlight' Page

The screenshot shows the 'Hostel Admin Spotlight' page. On the left, a sidebar menu includes 'Manage Complaint', 'Manage Students', 'Add Category', 'Add Sub-Category', 'Spotlight' (which is selected), 'Students Login Log', and 'Logout'. The main area has two sections: 'Add Announcement' (with fields for 'Hostel Block' set to 'P-Block' and 'Announcement' containing 'P-Block') and 'Manage Announcements' (a table showing two entries: P-Block and P-Block, both created on 2021-05-07 15:45:39 and last updated on 2021-05-07 16:01:28). A search bar and pagination controls are also present.

#	Hostel Block	Announcement	Creation date	Last Updated	Action
1	P-Block	P-Block	2021-05-07 15:45:39	2021-05-07 16:01:28	
2	P-Block	P-Block	2021-05-15 02:09:15		

2.3.8 Hostel Admin 'Student Login Log' Page

The screenshot shows the 'Hostel Admin Student Log' page. The sidebar menu is identical to the previous page. The main area displays a table of 'Student Login Log' entries, showing 10 of 56 records. Each entry includes columns for User Email (190CE0186), User IP (±1), Login Time (various dates and times from May 2021), Logout Time (some entries have empty or later times), and Status (Failed or Successful).

#	User Email	User IP	Login Time	Logout Time	Status
1	190CE0186	±1	2021-05-08 18:22:46		Failed
2	190CE0186	±1	2021-05-09 13:29:55	09-05-2021 01:30:23 PM	Successful
3	190CE0186	±1	2021-05-09 13:31:18	09-05-2021 01:31:26 PM	Successful
4	190CE0186	±1	2021-05-09 13:32:16	09-05-2021 01:32:35 PM	Successful
5	190CE0186	±1	2021-05-09 13:33:05	09-05-2021 02:34:00 PM	Successful
6	190CE0186	±1	2021-05-09 14:34:12	09-05-2021 02:58:52 PM	Successful
7	190CE0186	±1	2021-05-09 14:59:03	09-05-2021 03:11:32 PM	Successful
8	190CE0186	±1	2021-05-09 15:11:44		Failed
9	190CE0186	±1	2021-05-09 15:11:50	09-05-2021 07:38:48 PM	Successful
10	190CE0186	±1	2021-05-09 19:39:02	09-05-2021 08:05:43 PM	Successful

2.4 VHS Mess Admin Module

2.4.1 Mess Admin 'Login' Page

VHS | Mess Admin

VHS Mess Admin Login

P-Mess

.....

Login

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2.4.2 Mess Admin 'Home' Page (After Login)

Mess Admin| Change Password

localhost:8020/admin/change-password.php

VHS | Mess Admin

P-Mess

Admin Change Password

Current Password: Enter your current Password

New Password: Enter your new current Password

Current Password: Enter your new Password again

Submit

Manage Complaint

Manage Students

Add Category

Update Mess Timetable

Spotlight

Logout

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2.4.3 Mess Admin 'Yet to Process Complaints' Page

Complaint No.	Student Name	Student Reg. No.	Complaint Block	Reg Date	Status	Action
32	Kotha V V S Akash	19BCE0186	P-Mess	2021-05-22 21:38:24	Yet to Process	View Details

2.4.3.1 'View Details' Section in 'Yet to Process Complaints Page'

Complaint Number	32	Student Name	Kotha V V S Akash	Student Reg. No.	19BCE0186
Category	Mess Cleanliness	SubCategory	Nothing	Complaint Type	Complaint
Complaint Block	P-Mess	Nature of Complaint	not clean		
Complaint Details	Not Clean!!				
File (if any)	File NA				
Final Status	Yet to Process				
Action	Take Action View Student Details				

2.4.3.1.1 'Take Action' Section in 'View Details'

The screenshot shows a web browser window titled 'Mess Admin Complaint Details'. The URL in the address bar is `localhost/VHS/Mess%20admin/complaint-details.php?cid=32`. The page displays a form for managing a complaint. On the left, there's a sidebar with a 'Complaint Number: 32' header, a 'Status' dropdown set to 'Closed', and a text area containing 'Thank you for the feedback!'. Below this is a 'Remark' text area. At the bottom of the sidebar are 'Submit' and 'Close this window' buttons. To the right, there's a table with student details: Student Name (Kotha VVS Akash), Student Reg. No (19BCE0186), and other columns like Mess Cleanliness, SubCategory, and Complaint Type. Below the table, there are sections for 'Nature of Complaint' (not clean) and 'Yet to Process'. At the bottom right of the main content area are 'Take Action' and 'View Student Details' buttons.

2.4.3.1.2 'View Student Details' Section in 'View Details'

The screenshot shows the same 'Mess Admin Complaint Details' page as above. The URL is now `localhost/VHS/Mess%20admin/userprofile.php?uid=1`. A sidebar on the left shows 'Kotha VVS Akash's profile' with various student details: Reg Date (2021-05-08 17:14:52), Registration No (19BCE0186), Student VIT mail ID (kothavvsakash2019@vitstudent.ac.in), Student Contact No (9869758575), DOB (2002-08-03), Branch (CSE), Specialization (CORE), School (SCOPE), Hostel Block (P-Block), Hostel Room No (649), and Mess Block (P-Mess). The main content area on the right is identical to the previous screenshot, showing the student's name, registration number, and other table data, along with 'Take Action' and 'View Student Details' buttons.

2.4.4 Mess Admin 'Manage Students' Page

#	Name	Reg.No	Hostel Block	Mess Block	Contact no	Reg. Date	Action
1	Kotha V V S Akash	19BCE0186	P-Block	P-Mess	9869758575	2021-05-08 17:14:52	<button>View Details</button>
2	Kothamasu Karthik	19BCI0141	M-Block	P-Mess	0	2021-05-14 22:13:49	<button>View Details</button>
3	Mahankali Sai Sharath Chandra	19BCE0316	M-Block	M-Mess	8798798576	2021-05-14 22:17:46	<button>View Details</button>
4	A Madhugrhnaa Sai	19BCE0314	N-Block	N-Mess	9876789854	2021-05-14 22:20:04	<button>View Details</button>

Showing 1 to 4 of 4 entries

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2.4.4.1 'View Details' Section in 'Manage Students Page'

Kotha V V S Akash's profile

Reg Date: 2021-05-08 17:14:52

Registration-No: 19BCE0186

Student VIT mail-ID: kothav.sakash2019@vitstudent.ac.in

Student Contact-No: 9869758575

DOB: 2002-08-03

Branch: CSE

Specialization: CORE

School: SCOPE

Hostel Block: P-Block

Hostel Room-No: 649

Mess Block: P-Mess

2.4.5 Mess Admin 'Add Category' Page

The screenshot shows the 'Add Category' page of the VHS Mess Admin interface. The left sidebar contains navigation links: Manage Complaint, Manage Students, Add Category (selected), Update Mess Timetable, Spotlight, and Logout. The main area has a form titled 'Add Category' with fields for 'Category Name' (placeholder 'Enter category name') and 'Description'. Below the form is a table titled 'Manage Categories' showing three entries:

#	Category	Description	Creation date	Last Updated	Action
1	Mess Cleanliness	Mess Cleanliness Related	2021-05-07 18:27:13	2021-05-14 23:59:10	
2	Mess Food Feedback	Mess Food Feedback Related	2021-05-09 20:11:58	2021-05-15 00:00:34	
3	Theft Related	Theft Related	2021-05-15 00:00:19		

Showing 1 to 3 of 3 entries.

2.4.6 Mess Admin 'Update Mess Timetable' Page

The screenshot shows the 'Update Mess Timetable' page of the VHS Mess Admin interface. The left sidebar contains navigation links: Manage Complaint, Manage Students, Add Category, Update Mess Timetable (selected), Spotlight, and Logout. The main area has a table titled 'Mess Timetable' showing seven entries:

#	Mess Block	Day	Breakfast	Lunch	Snacks	Dinner	Last Updated At	Action
1	P-Mess	Monday	Idly	Sambhar	Samosa	Curd	2021-05-22 16:02:34	
2	P-Mess	Tuesday	Dosa	Ravaam	Sandwich	Roti	2021-05-09 20:12:24	
3	P-Mess	Wednesday	Upma	Dal	Chips	Dosa	2021-05-09 20:12:31	
4	P-Mess	Thursday	Idly	Curd	Biscuit	Chapatti	2021-05-09 20:12:37	
5	P-Mess	Friday	Poha	Carrot	Puff	Rumali Roti	2021-05-09 20:12:45	
6	P-Mess	Saturday	Dosa	Potato	Samosa	Naan	2021-05-09 20:12:51	
7	P-Mess	Sunday	Upma	Sambhar	Chips	Roti	2021-05-09 20:12:56	

Showing 1 to 7 of 7 entries.

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2.4.7 Mess Admin 'Spotlight' Page

The screenshot shows a web browser window titled 'Mess Admin Spotlight' with the URL 'localhost:8208/admin/spotlight.php'. The page is titled 'VHS | Mess Admin'. On the left, there is a sidebar menu with the following items:

- Manage Complaint
- Manage Students
- Add Category
- Update Mess Timetable
- Spotlight** (highlighted in blue)
- Logout

The main content area has two sections: 'Add Announcement' and 'Manage Announcements'.

Add Announcement: A form with a dropdown 'Mess Block' set to 'P-Mess' and a text area for 'Announcement' containing 'Hi Student!'. A blue 'Add' button is at the bottom.

Manage Announcements: A table showing two entries:

#	Mess Block	Announcement	Creation date	Last Updated	Action
1	P-Mess	Announcement1	2021-05-09 19:31:23	2021-05-09 20:10:19	
2	P-Mess	Hi Student!	2021-05-22 18:31:14		

At the bottom of the table, it says 'Showing 1 to 2 of 2 entries'.

2.5 VHS Admin Module

2.5.1 VHS Admin 'Login' Page

The screenshot shows a web browser window titled "VHS | VHS Admin login". The URL in the address bar is "localhost/VHS/VHS362/admin/index.php". The page has a blue header bar with the text "VHS | Admin". Below the header is a "VHS Admin Login" form. It contains two input fields: one for "Admin1" and another for a password. A "Login" button is located below the password field. At the bottom of the page, there is a copyright notice: "© 2021 VHS All rights reserved."

2.5.2 VHS Admin 'Home' Page (After Login)

The screenshot shows a web browser window titled "Admin | Change Password". The URL in the address bar is "localhost/VHS/VHS362/admin/change-password.php". The page has a blue header bar with the text "VHS | Admin" and a user profile icon labeled "Admin1". On the left side, there is a sidebar with several navigation options: "Manage Students", "Student Registration", "Add Hostel Block", "Add Mess Block", "Students Login Log", and "Logout". The main content area is titled "Admin Change Password" and contains three input fields: "Current Password" (placeholder: "Enter your current Password"), "New Password" (placeholder: "Enter your new current Password"), and "Confirm Password" (placeholder: "Enter your new Password again"). A "Submit" button is located at the bottom of the form. At the bottom of the page, there is a copyright notice: "© 2021 VHS All rights reserved."

2.5.3 VHS Admin 'Manage Students' Page

The screenshot shows the 'Manage Students' page of the VHS Admin interface. On the left, there is a sidebar with navigation links: 'Manage Students' (selected), 'Student Registration', 'Add Hostel Block', 'Add Mess Block', 'Students Login Log', and 'Logout'. The main area is titled 'Manage Students' and displays a table of student records. The columns are: #, Name, Reg No, Hostel Block, Mess Block, Contact no, Reg. Date, and Action. There are four entries in the table:

#	Name	Reg No	Hostel Block	Mess Block	Contact no	Reg. Date	Action
1	Kotha V V S Akash	19BCE0186	P-Block	P-Mess	9869758575	2021-05-08 17:14:52	View Details Delete
2	Kothamasu Karthik	19BCE0141	M-Block	P-Mess	0	2021-05-14 22:13:49	View Details Delete
3	Mahankali Sai Sharath Chandra	19BCE0316	M-Block	M-Mess	8798298976	2021-05-14 22:17:46	View Details Delete
4	A Madhuginea Sai	19BCE0314	N-Block	N-Mess	9876789854	2021-05-14 22:20:04	View Details Delete

Showing 1 to 4 of 4 entries.

2.5.3.1 'View Details' Section in 'Manage Students Page'

The screenshot shows the 'Manage Students' page with a modal window open for 'Kotha V V S Akash's profile. The modal contains the following information:

- Reg Date:** 2021-05-08 17:14:52
- Registration-No:** 19BCE0186
- Student VIT mail-ID:** kothavvsakash2019@vitstudent.ac.in
- Student Contact-No:** 9869758575
- DOB:** 2002-08-03
- Branch:** CSE
- Specialization:** CORE
- School:** SCOPE
- Hostel Block:** P-Block
- Hostel Room-No:** 649
- Mess Block:** P-Mess

The main table on the page remains the same as in the previous screenshot.

2.5.4 VHS Admin 'Student Registration' Page

The screenshot shows a web browser window titled 'VHS | Student Registration' with the URL 'localhost/VHS/users/registration.php'. The page has a blue header bar with the text 'VIT HOSTEL SERVICES (STUDENT REGISTRATION)'. Below this is a form titled 'STUDENT REGISTRATION' containing fields for 'Full Name', 'Email ID', 'Register-No.', 'Select Hostel Block', 'Select Mess Block', 'Contact no.', and 'Password'. A 'Register' button is at the bottom.

2.5.5 VHS Admin 'Add Hostel Block' Page

The screenshot shows a web browser window titled 'Admin | Hostel Block' with the URL 'localhost/VHS/VHS%2admin/state.php'. The page has a blue header bar with the text 'VHS | Admin' and a user profile icon. On the left is a sidebar with options: 'Manage Students', 'Student Registration' (selected), 'Add Hostel Block' (highlighted in blue), 'Add Mess Block', 'Students Login Log', and 'Logout'. The main content area has a section titled 'Add Hostel Block' with fields for 'Block Name' (containing 'Enter State Name') and 'Description'. Below this is a 'Add' button. At the bottom is a table titled 'Manage Hostel Blocks' showing four rows of data:

#	Hostel Block	Description	Creation date	Last Updated	Action
1	M-Block	MB	2016-10-18 17:05:02	2021-05-08 18:20:17	
2	F-Block	FB	2021-05-07 14:23:41	2021-05-08 18:20:22	
3	N-Block	NB	2021-05-07 16:29:11	2021-05-08 18:20:27	
4	Q-Block	QB	2021-05-14 22:46:00	2021-05-15 02:09:05	

2.5.6 VHS Admin 'Add Mess Block' Page

#	Mess Block	Description	Creation date	Last Updated	Action
1	P-Mess	PM	2021-05-08 17:37:48		Edit Delete
2	M-Mess	MM	2021-05-08 17:37:59	2021-05-09 20:11:08	Edit Delete
3	N-Mess	NM	2021-05-08 17:38:00	2021-05-09 20:11:02	Edit Delete
4	Q-Mess	QM	2021-05-14 22:48:03		Edit Delete

2.5.7 VHS Admin 'Student Login Log' Page

#	User Email	User IP	Login Time	Logout Time	Status
1	T90CE0186	:1	2021-05-08 19:22:46		Failed
2	T90CE0186	:1	2021-05-09 13:29:55	09-05-2021 01:30:23 PM	Successful
3	T90CE0186	:1	2021-05-09 13:31:18	09-05-2021 01:31:26 PM	Successful
4	T90CE0186	:1	2021-05-09 13:32:16	09-05-2021 01:32:35 PM	Successful
5	T90CE0186	:1	2021-05-09 13:33:05	09-05-2021 02:34:00 PM	Successful
6	T90CE0186	:1	2021-05-09 14:34:12	09-05-2021 02:58:52 PM	Successful
7	T90CE0186	:1	2021-05-09 14:59:03	09-05-2021 03:11:32 PM	Successful
8	T90CE0186	:1	2021-05-09 15:11:44		Failed
9	T90CE0186	:1	2021-05-09 15:11:50	09-05-2021 07:38:48 PM	Successful
10	T90CE0186	:1	2021-05-09 19:39:02	09-05-2021 08:05:43 PM	Successful

Showing 1 to 10 of 56 entries.

3. Software Interfaces

For the system, we will launch the portal over the internet and other than the hardware specified in the hardware interface section, the software requirements are to support windows operating system with support to MySQL, Apache and PHP servers.

3.1 Inputs

The software will receive input from source of user interface. The user interface (Student) will supply the keywords (Details of complaints) to the Software. The user interface (Hostel Staff) will supply the keywords (Status of Complaints, Announcements) to the Software. The user interface (Mess Staff) will supply the keywords (Status of Complaints, Announcements, New Mess Timetable) to the Software.

3.2 Outputs

The output will appear on user interface (Student) Like: Status of Complaints, Spotlight, Updated Mess Timetable. The output will appear on user interface (Hostel Staff) Like: Complaints raised by the student of that particular hostel block. The output will appear on user interface (Mess Staff) Like: Complaints raised by the student of that particular mess block.

3.3 Operating System

The software will run on the Windows operating system (preferably Windows 10).

3.4 We are using some software interfaces listed below

- Operating System: Windows 10
- IDE Tool's: Notepad++, sub lime text editor
- For Scripting: HTML, CSS

- Database: MySQL
- Web Requirements: PhpMyAdmin
- Web server: Apache
- Web Browser: Any Browser
- Software interfaces that we are used in this project include:- MySQL, PhpMyAdmin, Sublime text editor. For creating the database, we have used MySQL. We have coded the HTML part in the sublime text editor. Scripts related with PHP are also coded in the sublime text editor. We have managed the database by using the PhpMyAdmin.

Test report and exploration

for

“VIT HOSTEL SERVICES”

Prepared by:

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COURSE: SOFTWARE ENGINEERING

LAB SECTION: L45+L46 (CSE3001)

DATE: 23-05-2021



VIT®

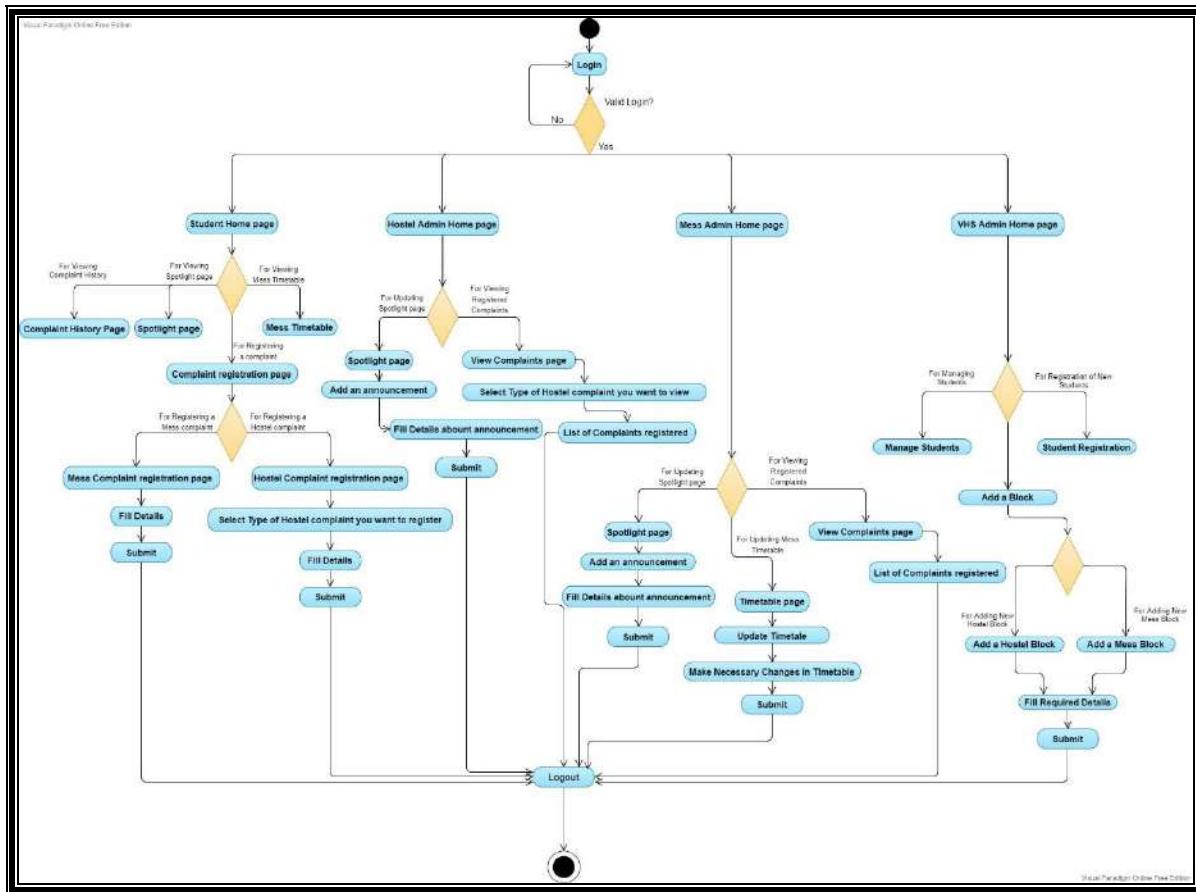
Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

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1. Develop an architectural design to depict the system components and their interfaces.



The User interface includes various forms and windows. The main window will consist of the different login options for different users. The interface will visualize the various features and functionalities listed in this document for this prototype as the included below:

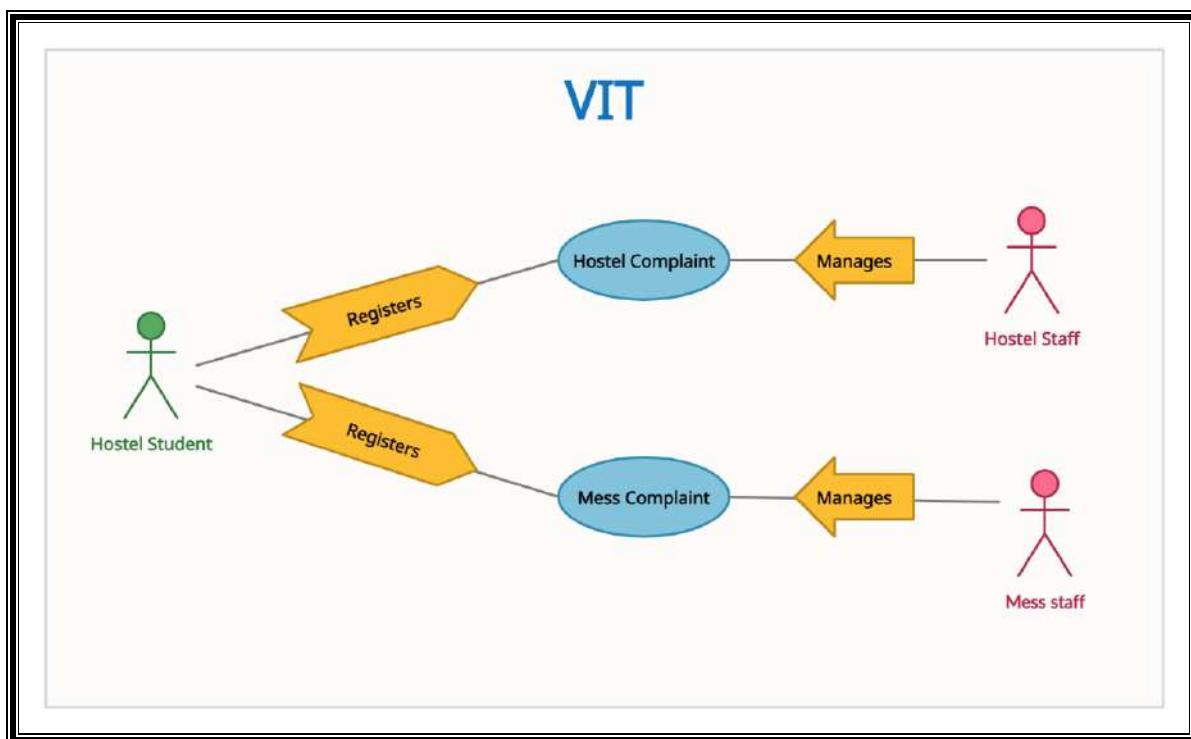
- Drop down menu for various option selection.
- Selection list for filtering Hostel/mess related complaints.
- Push buttons for student raising complaints.
- Help button, etc.

The design in this project contains three sides, they are:

Student side, Hostel Admin side, Mess Mess side.

- **Student side** contains or has the privileges of login, Raising Hostel/Mess related Complaints, Viewing Spotlight Page, Viewing mess Timetable.
- **Hostel Admin side** have the facilities to login, view the complaints raised by the students of his/her particular hostel block, add new announcements to spotlight page of students of his/her particular hostel block.
- **Mess Admin side** contains the options to login, view the complaints raised by the students of his/her particular mess, add new announcements to spotlight page of students of his/her particular mess, update the mess timetable.

A general diagram illustrating how our product interacts with the environment and in what context it is being used is:

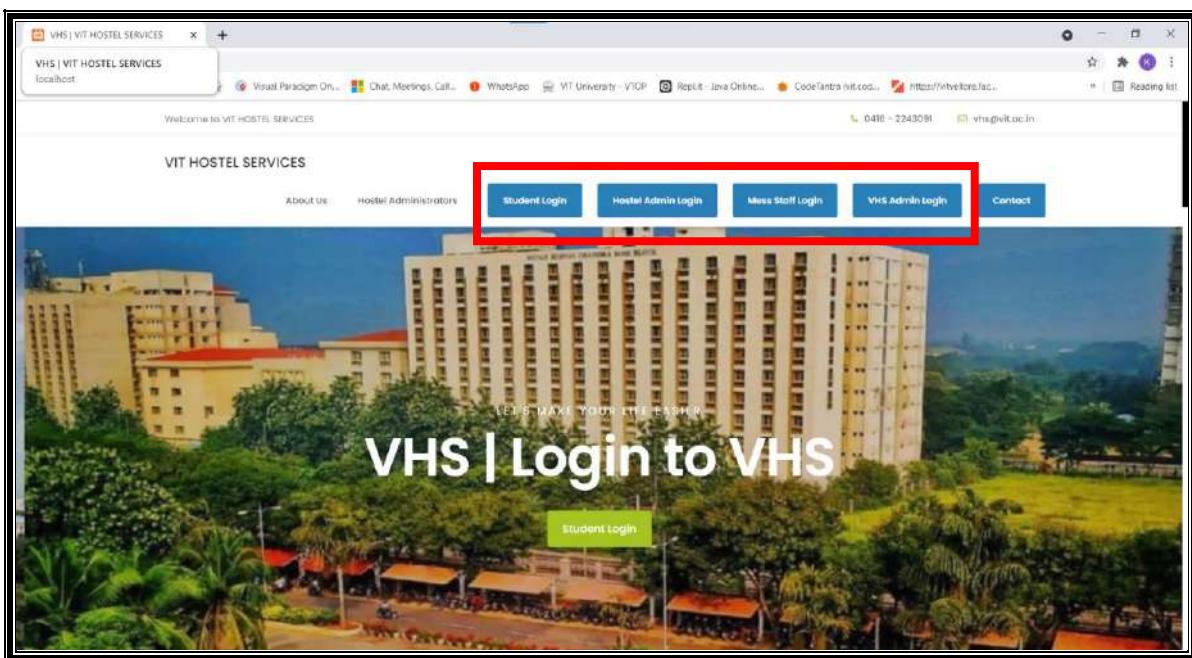


2. Validate the functionality of the developed system in conformance with the SRS.

2.1 Modules:

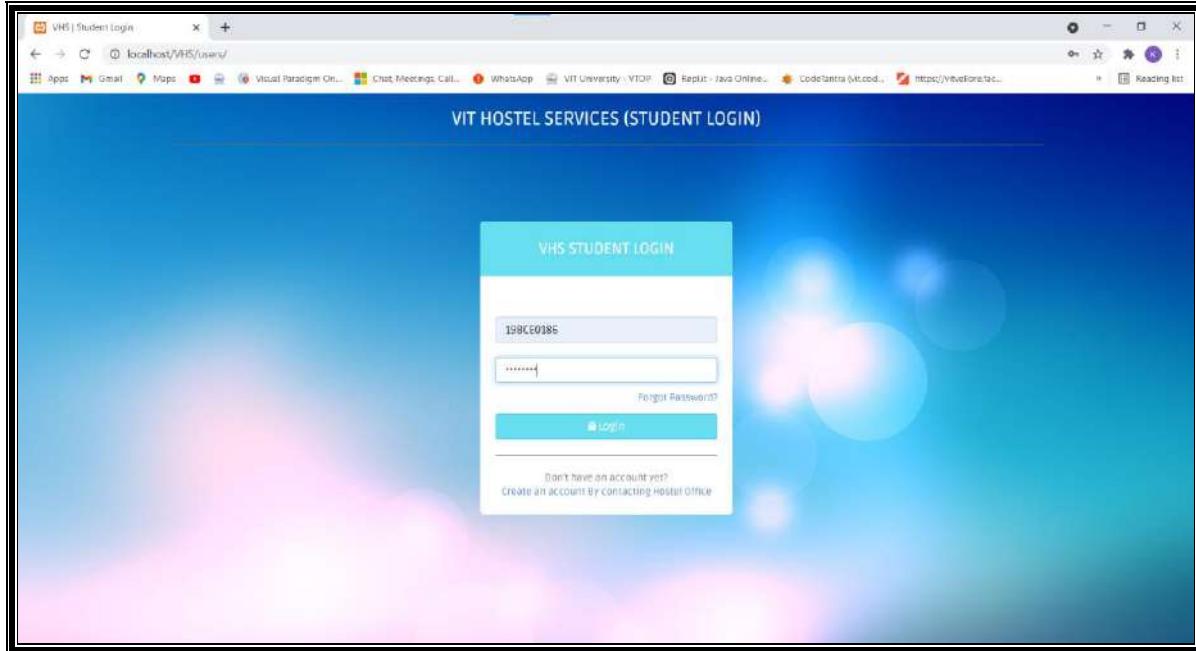
This application consists following modules

- Student Module
- Hostel Admin Module
- Mess Admin Module
- VHS Admin Module



2.1.1 Student Module functionalities:

- **Student Login:** By using this functionality, A Student can Login into system using his set of valid Username and Password.

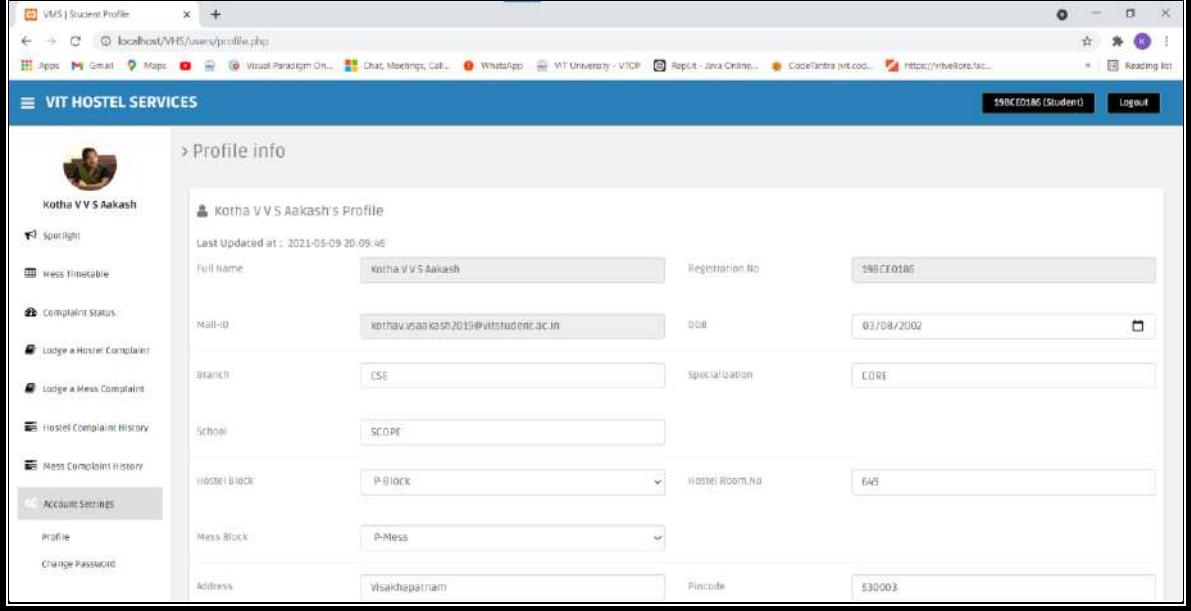


(Student 'Login' Page)

- **Raise a Complaint:** By using this functionality, A student can select the type of complaint he/she wants to rise and then fill out all the necessary details to get the complaint registered.

(Student 'Lodge a Hostel Complaint' Page)

- **View My Details:** By using this functionality, A student can view his Hostel & Mess Details like: Hostel Block, Mess Name, Hostel Room No, Personal Details(DOB, Address), etc.,

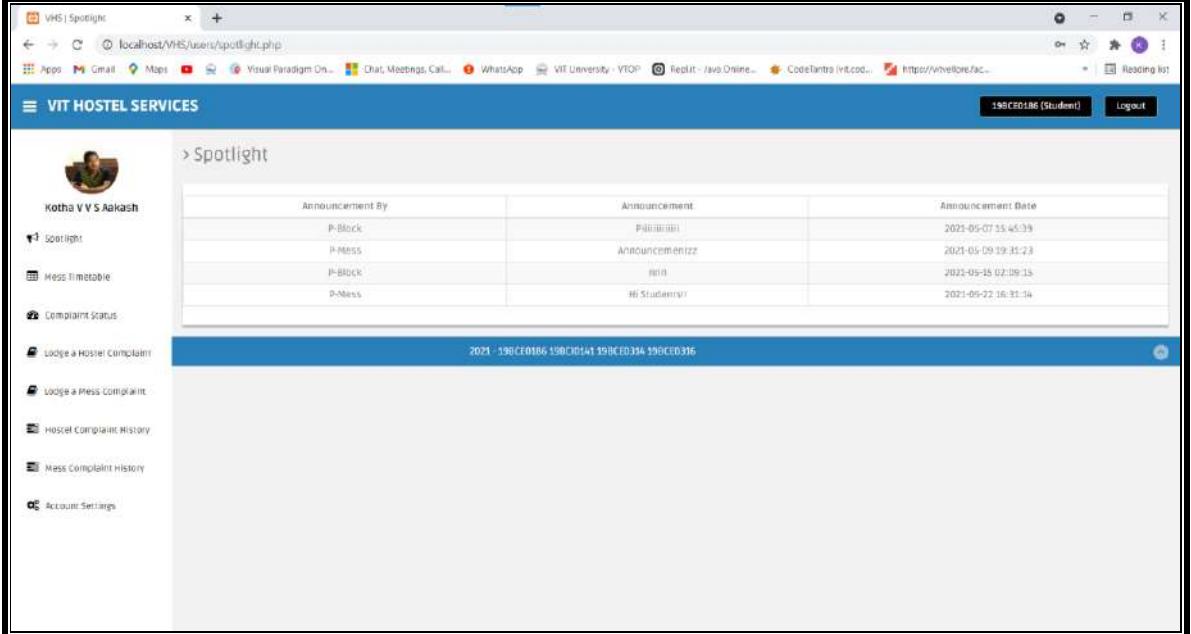


The screenshot shows the 'Profile info' section of the VIT Hostel Services website. The student's profile is displayed with the following details:

Field	Value	Field	Value
Full Name	Kotha VVS Aakash	Registration No.	19BCE0186
Mail-ID	kothav.vsaakash2019@vitstudent.ac.in	DOB	03/08/2002
Branch	CSE	Specialization	CORE
School	SCOPE		
Hostel Block	P-Block	Hostel Room No.	646
Mess Block	P-Mess		
Address	Vizakapatnam	Pincode	530003

(Student 'Profile' Page)

- **Spotlight:** By using this functionality, A student can view the announcement's made his particular Hostel Block and Mess respectively.



The screenshot shows the 'Spotlight' section of the VIT Hostel Services website, displaying announcements categorized by Hostel Block and Mess. The announcements are listed as follows:

Announcement By	Announcement	Announcement Date
P-Block	Pillai	2021-05-07 15:46:39
P-Mess	Announcementzz	2021-05-09 19:41:23
P-Block	Ran	2021-05-15 02:09:15
P-Mess	H Students!!	2021-05-22 16:31:34

(Student 'Spotlight' Page)

- **View Mess Timetable:** By using this functionality, A student can view the updated Mess Timetable, made by his/her respective Mess management.

The screenshot shows a web browser window titled "VHS | Mess Timetable" with the URL "localhost/VHS/users/messatt.php". The page header includes the "VIT HOSTEL SERVICES" logo and a user profile for "Kotha VVS Akash". On the left, there is a sidebar with links: "Spotlight", "Mess Timetable", "Complaint Status", "Lodge a Hostel Complaint", "Lodge a Mess Complaint", "Hostel Complaint History", "Mess Complaint History", and "Account Settings". The main content area is titled "Your Mess Timetable" and displays a table of meal details for P-Mess across seven days. The table columns are: Mess Block, Day, Breakfast, Lunch, Snacks, Dinner, and Last Updated At. The data is as follows:

Mess Block	Day	Breakfast	Lunch	Snacks	Dinner	Last Updated At
P-Mess	Monday	Idly	Sambhar	Samosa	Curd	2021-05-22 16:32:34
P-Mess	Tuesday	Dosa	Rasam	Sandwich	Roti	2021-05-09 20:12:26
P-Mess	Wednesday	Upma	Sal	Chips	Bosu	2021-05-09 20:12:31
P-Mess	Thursday	Idly	Curd	Biscuit	Chapatti	2021-05-09 20:12:37
P-Mess	Friday	Dosa	Carrot	Puff	Rumali Roti	2021-05-09 20:12:46
P-Mess	Saturday	Dosa	Potato	Samosa	Naan	2021-05-09 20:12:51
P-Mess	Sunday	Upma	Sambhar	Chips	Roti	2021-05-09 20:12:56

At the bottom of the page, a footer bar contains the text "2021 - 19BCE0186 19BCE0341 19BCE0354 19BCE0316".

(Student 'Mess Timetable' Page)

2.1.2 Hostel Admin Module functionalities:

- **Hostel Admin Login:** By using this functionality, A Hostel Admin can Login into system using his set of valid Username and Password.

The screenshot shows a web browser window titled "VHS | Hostel Admin Login" with the URL "localhost/VHS/admin/". The page header includes the "VHS | Hostel Admin" logo and a "Back to Portal" link. The main content area features a login form titled "VHS Hostel Admin Login" with two input fields: "P-Block" and a password field with masked input. Below the fields is a "Login" button. At the bottom of the page, a copyright notice reads "© 2021 VHS All rights reserved."

(Hostel Admin 'Login' Page)

- **View Complaints:** using this functionality, Hostel Admin can view the complaints raised by his respective hostel block student's and can further manage them.

Complaint No	Student Name	Student Reg.No	Complaint Block	Reg Date	Status	Action
25	Kotha VVS Aakash	19BCE0186	P-Block	2021-05-22 21:29:35	Yet to Process	View Details

(Hostel Admin 'Yet to Process Complaints' Page)

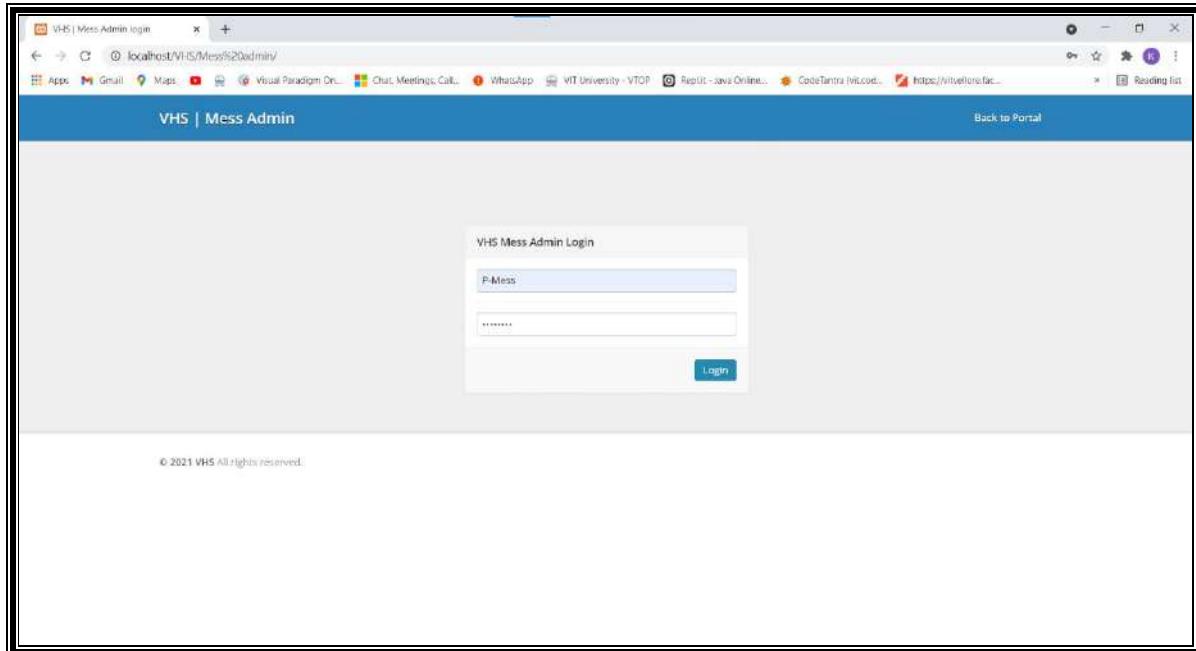
- **Add an Announcement:** By using this functionality, A Hostel Admin can add the announcement's if necessary and further these announcements get reflected in the login page of students of this particular Hostel block.

#	Hostel Block	Announcement	Creation date	Last Updated	Action
1	P-Block	Prabhul	2021-05-07 15:05:39	2021-05-07 16:01:28	Edit Delete
2	P-Block	nmn	2021-05-15 02:09:15		Edit Delete

(Hostel Admin 'Spotlight Page')

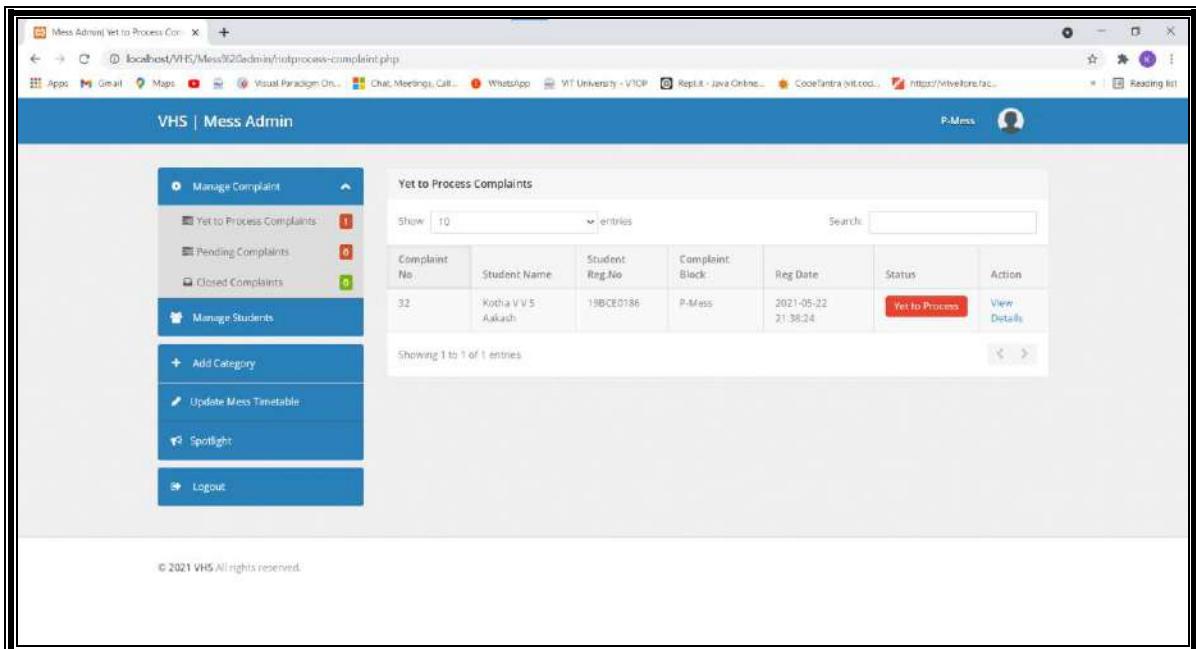
2.1.3 Mess Admin Module functionalities:

- **Mess Admin Login:** By using this functionality, A Mess Admin can Login into system using his set of valid Username and Password.



(Mess Admin 'Login' Page)

- **View Complaints:** By using this functionality, a Mess Admin can view the complaints raised by his/her respective mess student's and can further manage them.



(Mess Admin 'Yet to Process Complaints' Page)

- **Add an Announcement:** By using this functionality, A Mess Admin can add the announcement's if necessary and further these announcements get reflected in the login page of students of this particular mess.

The screenshot shows the 'Mess Admin Spotlight' page. On the left, a sidebar menu includes 'Manage Complaint', 'Manage Students' (which is highlighted in blue), 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main area has a heading 'Add Announcement:' with a dropdown for 'Mess Block' set to 'P-Mess'. Below it is a text input field for 'Announcement' which is currently empty. At the bottom right of this section is a blue 'Add' button. Below this is a table titled 'Manage Announcements' showing two entries:

#	Mess Block	Announcement	Creation date	Last Updated	Action
1	P-Mess	AnnouncementVITS	2021-05-09 19:31:23	2021-05-09 20:10:19	
2	P-Mess	Hi Student!!	2021-05-22 11:31:14		

At the bottom of the table, it says 'Showing 1 to 2 of 2 entries'.

(Mess Admin 'Spotlight' Page)

- **Update Mess Timetable:** By using this functionality, A Mess Admin can update the Mess Timetable whenever necessary.

The screenshot shows the 'Mess Admin Mess Timetable' page. The sidebar menu is identical to the previous page. The main area has a heading 'Mess Timetable' with a dropdown for 'Show' set to '10' and a search bar. Below is a table titled 'Mess Timetable' showing meal items for each day of the week:

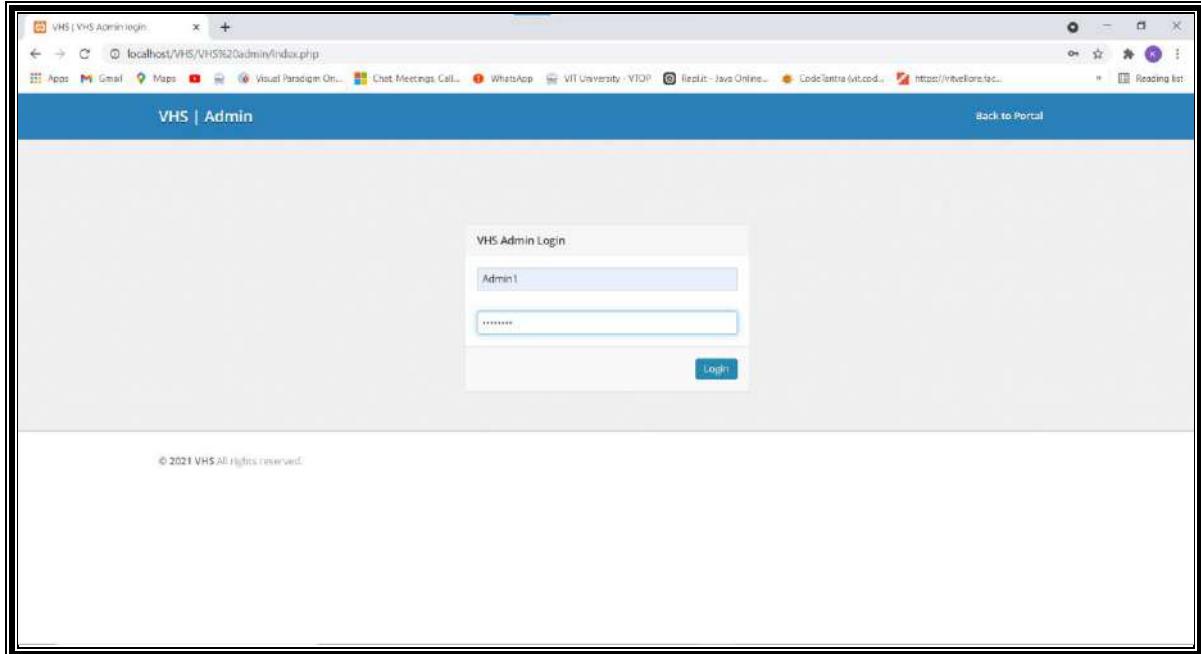
#	Mess Block	Day	Breakfast	Lunch	Snacks	Dinner	Last Updated At	Action
1	P-Mess	Monday	Idly	Sambhar	Samosa	Curd	2021-05-22 16:32:34	
2	P-Mess	Tuesday	Dosa	Rasam	Sandwich	Roti	2021-05-09 20:12:04	
3	P-Mess	Wednesday	Upma	Dal	Chips	Dosa	2021-05-09 20:12:31	
4	P-Mess	Thursday	Idly	Curd	Biscuit	Chapati	2021-05-09 20:12:37	
5	P-Mess	Friday	Poha	Carrot	Puff	Rumali Roti	2021-05-09 20:12:45	
6	P-Mess	Saturday	Dosa	Potato	Samosa	Naan	2021-05-09 20:12:51	
7	P-Mess	Sunday	Upma	Sambhar	Chips	Roti	2021-05-09 20:12:56	

At the bottom of the table, it says 'Showing 1 to 7 of 7 entries'.

(Mess Admin 'Update Mess Timetable' Page)

2.1.4 VHS Admin Module functionalities:

- **VHS Admin Login:** By using this functionality, A VHS Admin can Login into system using his set of valid Username and Password.



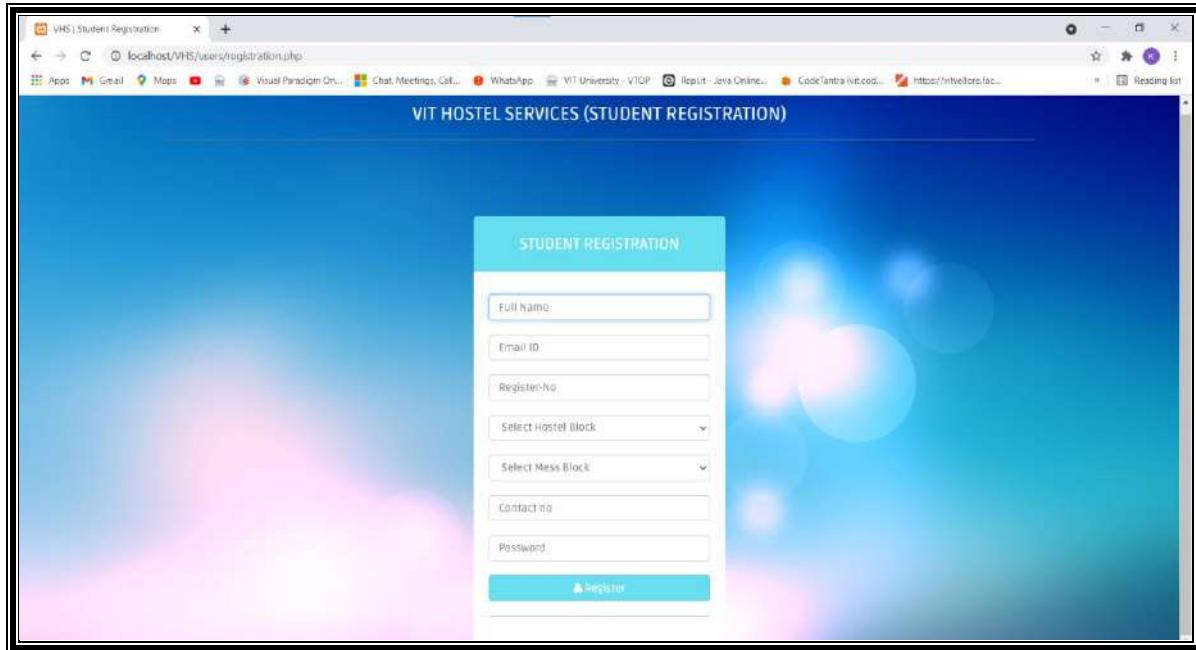
(VHS Admin ‘Login’ Page)

- **Manage Students:** By using this functionality, A VHS Admin can view the Details of all the Students present in the Database and can delete a student if necessary.

#	Name	Reg No	Hostel Block	Mess Block	Contact no	Reg. Date	Action
1	Kotha V V S Akash	19BCE0186	P-Block	P-Mess	986975875	2021-05-08 17:14:52	View Details Delete
2	Kothamasu Karthik	19BCE0141	M-Block	P-Mess	0	2021-05-14 22:13:49	View Details Delete
3	Mahankali Sri Sharath Chandra	19BCE0316	M-Block	M-Mess	8796758976	2021-05-14 22:12:46	View Details Delete
4	A Madhugena Sai	19BCE0314	N-Block	N-Mess	9876789854	2021-05-14 22:20:54	View Details Delete

(VHS Admin ‘Manage Students’ Page)

- **Student Registration:** By using this functionality, A VHS Admin can add the Details of a new Student to the Database if necessary.



(VHS Admin 'Student Registration' Page)

- **Add a Hostel Block:** By using this functionality, A VHS Admin can add the any new Hostel block info if necessary and further these blocks get reflected in the Hostel Complaint Registration page of students after they get logged in.

#	Hostel Block	Description	Creation date	Last Updated	Action
1	M-Block	MB	2016-09-18 17:00:02	2021-05-08 18:20:17	
2	P-Block	PB	2021-05-07 14:23:41	2021-05-08 18:20:22	
3	N-Block	NB	2021-05-07 16:29:11	2021-05-08 18:20:27	
4	Q-Block	QB	2021-05-14 22:46:00	2021-05-15 02:09:05	

(VHS Admin 'Add Hostel Block' Page)

- **Add a Mess Block:** By using this functionality, A VHS Admin can add the any new Mess block info if necessary and further these blocks get reflected in the Mess Complaint Registration page of students after they get logged in.

The screenshot shows a web-based administration interface for 'VHS | Admin'. The left sidebar contains links for 'Manage Students', 'Student Registration', 'Add Hostel Block', 'Add Mess Block' (which is highlighted in blue), and 'Students Login Log'. The right side has two main sections: 'Add Mess Block' (with fields for Block Name and Description) and 'Manage Mess Blocks' (a table listing four entries with columns for #, Mess Block, Description, Creation date, Last Updated, and Action).

#	Mess Block	Description	Creation date	Last Updated	Action
1	P-Mess	PM	2021-05-08 17:37:48	2021-05-09 20:11:28	
2	M-Mess	MM	2021-05-08 17:37:59	2021-05-09 20:11:28	
3	N-Mess	NM	2021-05-08 17:38:08	2021-05-09 20:11:02	
4	Q-Mess	QM	2021-05-14 22:48:03		

(VHS Admin 'Add Mess Block' Page)

3. Generate test cases for your system using basis path testing strategy.

In order to know about the basis path testing, it is necessary to understand about path testing. The term path refers to the flow of execution of commands and the conditions in a definitive direction. In other words, it's the route that a process takes from a one particular point to another point. An Independent path appends at least one new process, command, or a condition to the already defined independent path(s).

Every software program has multiple entry and exit points in its source code. Path testing verifies these points in the source code to ensure there will be no bugs encountered in the execution of processes through a sequence program. The method can be designed to either execute all or selected paths through a particular program.

The challenge with this arrives in complex programs where the entry & exit points to be tested in total. Depending on the amount of the source code to be tested, this can take some days or even weeks. This is where basis path testing is benefitted as it reduces the total test cases needed.

3.1 Steps for Carrying out Test cases:

- Drafting a control flow graph to identify all the possible program paths.
- Calculating the number of independent paths through a process known cyclomatic complexity which we discussed below.
- Define all the set of basis paths to be tested.
- Generate all the Test Cases to evaluate the program flow for each path.

3.2 Test cases of our System generated using Basis path testing

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
1.	Student Login Test	Student 'Login' Page	Student should already have a registered account.	Enter his/her valid set of Student Registration number and Password, then click on 'Login' Button.	The System should be directed to Student Home page of that particular student.
2.	Student Spotlight Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Spotlight Option' in his/her Home Page.	The System should be directed to Student Spotlight page, where the announcements made by his/her particular Hostel & Mess Blocks should be displayed in a Tabular format.
3.	Student Mess Timetable Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Mess Timetable Option' in his/her Home Page.	The System should be directed to Student Mess Timetable page, where the Timetable made by his/her particular Mess Block should be displayed in a Tabular format.
4.	Student Hostel Complaint Status Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Complaint Status Option' and then 'Hostel Complaint Status Option' in his/her Home Page.	The System should be directed to Student Hostel Complaint Status Page, where the No. of Hostel complaints made by that particular student will be displayed in 3 (Not Processed, In Process, Processed) different categories.
5.	Student Mess Complaint Status Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Complaint Status Option' and then 'Mess Complaint Status Option' in his/her Home Page.	The System should be directed to Student Mess Complaint Status Page, where the No. of Mess complaints made by his/her will be displayed in 3 (Not Processed, In Process, Processed) different categories.

6.	Student Lodge a Hostel Complaint Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Lodge a Hostel Complaint' in his/her Home Page, and then fill all the necessary details, and then click on Submit button.	The System should display the msg- "Successfully Registered", and these complaint details should be displayed in Login of that particular complaint Hostel block.
7.	Student Lodge a Mess Complaint Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Lodge a Mess Complaint' in his/her Home Page, and then fill all the necessary details, and then click on Submit button.	The System should display the msg- "Successfully Registered", and these complaint details should be displayed in Login of that particular complaint Mess block.
8.	Student Hostel Complaint History Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Hostel Complaint History Option' in his/her Home Page.	The System should be directed to Student Hostel Complaint History page, where the list of Hostel Complaints made by him/her should be displayed in a Tabular format.
9.	Student Mess Complaint History Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Mess Complaint History Option' in his/her Home Page.	The System should be directed to Student Hostel Complaint History page, where the list of Mess Complaints made by him/her should be displayed in a Tabular format.
10.	Student Profile Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Account Setting Option' and then 'Profile Option' in his/her Home Page, and then modify his/her details and then click on Submit button (if necessary).	The System should be directed to Student Profile page, where the updated academic and personal information of that particular student will be displayed.
11.	Student Change Password Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Account Setting Option' and then 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same student login, he/she should use the New Password to get to his/her Home Page.

12.	Student Logout Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Logout Option' his/her Home Page.	The System should be directed to VHS Home page.
13.	Student Forgot Password Test	Student 'Login' Page	Student should already have a registered account.	Student should click the 'Forgot Password' and then fill the necessary details to change the password in the Student Login page (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same student login, he/she should use the New Password to get to his/her Home Page.
14.	Hostel Admin Login Test	Hostel Admin 'Login' Page	Hostel Admin should already have a registered account.	Enter his/her valid set of Username and Password, then click on 'Login' Button.	The System should be directed to Hostel Admin Home page of that Hostel Block.
15.	Hostel Admin Yet to Process Complaints Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Complaints Option' and then 'Yet to Process Complaints Option' in his/her Home Page.	The System should be directed to Hostel Admin Yet to Process Complaints page, where the list of Yet to Process Complaints of that particular Hostel Block will be displayed in a tabular format.
16.	Hostel Admin Pending Complaints Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Complaints Option' and then 'Pending Complaints Option' in his/her Home Page.	The System should be directed to Hostel Admin Pending Complaints page, where the list of Pending Complaints of that particular Hostel Block will be displayed in a tabular format.
17.	Hostel Admin Closed Complaints Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Complaints Option' and then 'Closed Complaints Option' in his/her Home Page.	The System should be directed to Hostel Admin Closed Complaints page, where the list of Closed Complaints of that particular Hostel Block will be displayed in a tabular format.
18.	Hostel Admin Remark Test	Hostel Admin 'Yet to Process Complaints' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'View Details Option of any complaint' and then 'Take Action' and fill the Remark and then click on Submit button.	The System should display msg- "Successful", this remark should be displayed in the login of that particular student who raised that particular Hostel complaint.

19.	Hostel Admin Manage Students Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Students Option' in his/her Home Page.	The System should be directed to Hostel Admin Manage Students page, where the list of all the students present in the Database will be displayed in a tabular format.
20.	Hostel Admin Add Category Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Add Category' in his/her Home Page and then fill the necessary details of New Complaint Category he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Complaint Category Added", And this New Complaint Category should be displayed in Hostel Complaint Registration page of Student Login.
21.	Hostel Admin Add Sub Category Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Add Sub Category' in his/her Home Page and then fill the necessary details of New Complaint Sub Category he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Complaint Sub Category Added", And this New Complaint Sub Category should be displayed in Hostel Complaint Registration page of Student Login.
22.	Hostel Admin Spotlight Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Spotlight' in his/her Home Page and then fill the necessary details of New Announcement he/she wants to Add to Spotlight, and then click on 'Add' button.	The System should display msg- "Successfully Announcement Added", And this New Announcement should be displayed in Spotlight of Student (Who belong to this particular Hostel Block) Login.
23.	Hostel Admin Change Password Test	Hostel Admin 'Home' Page	Hostel Admin should be already logged in.	Hostel Admin should click the 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same Hostel Admin login, he/she should use the New Password to get to his/her Home Page.

24.	Hostel Admin Logout Test	Hostel Admin 'Home' Page	Hostel Admin should be already logged in.	Hostel Admin should click the 'Logout Option' in his/her Home Page.	The System should be directed to Hostel Admin Login page and a msg- "Successfully Logged out" will be displayed.
25.	Mess Admin Login Test	Mess Admin 'Login' Page	Mess Admin should already have a registered account.	Enter his/her valid set of Username and Password, then click on 'Login' Button.	The System should be directed to Mess Admin Home page of that Hostel Block.
26.	Mess Admin Yet to Process Complaints Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Complaints Option' and then 'Yet to Process Complaints Option' in his/her Home Page.	The System should be directed to Mess Admin Yet to Process Complaints page, where the list of Yet to Process Complaints of that particular Mess Block will be displayed in a tabular format.
27.	Mess Admin Pending Complaints Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Complaints Option' and then 'Pending Complaints Option' in his/her Home Page.	The System should be directed to Mess Admin Pending Complaints page, where the list of Pending Complaints of that particular Mess Block will be displayed in a tabular format.
28.	Mess Admin Closed Complaints Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Complaints Option' and then 'Closed Complaints Option' in his/her Home Page.	The System should be directed to Mess Admin Closed Complaints page, where the list Closed Complaints of that particular Mess Block will be displayed in a tabular format.
29.	Mess Admin Remark Test	Mess Admin 'Yet to Process Complaints' Page	Mess Admin should be logged in.	Mess Admin should click the 'View Details Option of any complaint' and then 'Take Action' and fill the Remark and then click on Submit button.	The System should display msg- "Successful", this remark should be displayed in the login of that particular student who raised that particular Mess complaint.
30.	Mess Admin Manage Students Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Students Option' in his/her Home Page.	The System should be directed to Mess Admin Manage Students page, where the list of all the students present in the Database will be displayed in a tabular format.

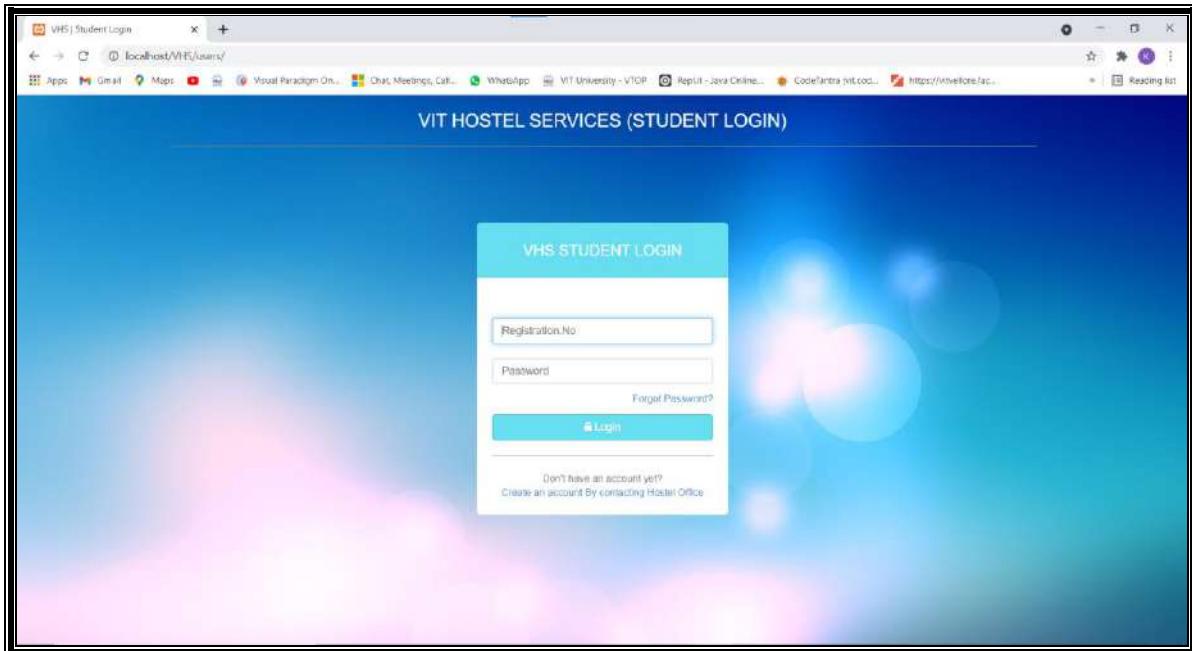
31.	Mess Admin Add Category Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Add Category' in his/her Home Page and then fill the necessary details of New Complaint Category he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Complaint Category Added", And this New Complaint Category should be displayed in Mess Complaint Registration page of Student Login.
32.	Mess Admin Update Mess Timetable Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Update Mess Timetable' in his/her Home Page and then click on 'Modify Option' and the modify the necessary Details then click on 'Update' button.	The System should display msg- "Successfully Mess Timetable Updated", And this New Updated Mess Timetable should be displayed in Mess Timetable page of Student (Who belong to this particular Mess Block) Login.
33.	Mess Admin Spotlight Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Spotlight' in his/her Home Page and then fill the necessary details of New Announcement he/she wants to Add to Spotlight, and then click on 'Add' button.	The System should display msg- "Successfully Announcement Added", And this New Announcement should be displayed in Spotlight of Student (Who belong to this particular Mess Block) Login.
34.	Mess Admin Change Password Test	Mess Admin 'Home' Page	Mess Admin should be already logged in.	Mess Admin should click the 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same Mess Admin login, he/she should use the New Password to get to his/her Home Page.
35.	Mess Admin Logout Test	Mess Admin 'Home' Page	Mess Admin should be already logged in.	Mess Admin should click the 'Logout Option' in his/her Home Page.	The System should be directed to Mess Admin Login page and a msg- "Successfully Logged out" will be displayed.
36.	VHS Admin Login Test	VHS Admin 'Login' Page	VHS Admin should already have a registered account.	Enter his/her valid set of Username and Password, then click on 'Login' Button.	The System should be directed to VHS Admin Home page.

37.	VHS Admin Manage Students Test	VHS Admin 'Home' Page	VHS Admin should be logged in.	VHS Admin should click the 'Manage Students Option' in his/her Home Page.	The System should be directed to VHS Admin Manage Students page, where the list of all the students present in the Database will be displayed in a tabular format.
38.	VHS Admin View Student Details Test	VHS Admin 'Manage Students' Page	VHS Admin should be logged in.	VHS Admin should click the 'Manage Students Option' and then 'View Details Option of any Student' in his/her Home Page.	The System should display the Complete academic and personal information of that particular Student in a New Window.
39.	VHS Admin Add Hostel Block Test	VHS Admin 'Home' Page	VHS Admin should be logged in.	VHS Admin should click the 'Add Hostel Block' in his/her Home Page and then fill the necessary details of New Hostel Block he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Hostel Block Added", And this New Hostel Block should be displayed in Hostel Complaint Registration page of Student Login.
40.	VHS Admin Add Mess Block Test	VHS Admin 'Home' Page	VHS Admin should be logged in.	VHS Admin should click the 'Add Mess Block' in his/her Home Page and then fill the necessary details of New Mess Block he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Mess Block Added", And this New Mess Block should be displayed in Mess Complaint Registration page of Student Login.
41.	VHS Admin Change Password Test	VHS Admin 'Home' Page	VHS Admin should be already logged in.	VHS Admin should click the 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same VHS Admin login, he/she should use the New Password to get to his/her Home Page.
42.	VHS Admin Logout Test	VHS Admin 'Home' Page	VHS Admin should be already logged in.	VHS Admin should click the 'Logout Option' in his/her Home Page.	The System should be directed to VHS Admin Login page and a msg- "Successfully Logged out" will be displayed.

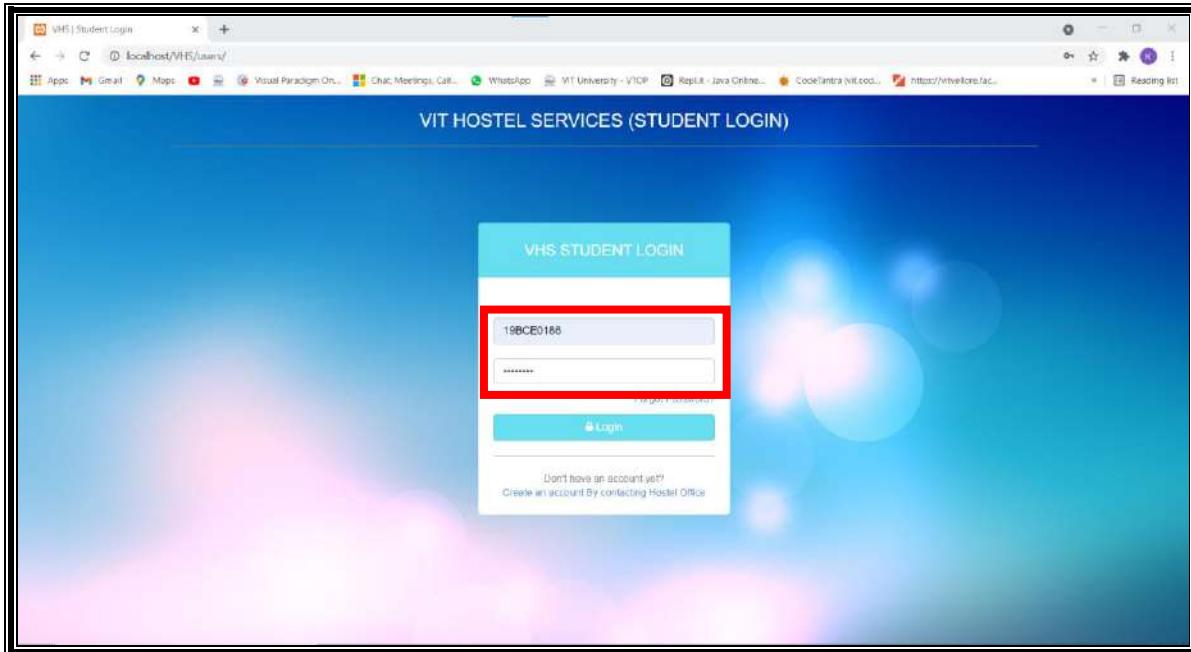
3.3 Evaluation of Test cases generated using Basis path testing

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.1.	Student Login Test	Student 'Login' Page	Student should already have a registered account.	Enter his/her valid set of Student Registration number and Password, then click on 'Login' Button.	The System should be directed to Student Home page of that particular student.

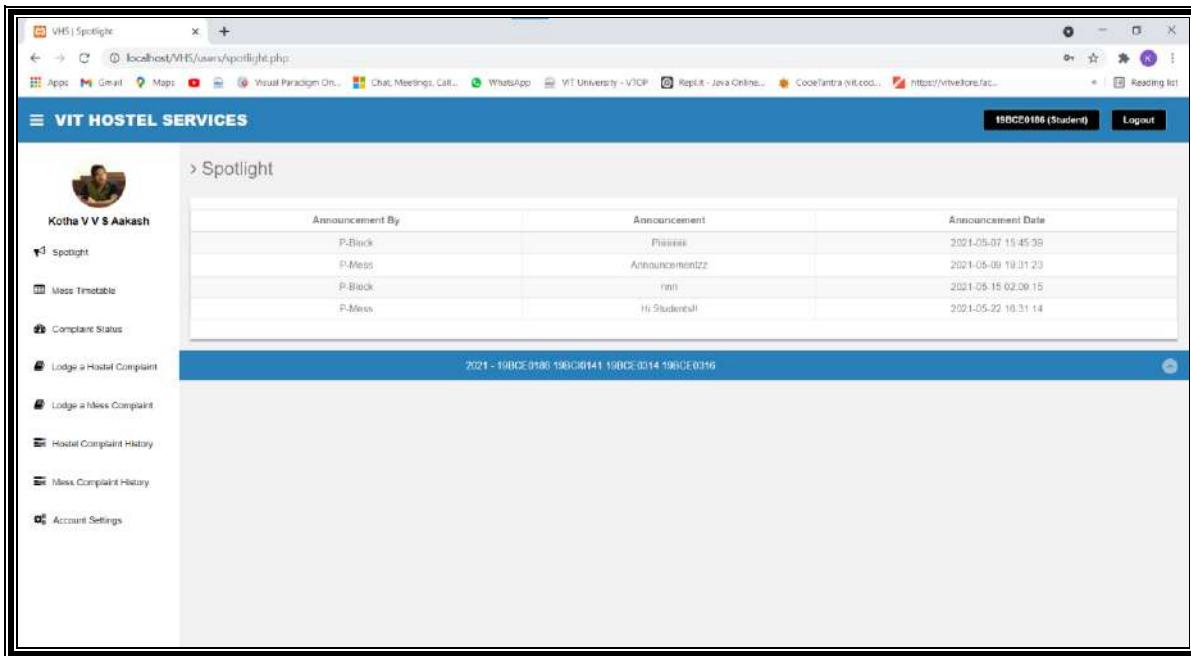
3.3.1.1 Present state of the System:



3.3.1.2 Test Input(s):



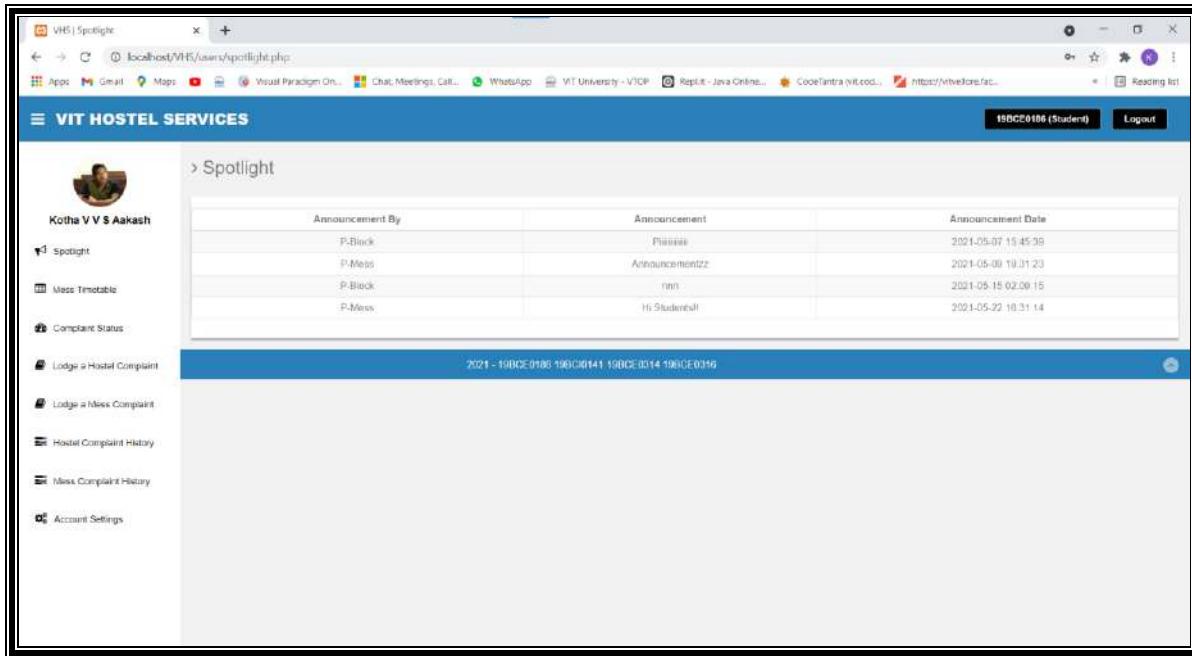
3.3.1.3 Output(s):



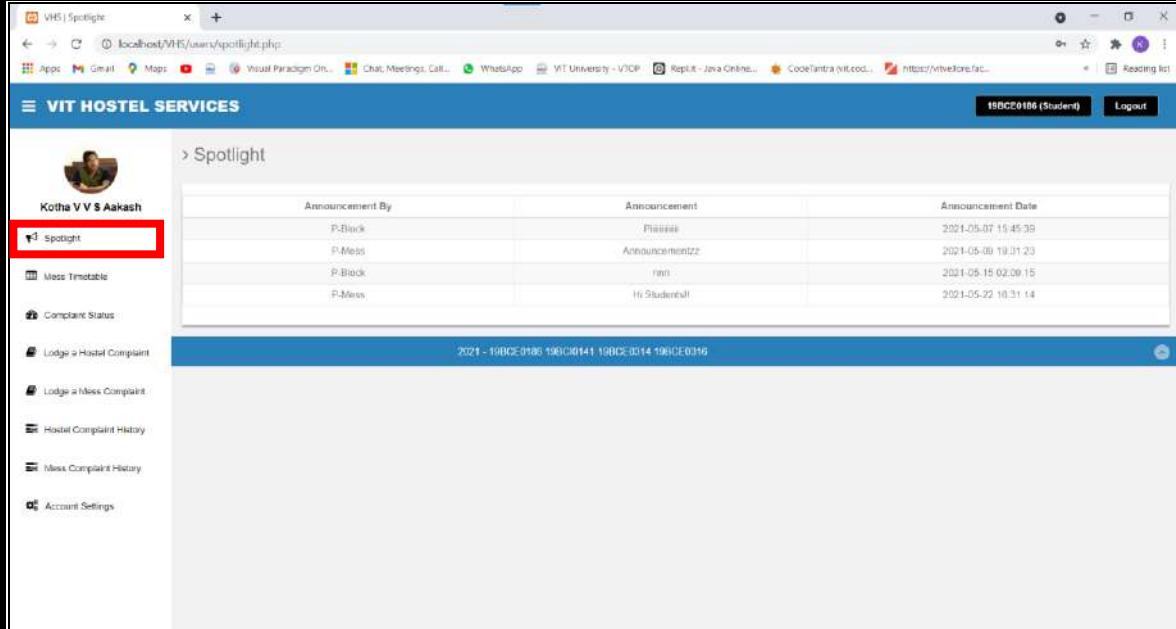
As the Expected Output is same as the Output we got, The Test Case-1 (Student Login Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.2.	Student Spotlight Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Spotlight Option' in his/her Home Page.	The System should be directed to Student Spotlight page, where the announcements made by his/her particular Hostel & Mess Blocks should be displayed in a Tabular format.

3.3.2.1 Present state of the System:



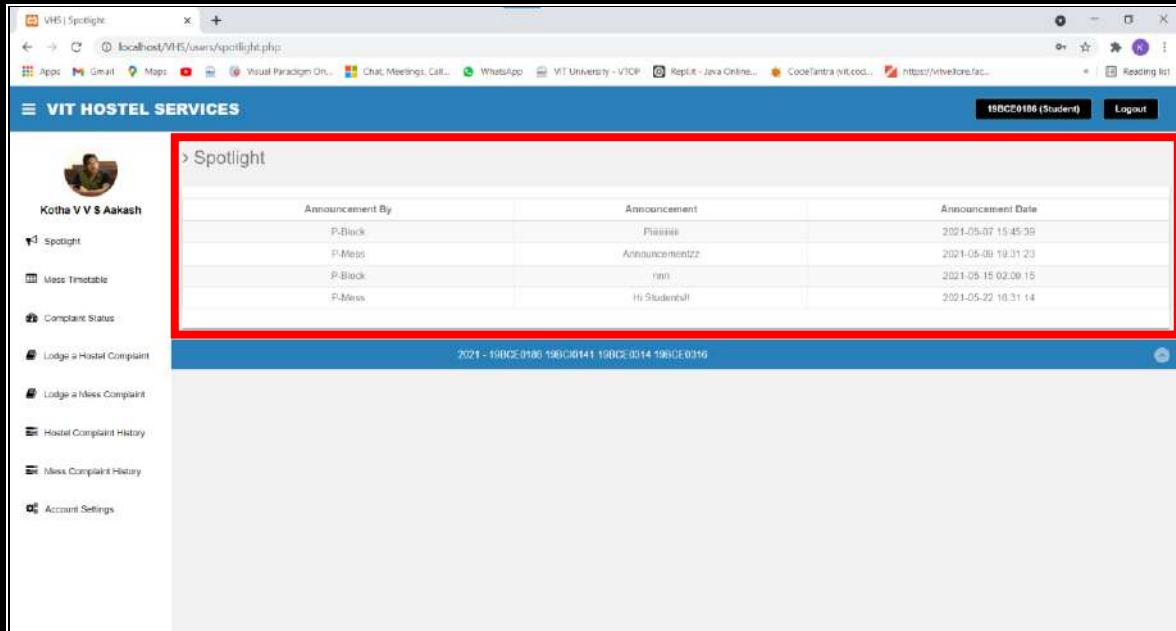
3.3.2.2 Test Input(s):



The screenshot shows the VIT Hostel Services website. The user is logged in as '19BCE0106 (Student)'. The sidebar on the left includes links for 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Spotlight' and displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	Planned	2021-05-07 15:45:39
P-Mess	Announcement123	2021-05-08 10:31:23
P-Block	rrrr	2021-05-15 02:09:15
P-Mess	Hi Students!!	2021-05-22 10:31:14

3.3.2.3 Output(s):



The screenshot shows the same VIT Hostel Services website as the previous one, but with a red box highlighting the table of announcements in the 'Spotlight' section. The table data is identical to the input screenshot.

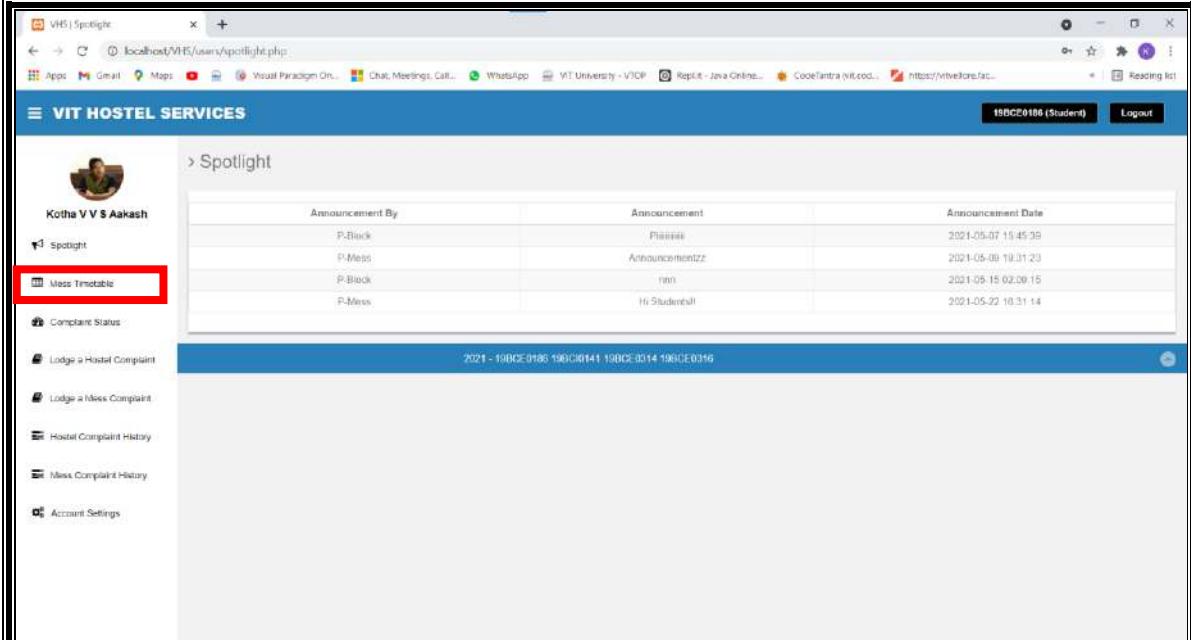
As the Expected Output is same as the Output we got, The Test Case-2 (Student Spotlight Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.3.	Student Mess Timetable Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Mess Timetable Option' in his/her Home Page.	The System should be directed to Student Mess Timetable page, where the Timetable made by his/her particular Mess Block should be displayed in a Tabular format.

3.3.3.1 Present state of the System:

Announcement By	Announcement	Announcement Date
P-Block	Plain	2021-05-07 15:45:39
P-Meals	Announcement123	2021-05-08 19:31:23
P-Block	nm	2021-05-15 02:09:15
P-Meals	Hi Students!!	2021-05-22 10:31:14

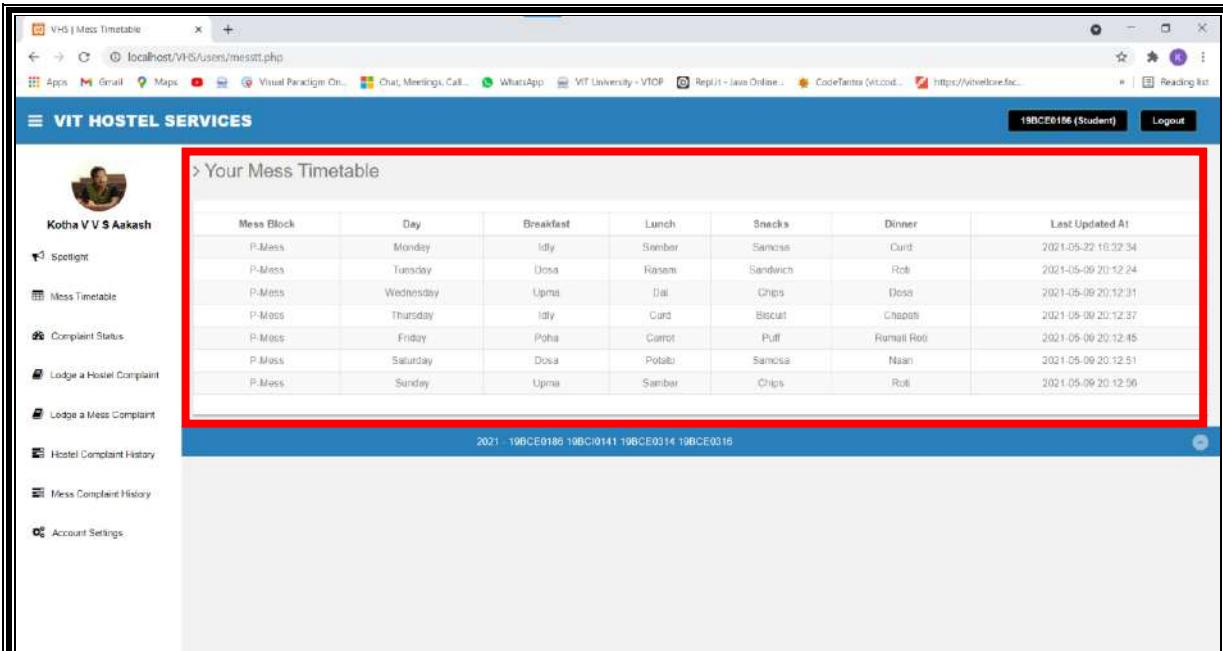
3.3.3.2 Test Input(s):



The screenshot shows the 'Spotlight' section of the VIT Hostel Services website. The sidebar on the left includes links for 'Spotlight', 'Mess Timetable' (which is highlighted with a red box), 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	Phoenix	2021-05-07 15:45:09
P-Mess	Announcement123	2021-05-09 19:31:23
P-Block	Ran	2021-05-15 02:09:15
P-Mess	Hi Students!!	2021-05-22 10:31:14

3.3.3.3 Output(s):



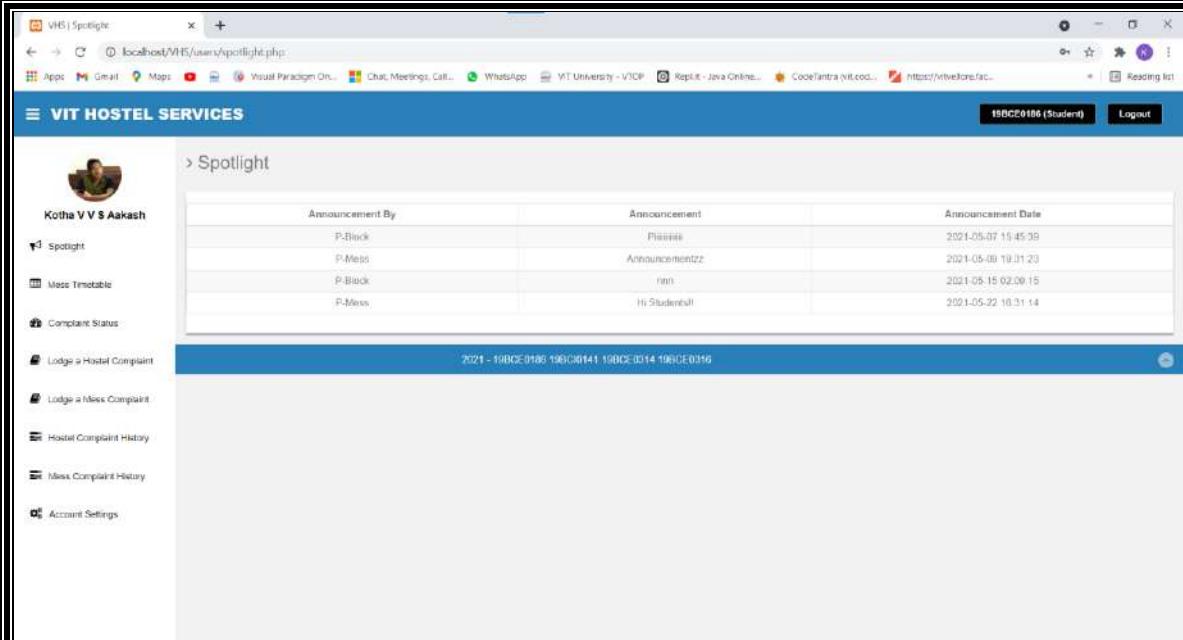
The screenshot shows the 'Your Mess Timetable' section of the VIT Hostel Services website. The sidebar on the left includes links for 'Spotlight', 'Mess Timetable' (which is highlighted with a red box), 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area displays a table of meals for different days:

Mess Block	Day	Breakfast	Lunch	Snacks	Dinner	Last Updated At
P-Mess	Monday	Idly	Sambhar	Samosa	Curd	2021-05-22 10:02:34
P-Mess	Tuesday	Dosa	Rasam	Sandwich	Roti	2021-05-09 20:12:24
P-Mess	Wednesday	Uppma	Bali	Chips	Dosa	2021-05-09 20:12:31
P-Mess	Thursday	Idly	Curd	Biscuit	Chapati	2021-05-09 20:12:37
P-Mess	Friday	Poha	Carrot	Puff	Rumali Roti	2021-05-09 20:12:45
P-Mess	Saturday	Dosa	Potato	Samosa	Naan	2021-05-09 20:12:51
P-Mess	Sunday	Ujma	Sambhar	Chips	Roti	2021-05-09 20:12:56

As the Expected Output is same as the Output we got, The Test Case-3 (Student Mess Timetable Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.4.	Student Hostel Complaint Status Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Complaint Status Option' and then 'Hostel Complaint Status Option' in his/her Home Page.	The System should be directed to Student Hostel Complaint Status Page, where the No. of Hostel complaints made by that particular student will be displayed in 3 (Not Processed, In Process, Processed) different categories.

3.3.4.1 Present state of the System:



The screenshot shows the 'Spotlight' section of the VIT Hostel Services website. On the left, there is a sidebar with a user profile picture and the name 'Kotha V V S Akash'. Below the profile are several menu items: 'Spotlight' (which is currently selected), 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	Prinice	2021-05-07 15:45:39
P-Mess	Announcementzz	2021-05-08 10:31:23
P-Block	nm	2021-05-15 02:00:15
P-Mess	Hi Students!!	2021-05-22 10:31:14

At the bottom of the table, there is a footer bar with the text '2021 - 19BCE0186 19BCE0141 19BCE0314 19BCE0316'.

3.3.4.2 Test Input(s):

VHS | Spotlight

localhost/VHS/users/spotlight.php

VIT HOSTEL SERVICES

Kotha V V S Akash

Spotlight

Mess Timetable

Complaint Status

Hostel Complaint Status

Mess Complaint Status

Lodge a Hostel Complaint

Lodge a Mess Complaint

Hostel Complaint History

Mess Complaint History

Account Settings

> Spotlight

Announcement By	Announcement	Announcement Date
P-Block	Palini	2021-05-07 15:45:39
P-Mess	Announcement72	2021-05-09 19:31:23
P-Block	978	2021-05-15 02:09:15
P-Mess	Hi Students!!	2021-05-22 16:31:14

2021 - 19BCE0106 19BCG0141 19BCE0314 19BCE0316

3.3.4.3 Output(s):

VHS | Hostel Complaint Status

localhost/VHS/users/dashboard.php

VIT HOSTEL SERVICES

Kotha V V S Akash

Spotlight

Mess Timetable

Complaint Status

Hostel Complaint Status

Mess Complaint Status

Lodge a Hostel Complaint

Lodge a Mess Complaint

Hostel Complaint History

Mess Complaint History

Account Settings

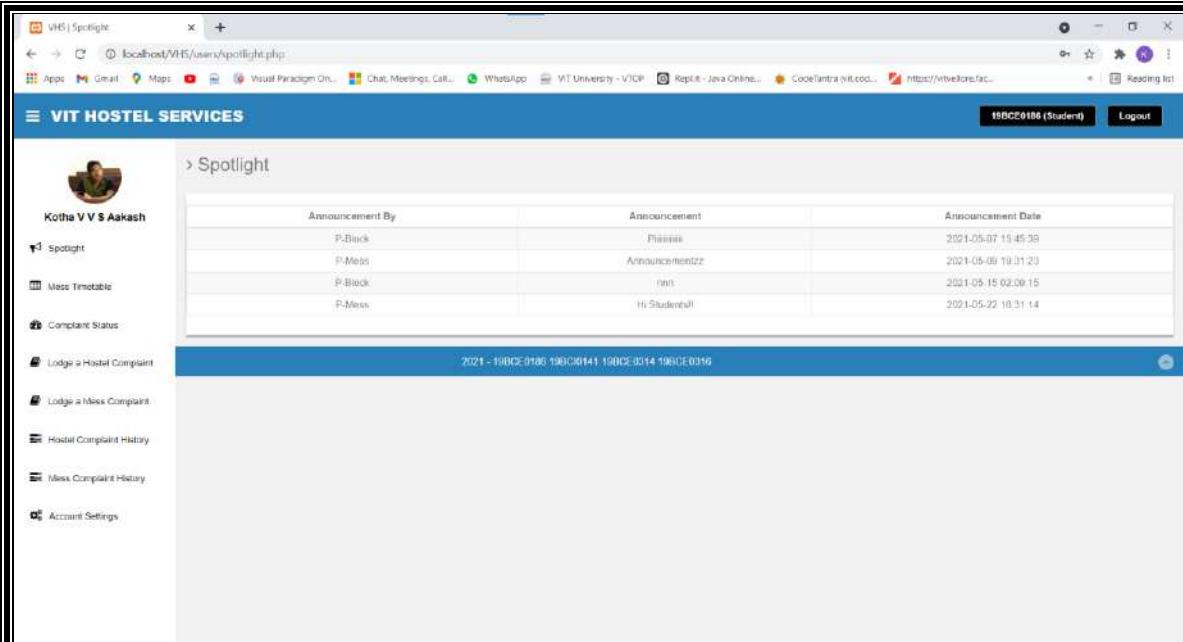
2021 - 19BCE0106 19BCG0141 19BCE0314 19BCE0316

0 1 0

As the Expected Output is same as the Output we got, The Test Case-4 (Student Hostel Complaint Status Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.5.	Student Mess Complaint Status Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Complaint Status Option' and then 'Mess Complaint Status Option' in his/her Home Page.	The System should be directed to Student Hostel Complaint Status Page, where the No. of Mess complaints made by that particular student will be displayed in 3 (Not Processed, In Process, Processed) different categories.

3.3.5.1 Present state of the System:



The screenshot shows the 'Spotlight' section of the VIT Hostel Services website. On the left, there is a sidebar with a user profile picture and the name 'Kotha V V S Akash'. Below the profile are several menu items: 'Spotlight' (which is currently selected), 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area displays a table of announcements. The table has three columns: 'Announcement By', 'Announcement', and 'Announcement Date'. The data is as follows:

Announcement By	Announcement	Announcement Date
P-Block	Prinice	2021-05-07 15:45:39
P-Mess	Announcementzz	2021-05-08 10:31:23
P-Block	nm	2021-05-15 02:00:15
P-Mess	Hi Students!!	2021-05-22 10:31:14

3.3.5.2 Test Input(s):

VIT Hostel Services - Spotlight

Kotha V V S Akash

Spotlight

Mess Timetable

Complaint Status 1

Mess Complaint Status 2

Lodge a Hostel Complaint

Lodge a Mess Complaint

Hostel Complaint History

Mess Complaint History

Account Settings

> Spotlight

Announcement By	Announcement	Announcement Date
P-Block	Palissi	2021-05-07 15:45:39
P-Mess	Announcement72	2021-05-09 19:31:23
P-Block	978	2021-05-15 02:09:15
P-Mess	Hi Students!!	2021-05-22 16:31:14

2021 - 19GCE0106 19BCI0141 19GCE0314 19GCE0316

3.3.5.3 Output(s):

VHS | Mess Complaint Status

Kotha V V S Akash

Spotlight

Mess Timetable

Complaint Status

Hostel Complaint Status

Mess Complaint Status

Lodge a Hostel Complaint

Lodge a Mess Complaint

Hostel Complaint History

Mess Complaint History

Account Settings

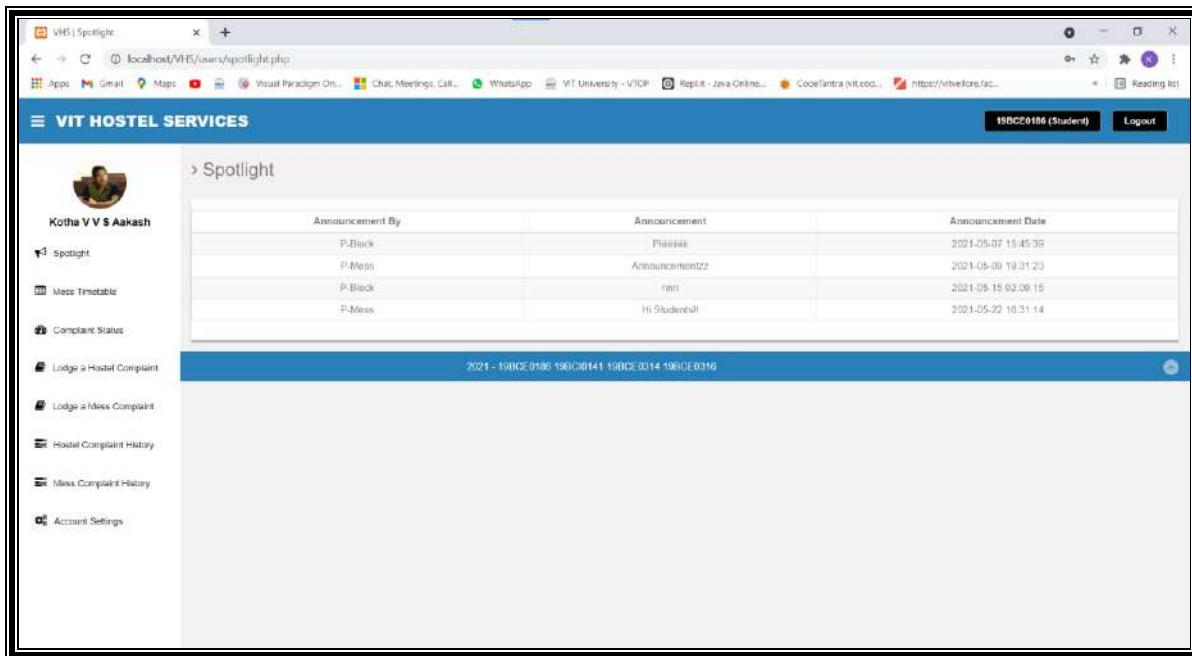
0 0 1

2021 - 19GCE0106 19BCI0141 19GCE0314 19GCE0316

As the Expected Output is same as the Output we got, The Test Case-5 (Student Mess Complaint Status Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.6.	Student Lodge a Hostel Complaint Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Lodge a Hostel Complaint' in his/her Home Page, and then fill all the necessary details, and then click on Submit button.	The System should display the msg- "Successfully Registered", and these complaint details should be displayed in Login of that particular complaint Hostel block.

3.3.6.1 Present state of the System:



3.3.6.2 Test Input(s):

The screenshot shows the 'Register Hostel Complaint' form. A red box highlights the main input area. A yellow '1' points to the 'Lodge a Hostel Complaint' button in the sidebar. A yellow '2' points to the 'Category' dropdown set to 'Wi-Fi' and the 'Sub Category' dropdown set to 'Wi-Fi Slow'. A yellow '3' points to the 'Submit' button at the bottom.

Kotha V V S Akash

Lodge a Hostel Complaint **1**

Category: Wi-Fi Sub Category: Wi-Fi Slow

Complaint Type: Complaint Hostel: P-Block

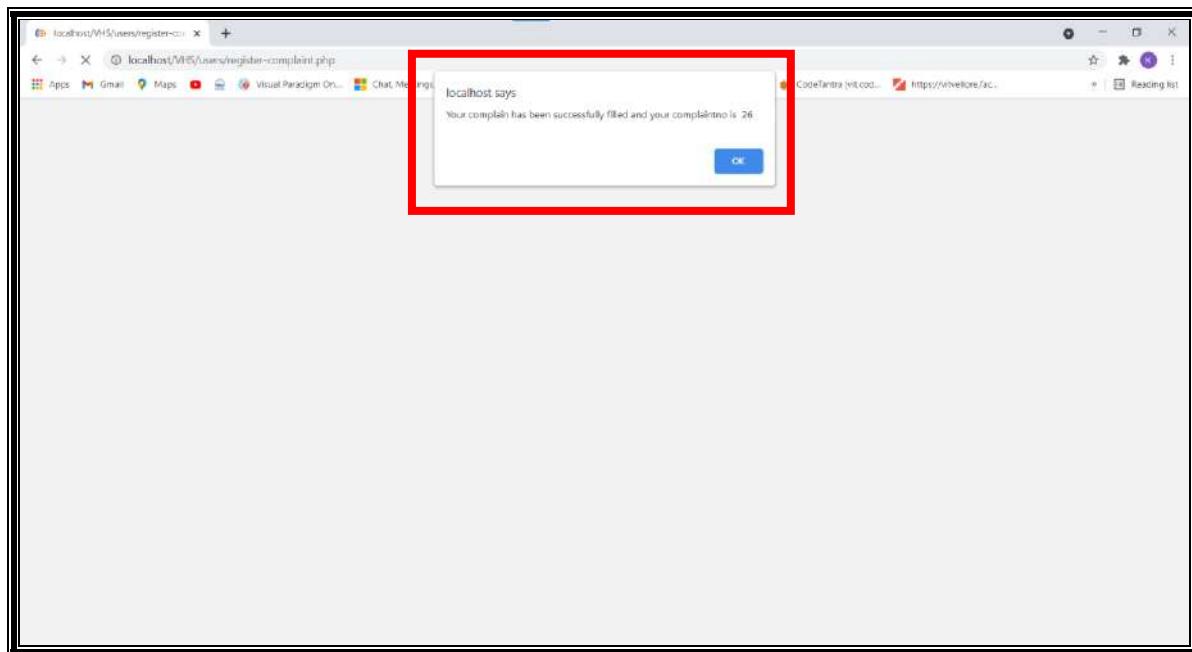
Nature of Complaint: Wi-Fi

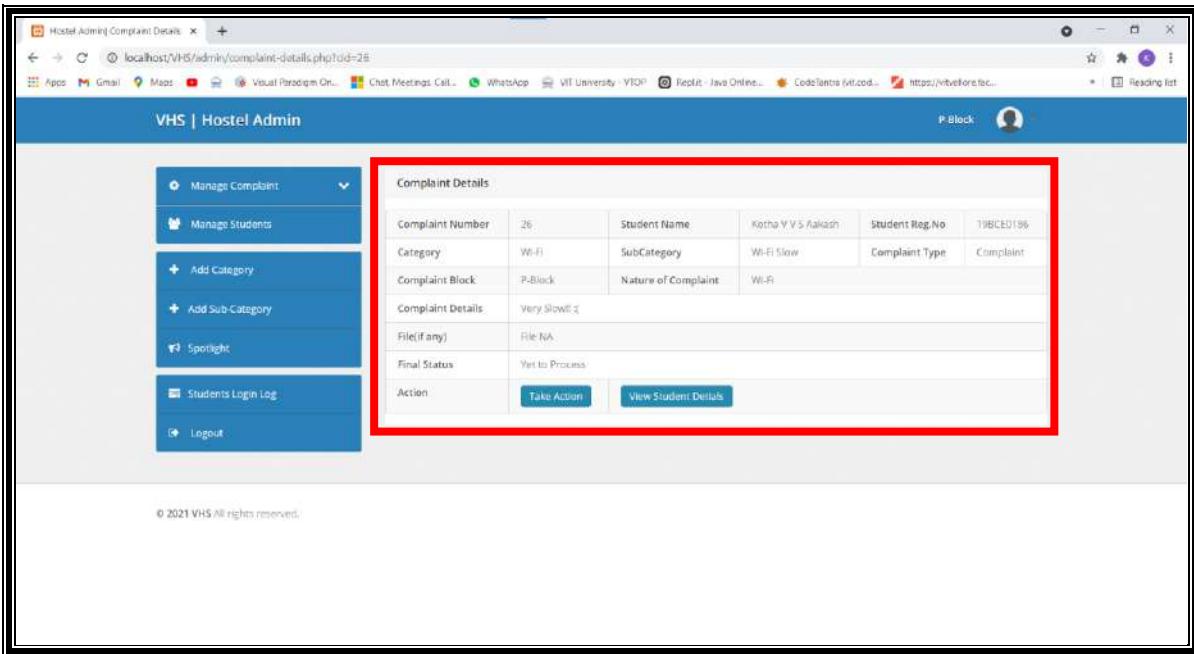
Complaint Details (max 2000 words): Very Slow!! .

Complaint Related Doc(if any): Choose File No file chosen

Submit **3**

3.3.6.3 Output(s):





The screenshot shows a web browser window titled "Hostel Admin| Complaint Details" with the URL "localhost:7051/admin/complaint-details.php?uid=26". The page is part of the "VHS | Hostel Admin" system. On the left, there is a sidebar with navigation links: "Manage Complaint", "Manage Students", "Add Category", "Add Sub-Category", "Spotlight", "Students Login Log", and "Logout". The main content area is titled "Complaint Details" and contains a table with the following data:

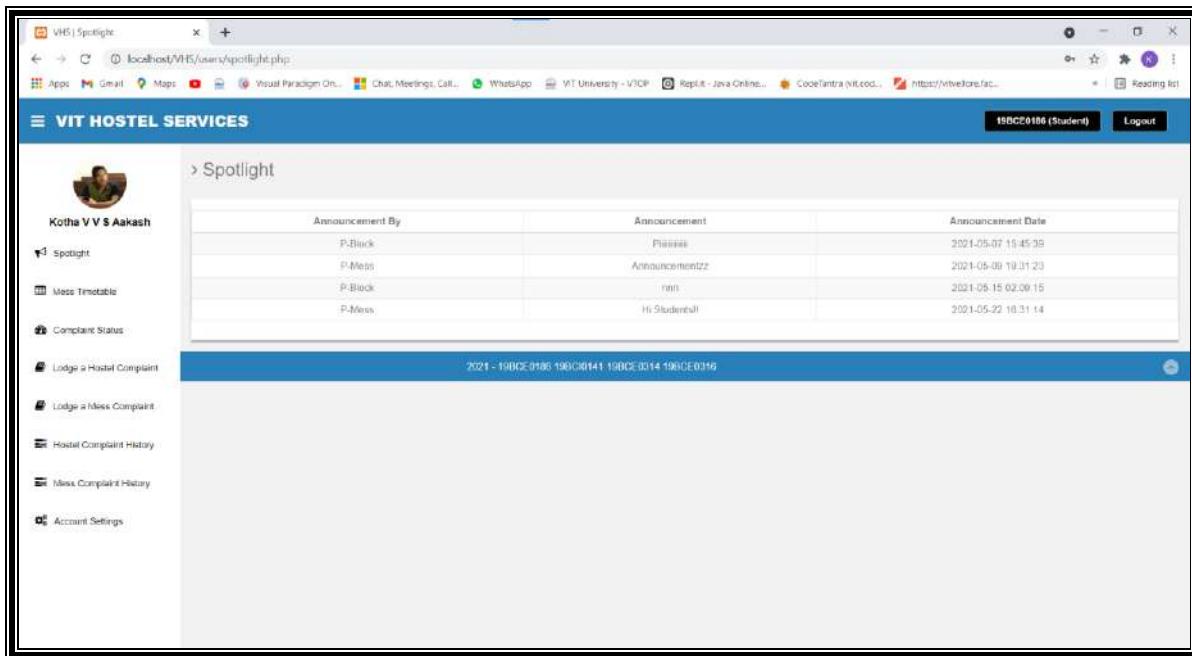
Complaint Number	26	Student Name	Kotha V S Akash	Student Reg.No	T1BCE0196
Category	Wi-Fi	SubCategory	Wi-Fi Slow	Complaint Type	Complaint
Complaint Block	P-Block	Nature of Complaint	Wi-Fi		
Complaint Details	Very Slow!!				
File(if any)	File NA				
Final Status	Yet to Process				
Action	<button>Take Action</button> <button>View Student Details</button>				

At the bottom left of the main content area, it says "© 2021 VHS All rights reserved."

As the Expected Output is same as the Output we got, The Test Case-6 (Student Lodge a Hostel Complaint Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.7.	Student Lodge a Mess Complaint Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Lodge a Mess Complaint' in his/her Home Page, and then fill all the necessary details, and then click on Submit button.	The System should display the msg- "Successfully Registered", and these complaint details should be displayed in Login of that particular complaint Mess block.

3.3.7.1 Present state of the System:



3.3.7.2 Test Input(s):

VIT HOSTEL SERVICES

> Register Mess Complaint

Kotha V V S Akash

Lodge a Mess Complaint 1

Mess Food Feedback 2

Complaint Type: Complaint 2

Mess Block: Mess Block 2

P-Mess: P-Mess 2

Nature of Complaint: Not Tasty! 2

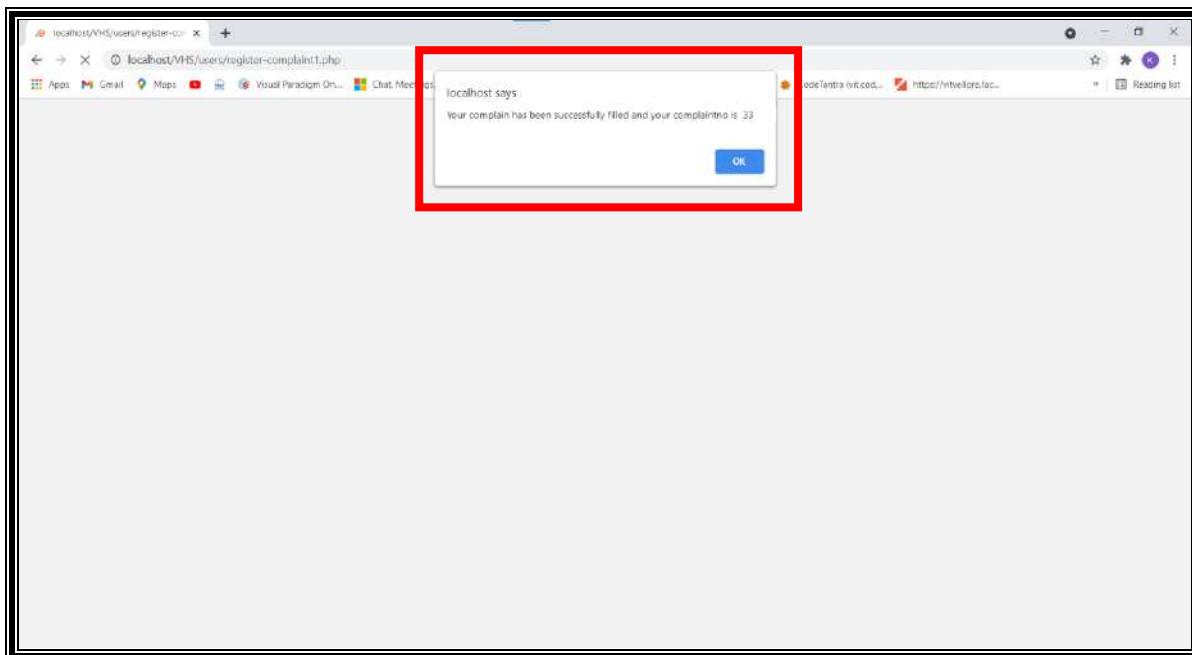
Complaint Details (max 2000 words): Not Tasty! 2

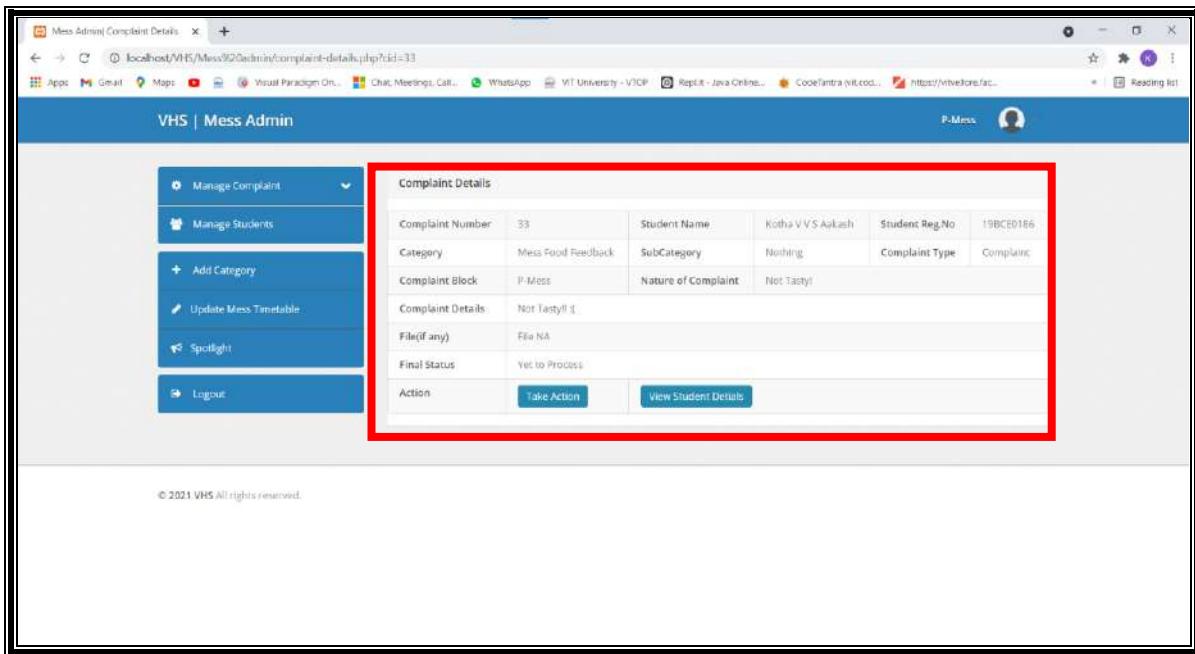
Complaint Related Doc (if any):

Choose File: No file chosen

Submit 3

3.3.7.3 Output(s):

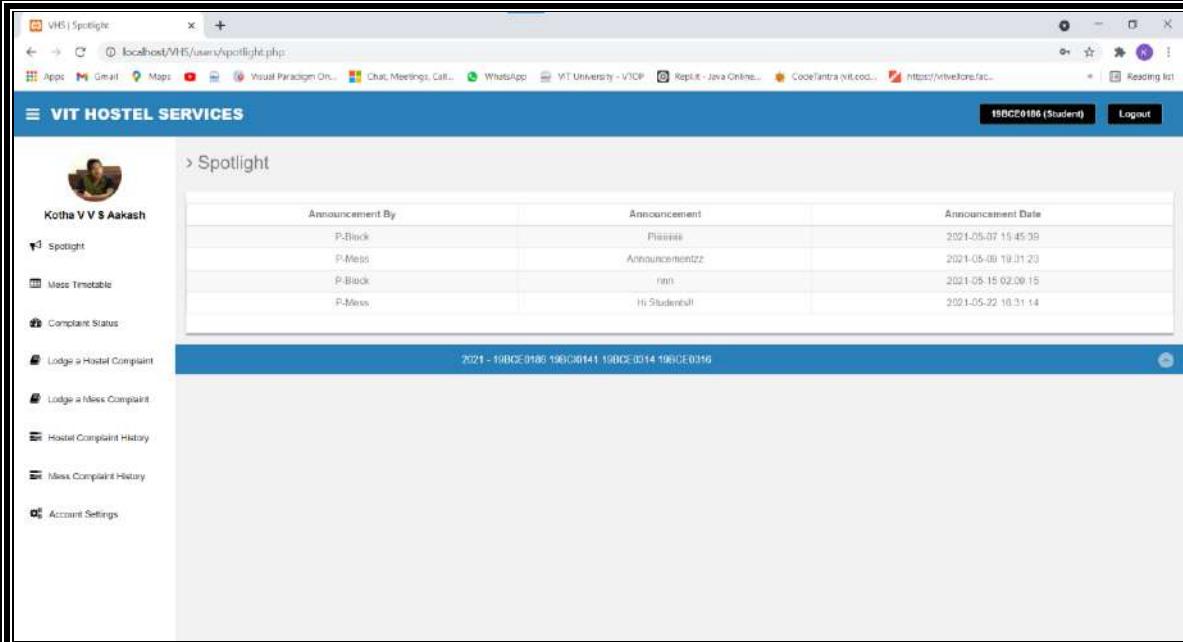




As the Expected Output is same as the Output we got, The Test Case-7 (Student Lodge a Mess Complaint Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.8.	Student Hostel Complaint History Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Hostel Complaint History Option' his/her Home Page.	The System should be directed to Student Hostel Complaint History page, where the list of Hostel Complaints made by him/her should be displayed in a Tabular format.

3.3.8.1 Present state of the System:

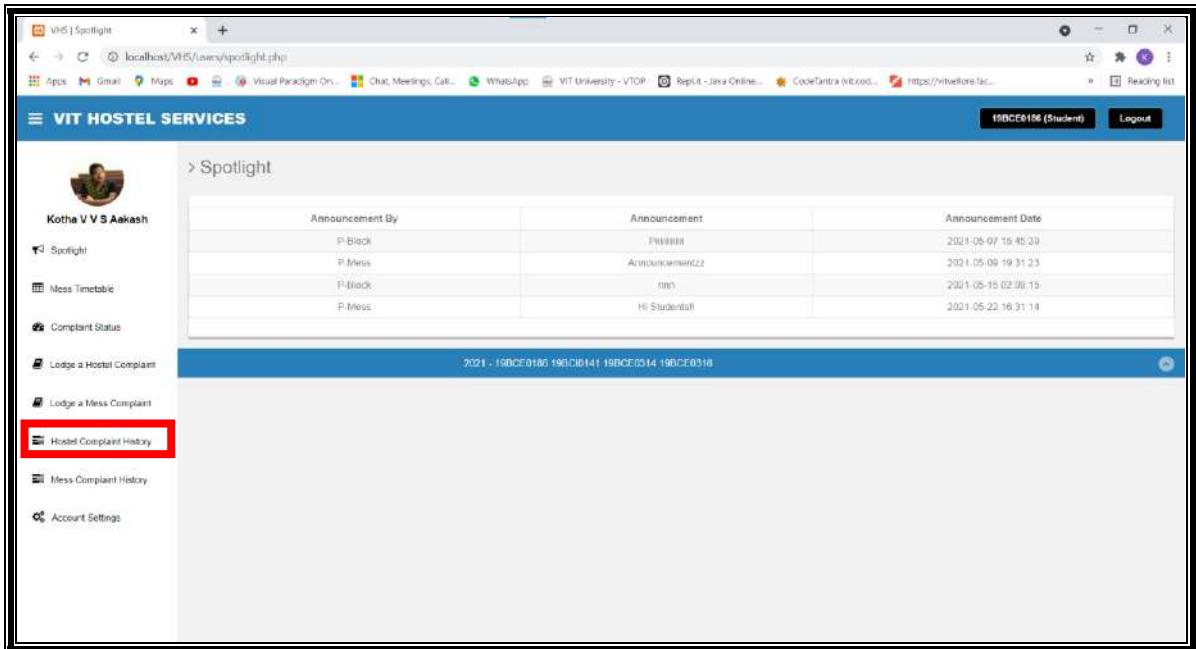


The screenshot shows a web browser window titled 'VHS | Spotlight' with the URL 'localhost/VHS/user/v/spotlight.php'. The page is titled 'VIT HOSTEL SERVICES' and shows a user profile for 'Kotha V V S Akash'. On the left, there is a sidebar with links: 'Spotlight' (which is active), 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Spotlight' and displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	Plain	2021-05-07 15:45:39
P-Meals	Announcementzz	2021-05-08 19:31:23
P-Block	nm	2021-05-15 02:09:15
P-Meals	Hi Students!!	2021-05-22 10:31:14

At the bottom of the page, there is a footer bar with the text '2021 - 19BCE0406_19G00141_19BCE0014_19G0E0316'.

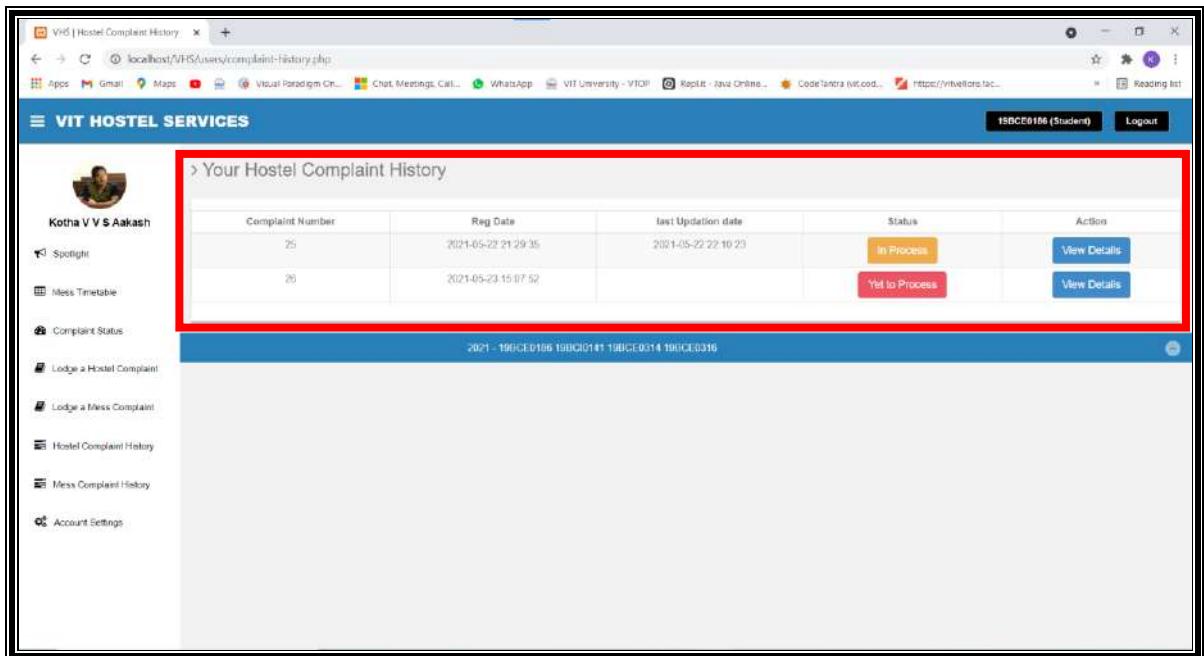
3.3.8.2 Test Input(s):



The screenshot shows the 'Spotlight' section of the VIT Hostel Services website. The sidebar on the left includes links for 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History' (which is highlighted with a red box), 'Mess Complaint History', and 'Account Settings'. The main content area displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	P111111	2021-05-07 15:45:20
P-Mess	Announcement122	2021-05-09 19:31:23
P-Block	nnn	2021-05-15 02:00:15
P-Mess	Hi Student!!	2021-05-22 16:31:14

3.3.8.3 Output(s):



The screenshot shows the 'Your Hostel Complaint History' page. The sidebar on the left is identical to the previous screenshot. The main content area displays a table of complaints:

Complaint Number	Reg Date	Last Update Date	Status	Action
25	2021-05-22 21:29:35	2021-05-22 22:10:23	In Process	View Details
26	2021-05-23 15:07:52		Yet to Process	View Details

As the Expected Output is same as the Output we got, The Test Case-8 (Student Hostel Complaint History Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.9.	Student Mess Complaint History Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Mess Complaint History Option' his/her Home Page.	The System should be directed to Student Mess Complaint History page, where the list of Hostel Complaints made by him/her should be displayed in a Tabular format.

3.3.9.1 Present state of the System:

Announcement By	Announcement	Announcement Date
P-Block	Plain	2021-05-07 15:45:39
P-Meals	Announcement123	2021-05-08 19:31:23
P-Block	nm	2021-05-15 02:09:15
P-Meals	Hi Students!!	2021-05-22 10:31:14

3.3.9.2 Test Input(s):

The screenshot shows the 'Spotlight' section of the VIT Hostel Services website. On the left, there's a sidebar with various links: 'Spotlight' (highlighted with a red box), 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', and 'Mess Complaint History'. The main content area displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	P111111	2021-05-07 15:45:20
P-Mess	Announcement122	2021-05-09 19:31:23
P-Block	nnn	2021-05-15 02:00:15
P-Mess	Hi Student!!	2021-05-22 16:31:14

3.3.9.3 Output(s):

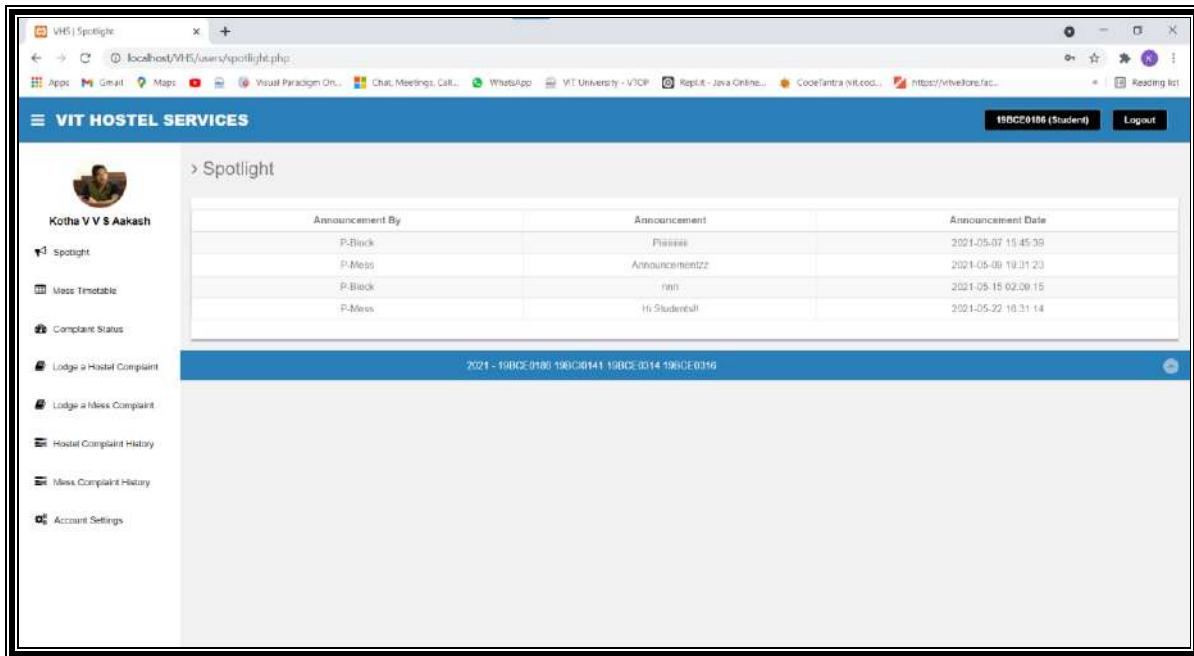
The screenshot shows the 'Your Mess Complaint History' section. The table lists two complaints:

Complaint Number	Reg Date	Last Updation date	Status	Action
32	2021-05-22 21:38:34	2021-05-22 22:37:48	Closed	View Details
33	2021-05-23 15:16:20		Yet to Process	View Details

As the Expected Output is same as the Output we got, The Test Case-9 (Student Mess Complaint History Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.10.	Student Profile Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Account Setting Option' and then 'Profile Option' in his/her Home Page, and then modify his/her details and then click on Submit button (if necessary).	The System should be directed to Student Profile page, where the updated academic and personal information of that particular student will, be displayed.

3.3.10.1 Present state of the System:



3.3.10.2 Test Input(s):

The screenshot shows the 'Spotlight' section of the VIT Hostel Services website. On the left, there's a sidebar with links like 'Spotlight', 'Mess Timetable', 'Complaint Status', etc. The main area displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	Passes	2021-05-07 19:45:39
P-Mess	Announcement 12	2021-05-09 19:31:23
P-Block	BB	2021-05-15 02:06:15
P-Mess	Hi Students!!	2021-05-22 16:31:14

Below the table, there are several navigation links: 'Account Settings' (highlighted with a red box and yellow '1'), 'Profile' (highlighted with a red box and yellow '2'), 'Change Password', and 'Logout'.

3.3.10.3 Output(s):

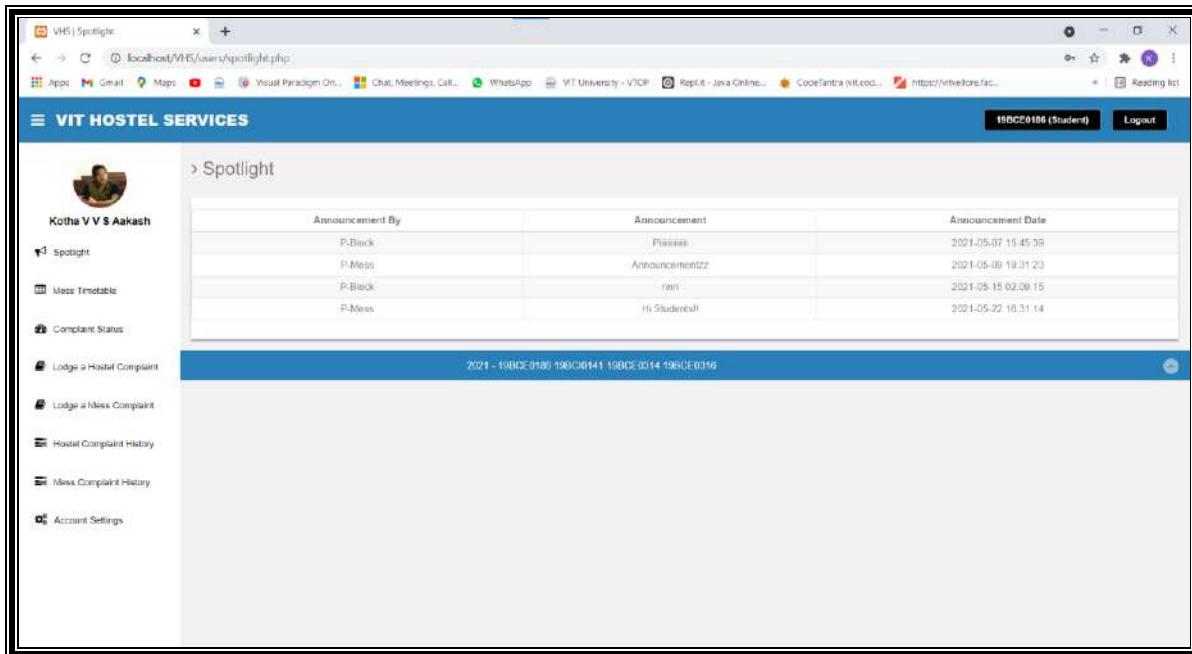
The screenshot shows the 'Profile Info' page for 'Kothe V V S Aakash'. The page is divided into sections for personal information, academic details, and contact information. The entire form area is highlighted with a red box.

Kothe V V S Aakash's Profile			
Last Updated at :	2021-05-09 20:09:46		
Full Name	Kothe V V S Aakash	Registration No	19BCE0186
Mail-ID	kothavsaakash2019@vitstudent.ac.in	DOB	03/08/2002
Branch	DSE	Specialization	CORE
School	SCOPE		
Hostel Block	P-Block	Hostel Room No	649
Mess Block	P-Mess		
Address	Vishakhapatnam	Pincode	530003

As the Expected Output is same as the Output we got, The Test Case-10 (Student Profile Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.11.	Student Change Password Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Account Setting Option' and then 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same student login, he/she should use the New Password to get to his/her Home Page.

3.3.11.1 Present state of the System:



3.3.11.2 Test Input(s):

The screenshot shows the 'Spotlight' section of the VIT Hostel Services website. On the left, there's a sidebar with icons for various services: Spotlight (highlighted with a yellow box and labeled '1'), Mess Timetable, Complaint Status, Lodge a Hostel Complaint, Lodge a Mess Complaint, Hostel Complaint History, and Mess Complaint History. Below these are Account Settings and Change Password (highlighted with a yellow box and labeled '2'). The main content area displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	Passes	2021-05-07 15:45:39
P-Mess	Announcement 2	2021-05-09 19:31:23
P-Block	BB	2021-05-15 02:06:15
P-Mess	Hi Students!!	2021-05-22 16:31:14

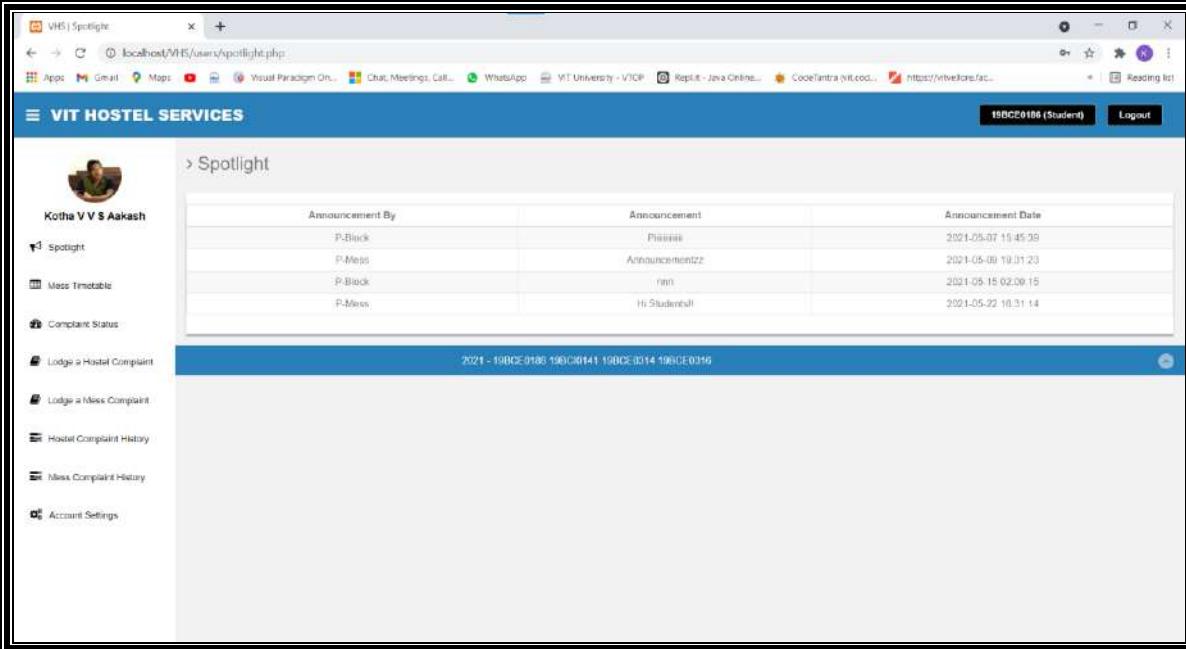
3.3.11.3 Output(s):

The screenshot shows the 'Change Password' form. A red box highlights the input fields: Current Password, New Password, and Confirm Password. Below the form is a message: '2021 - 196CE0186 19BC0141 19BCE0314 19BCE0316'. The rest of the page is identical to the previous screenshot, showing the sidebar and the 'Spotlight' announcements.

As the Expected Output is same as the Output we got, The Test Case-11 (Student Change Password Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.12.	Student Logout Test	Student 'Home' Page	Student should be already logged in.	Student should click the 'Logout Option' his/her Home Page.	The System should be directed to VHS Home page.

3.3.12.1 Present state of the System:



The screenshot shows a web browser window for 'VHS Spotlight' at the URL 'localhost/VHS/users/spotlight.php'. The page title is 'VIT HOSTEL SERVICES'. On the left, there's a sidebar with a user profile picture and the name 'Kotha V V S Akash'. Below the profile are several menu items: 'Spotlight' (which is active), 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Spotlight' and displays a table of announcements. The table has columns for 'Announcement By', 'Announcement', and 'Announcement Date'. The data is as follows:

Announcement By	Announcement	Announcement Date
P-Blok	Plainie	2021-05-07 15:45:09
P-Mess	Announcementzzz	2021-05-08 19:31:23
P-Blok	rrrr	2021-05-15 02:09:15
P-Mess	Hi Students!!	2021-05-22 10:31:14

3.3.12.2 Test Input(s):

The screenshot shows a web browser window for 'VHS | Spotlight' at the URL localhost/VHS/users/spotlight.php. The page title is 'VIT HOSTEL SERVICES'. The top navigation bar includes links for 'Student Login', 'Logout' (which is highlighted with a red box), and other user-related options. On the left, there's a sidebar with a user profile picture and name 'Kotha V V S Akash', followed by a list of menu items: 'Spotlight', 'Mass Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Spotlight' and displays a table of announcements. The table has columns for 'Announcement By', 'Announcement', and 'Announcement Date'. The data is as follows:

Announcement By	Announcement	Announcement Date
P-Blok	Planned	2021-05-07 15:45:09
P-Mess	Announcementzz	2021-05-09 19:01:23
P-Blok	rrrr	2021-05-15 02:09:15
P-Mess	Hi Students!!	2021-05-22 10:31:14

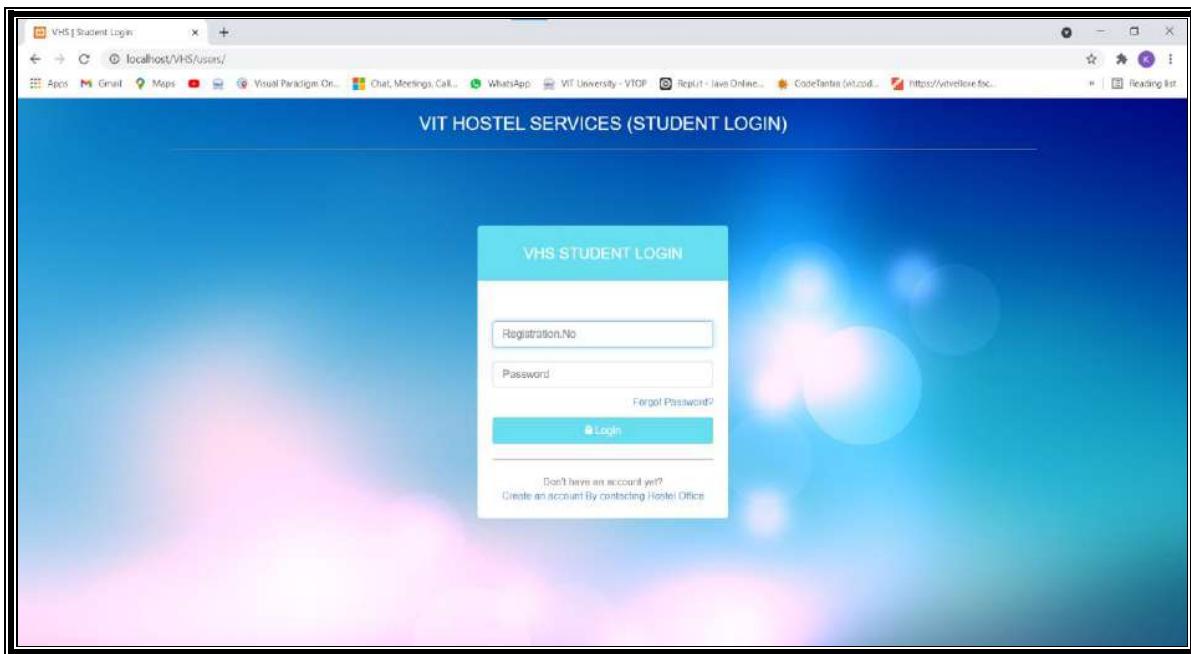
3.3.12.3 Output(s):

The screenshot shows a web browser window for 'VHS | VIT HOSTEL SERVICES' at the URL localhost/VHS/index.html. The page title is 'VIT HOSTEL SERVICES'. At the top, there's a navigation bar with links for 'About Us', 'Hostel Administrators', 'Student Login' (highlighted with a red box), 'Hostel Admin Login', 'Mess Staff Login', 'VHS Admin Login', and 'Contact'. Below the navigation is a large banner image of a modern multi-story building complex surrounded by greenery. Overlaid on the banner is the text 'LET'S MAKE YOUR LIFE EASIER' and 'VHS | Login to VHS'. At the bottom of the banner is a green button labeled 'Student Login'.

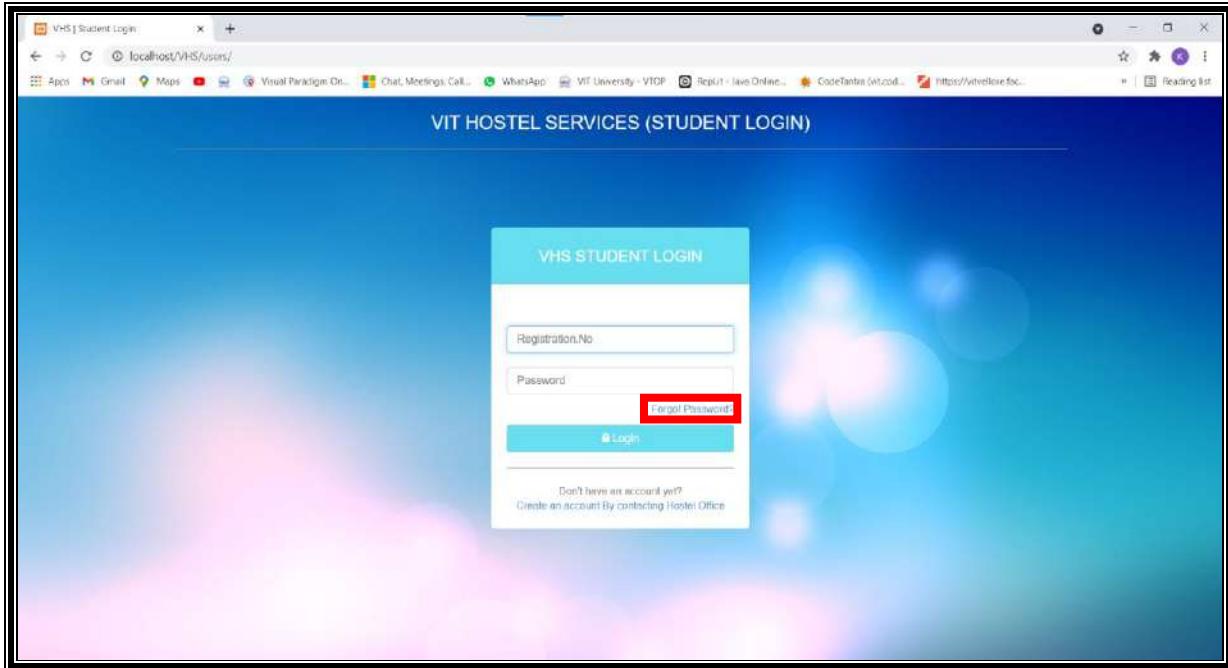
As the Expected Output is same as the Output we got, The Test Case-12 (Student Logout Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.13.	Student Forgot Password Test	Student 'Login' Page	Student should already have a registered account.	Student should click the 'Forgot Password' and then fill the necessary details to change the password in the Student Login page (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same student login, he/she should use the New Password to get to his/her Home Page.

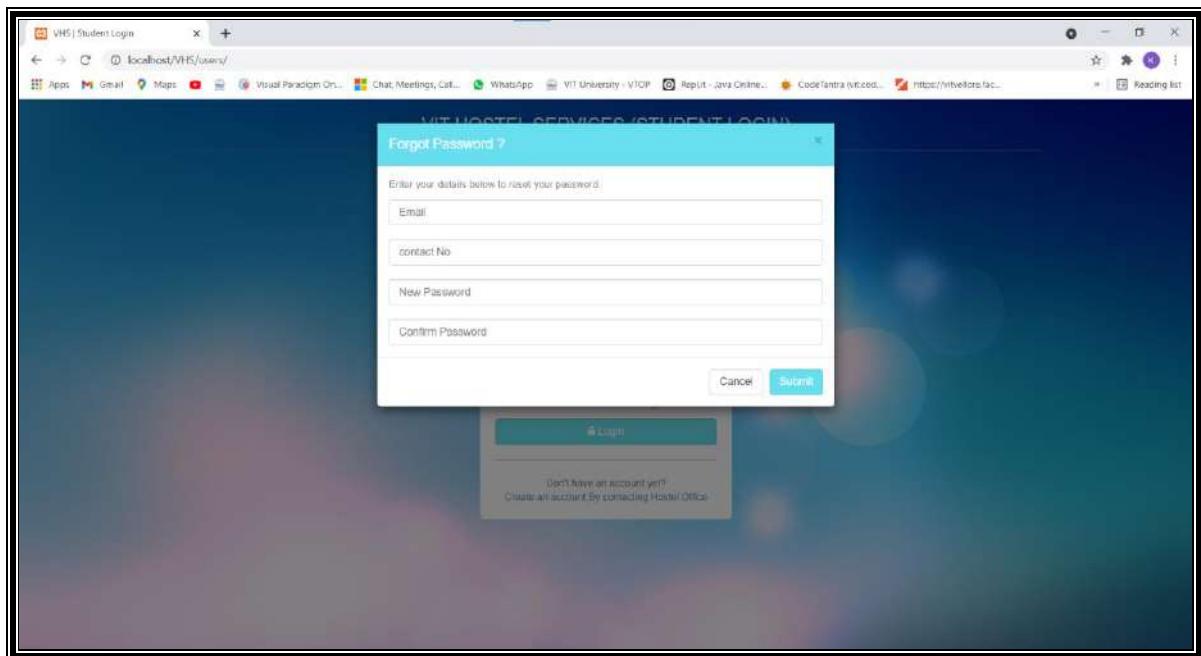
3.3.13.1 Present state of the System:



3.3.13.2 Test Input(s):



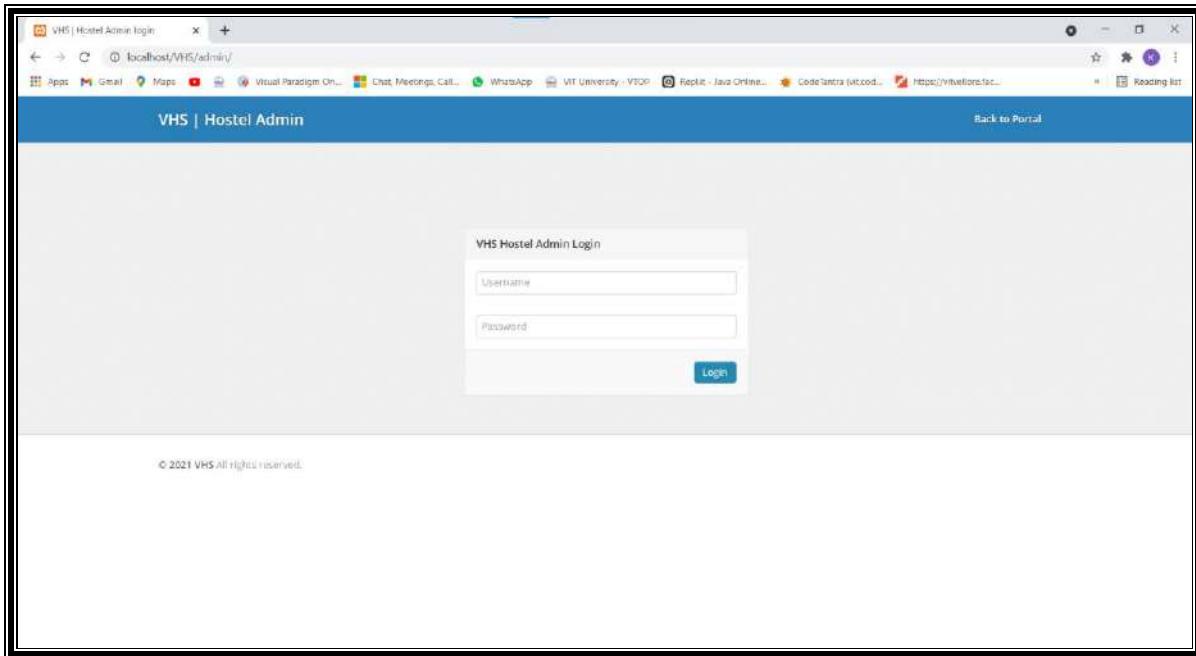
3.3.13.3 Output(s):



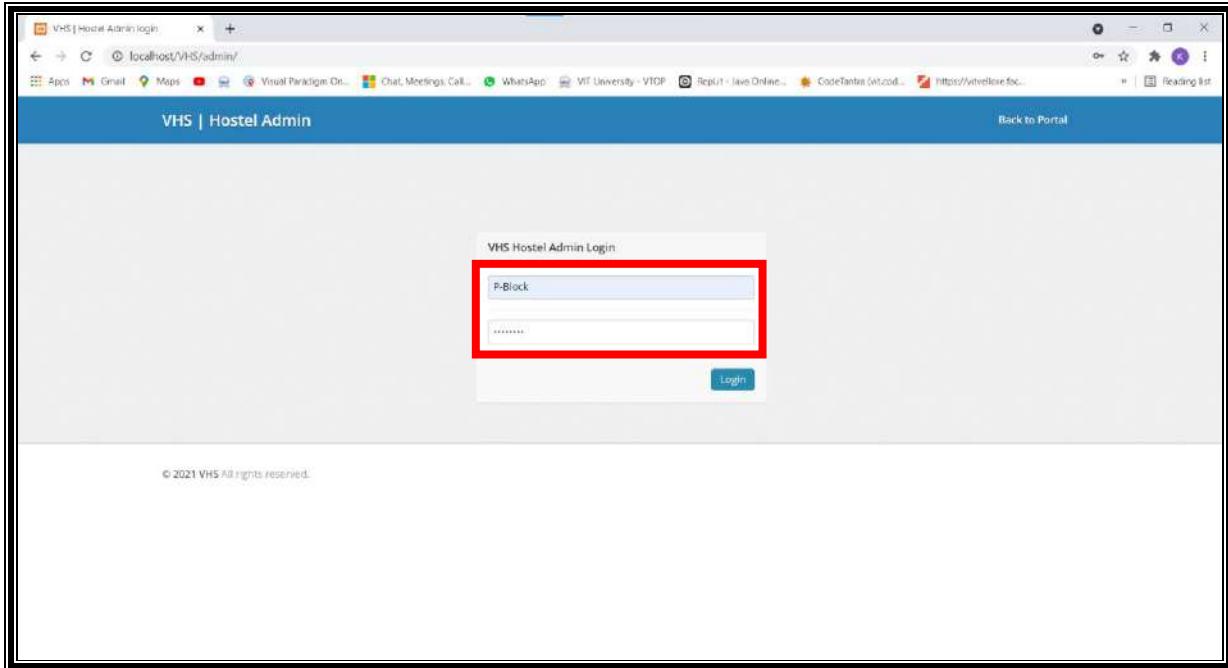
As the Expected Output is same as the Output we got, The Test Case-13 (Student Forgot Password Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.14.	Hostel Admin Login Test	Hostel Admin 'Login' Page	Hostel Admin should already have a registered account.	Enter his/her valid set of Username and Password, then click on 'Login' Button.	The System should be directed to Hostel Admin Home page of that Hostel Block.

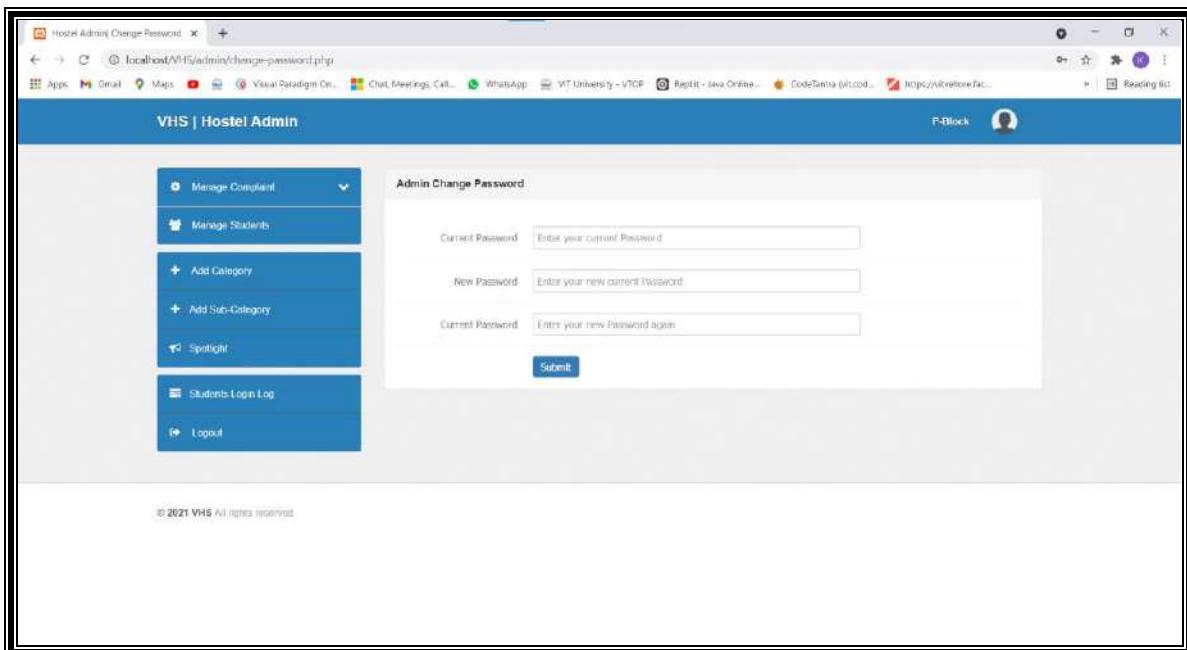
3.3.14.1 Present state of the System:



3.3.14.2 Test Input(s):



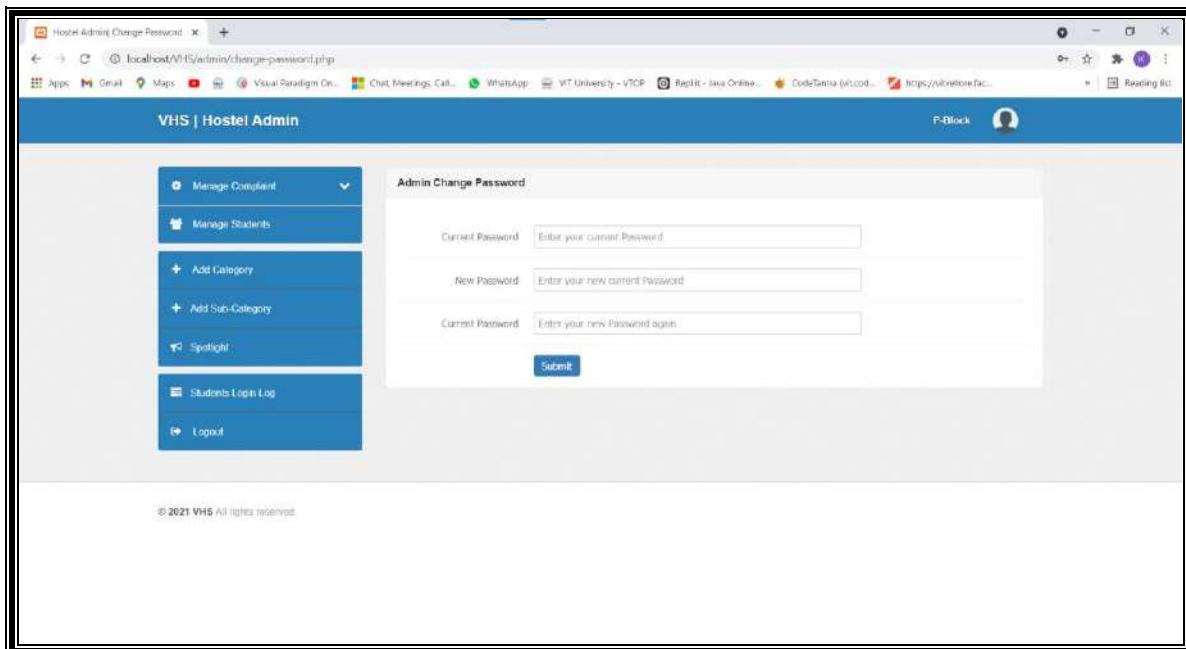
3.3.14.3 Output(s):



As the Expected Output is same as the Output we got, The Test Case-14 (Hostel Admin Login Test) is Passed!

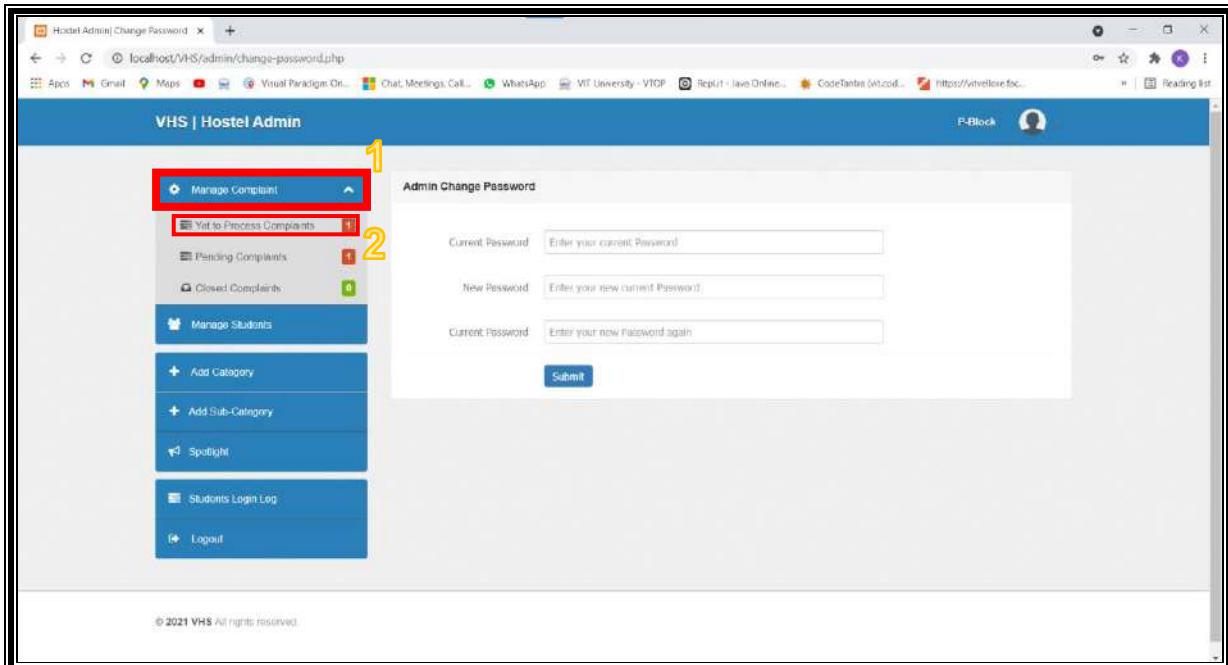
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.15.	Hostel Admin Yet to Process Complaints Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Complaints Option' and then 'Yet to Process Complaints Option' in his/her Home Page.	The System should be directed to Hostel Admin Yet to Process Complaints page, where the list of Yet to Process Complaints of that particular Hostel Block will be displayed in a tabular format.

3.3.15.1 Present state of the System:

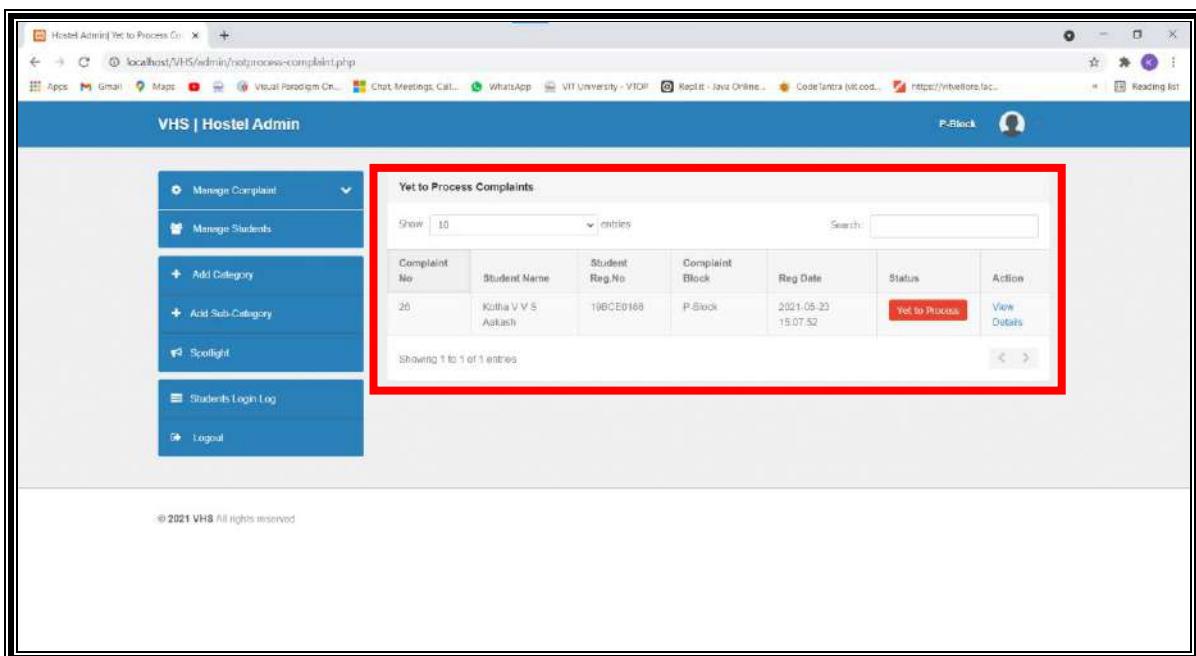


The screenshot shows a web browser window titled 'Hostel Admin Change Password'. The URL is 'localhost/VHS/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Hostel Admin' and a user profile icon. On the left, there is a vertical sidebar menu with the following options: 'Manage Complaint', 'Manage Students' (which is currently selected), 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students Log in Log', and 'Logout'. The main content area contains a form titled 'Admin Change Password' with three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A 'Submit' button is located at the bottom of the form. At the bottom of the page, there is a footer note: '© 2021 VHS All rights reserved.'

3.3.15.2 Test Input(s):



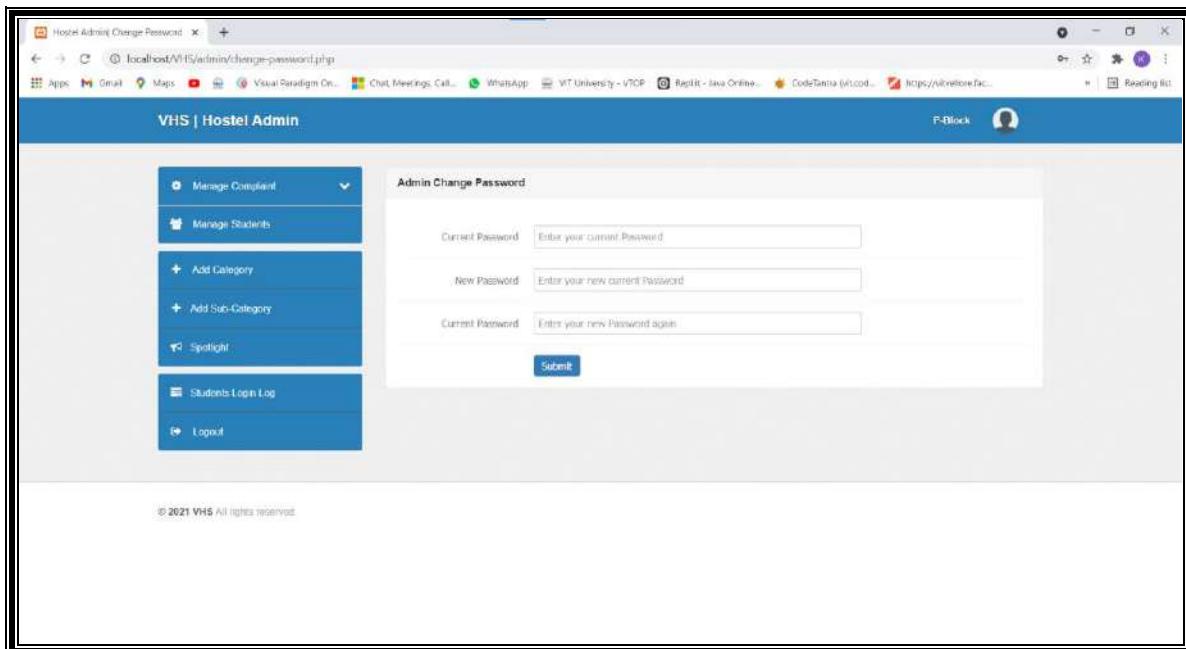
3.3.15.3 Output(s):



As the Expected Output is same as the Output we got, The Test Case-15 (Hostel Admin Yet to Process Complaints Test) is Passed!

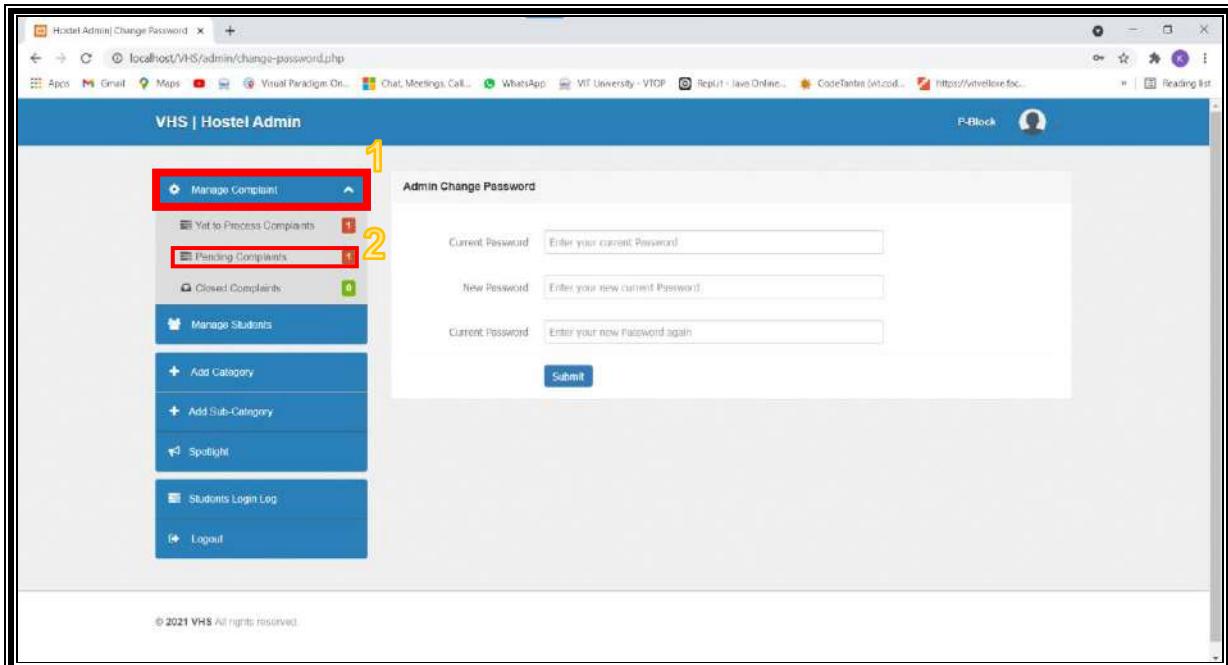
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.16.	Hostel Admin Pending Complaints Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Complaints Option' and then 'Pending Complaints Option' in his/her Home Page.	The System should be directed to Hostel Admin Pending Complaints page, where the list of Pending Complaints of that particular Hostel Block will be displayed in a tabular format.

3.3.16.1 Present state of the System:



The screenshot shows a web browser window titled 'Hostel Admin Change Password'. The URL in the address bar is 'localhost/VHS/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Hostel Admin' and a user profile icon. Below the header is a sidebar menu with the following options: 'Manage Complaint', 'Manage Students' (which is highlighted in blue), 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students Login Log', and 'Logout'. The main content area contains a form titled 'Admin Change Password' with three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A 'Submit' button is located at the bottom of the form. At the bottom left of the page, there is a small copyright notice: '© 2021 VHS All rights reserved.'

3.3.16.2 Test Input(s):



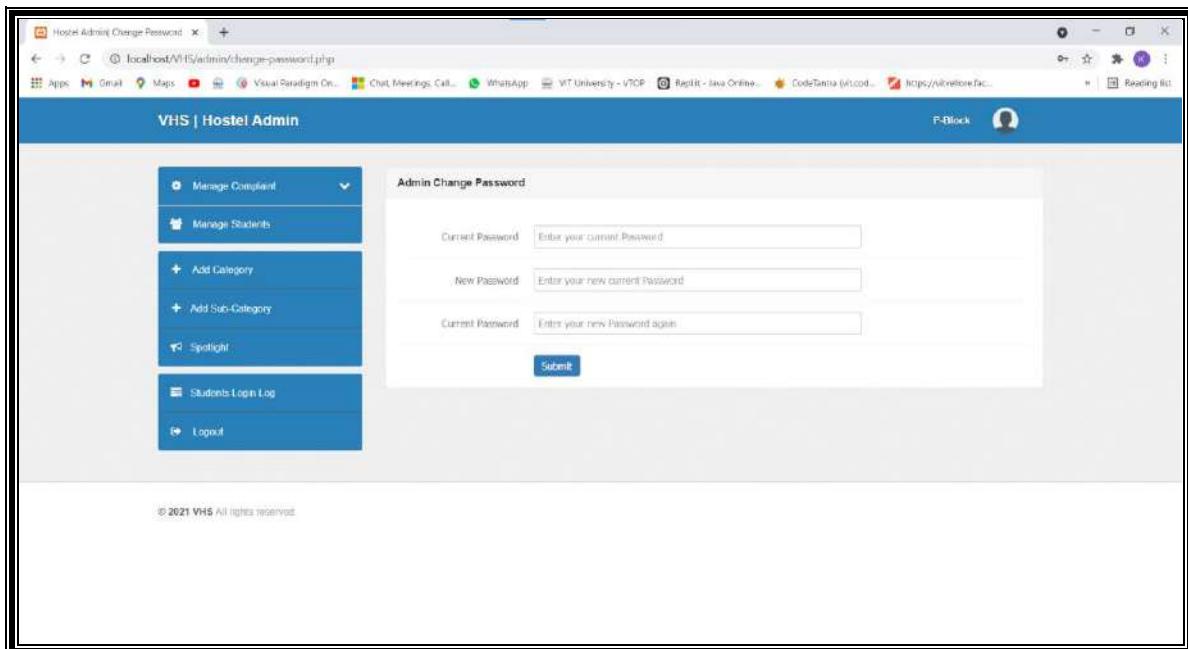
3.3.16.3 Output(s):

Complaint No.	Student Name	Student Reg.No	Complaint Block	Reg Date	Status	Action
25	Kotha V V S Akash	19GCE0106	P-Block	2021-05-22 21:26:35	Marked	View Details

As the Expected Output is same as the Output we got, The Test Case-16 (Hostel Admin Pending Complaints Test) is **Passed!**

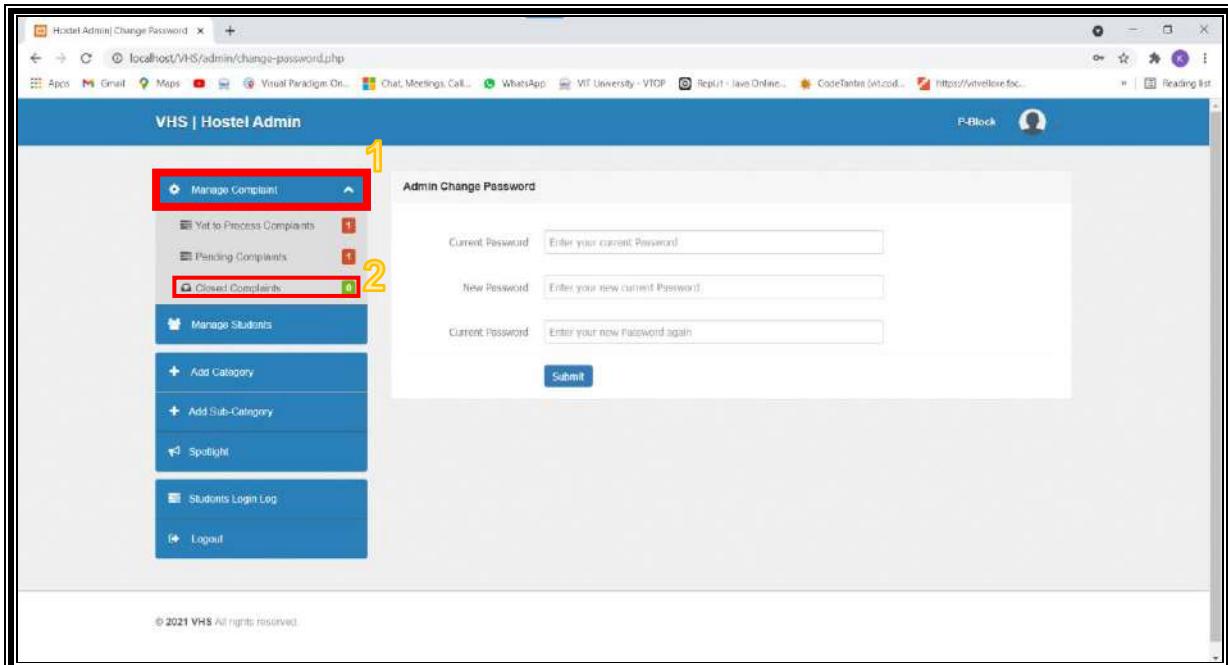
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.17.	Hostel Admin Closed Complaints Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Complaints Option' and then 'Closed Complaints Option' in his/her Home Page.	The System should be directed to Hostel Admin Closed Complaints page, where the list of Closed Complaints of that particular Hostel Block will be displayed in a tabular format.

3.3.17.1 Present state of the System:

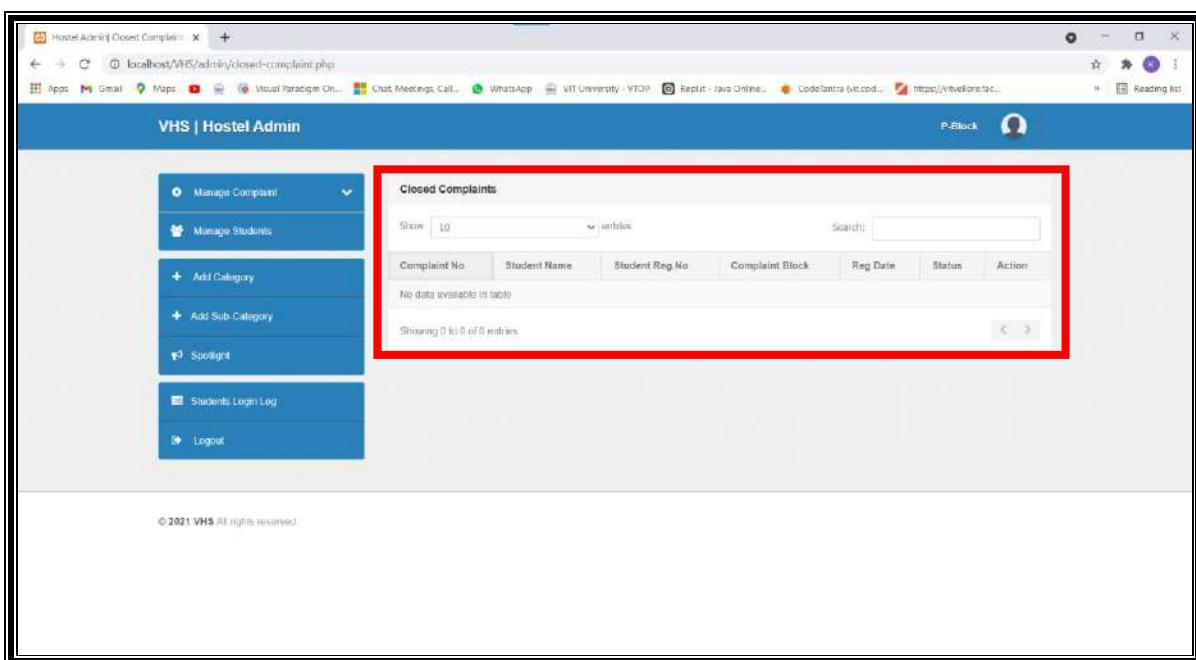


The screenshot shows a web browser window titled 'Hostel Admin Change Password'. The URL is 'localhost/VHS/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Hostel Admin' and a user profile icon. Below the header is a sidebar menu with the following options: 'Manage Complaint', 'Manage Students' (which is highlighted in blue), 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students Log In Log', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A 'Submit' button is located at the bottom of the form. At the bottom of the page, there is a footer note: '© 2021 VHS All rights reserved.'

3.3.17.2 Test Input(s):



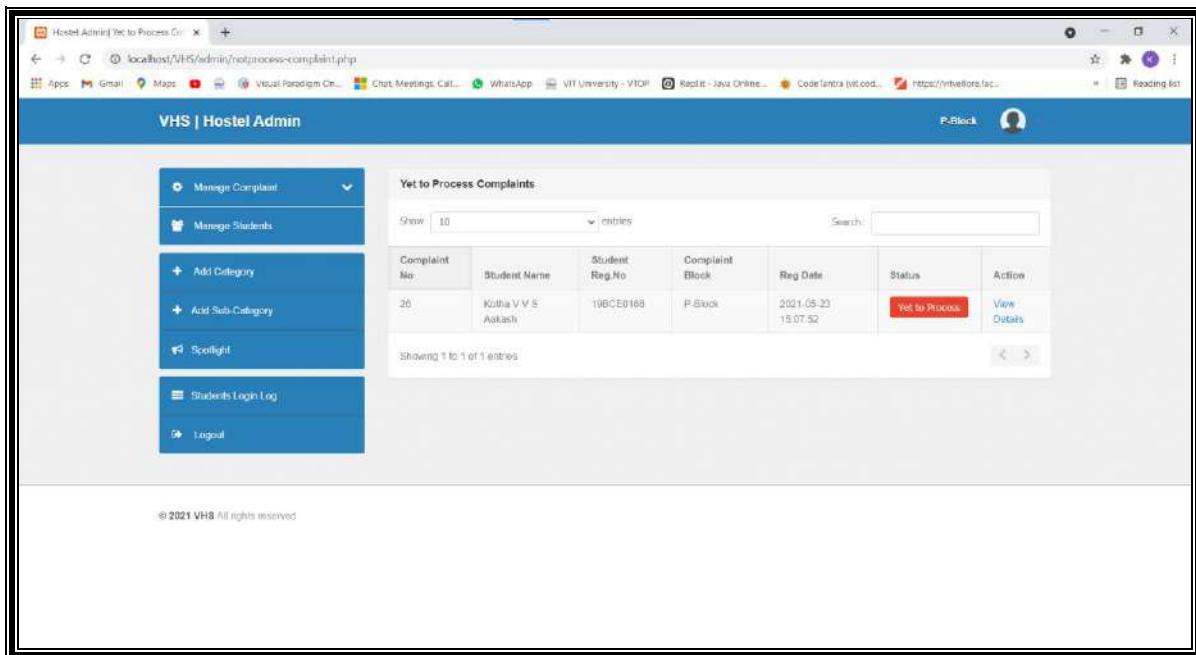
3.3.17.3 Output(s):



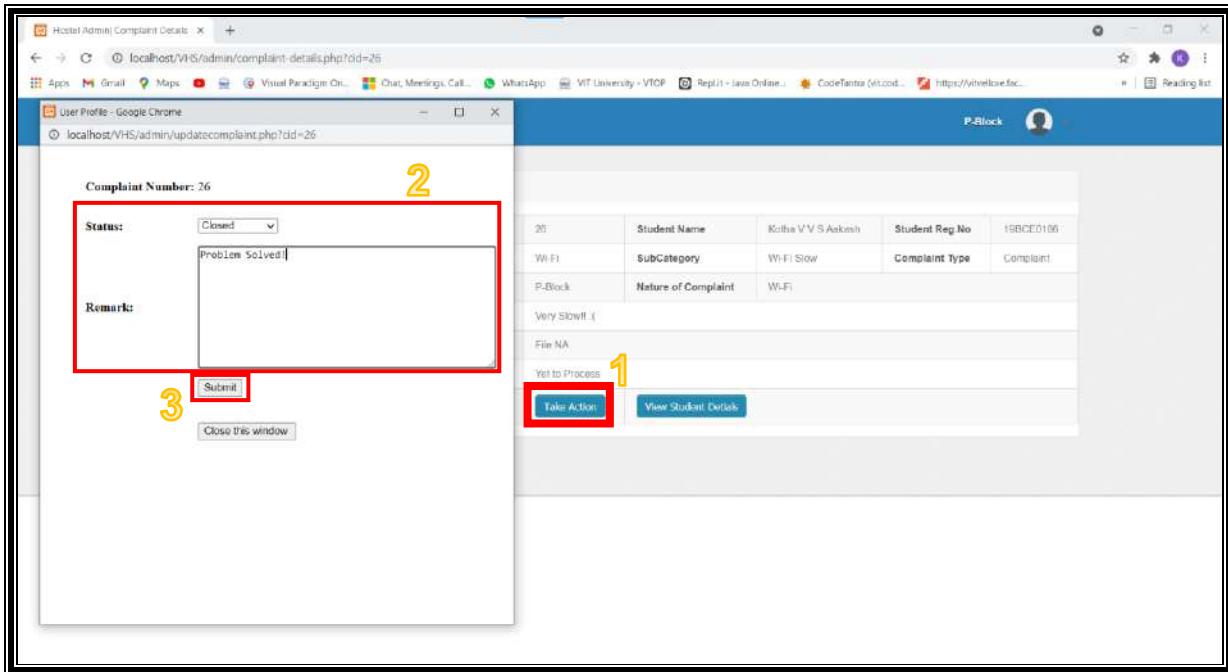
As the Expected Output is same as the Output we got, The Test Case-17 (Hostel Admin Closed Complaints Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.18.	Hostel Admin Remark Test	Hostel Admin 'Yet to Process Complaints' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'View Details Option of any complaint' and then 'Take Action' and fill the Remark and then click on Submit button.	The System should display msg- "Successful", this remark should be displayed in the login of that particular student who raised that particular Hostel complaint.

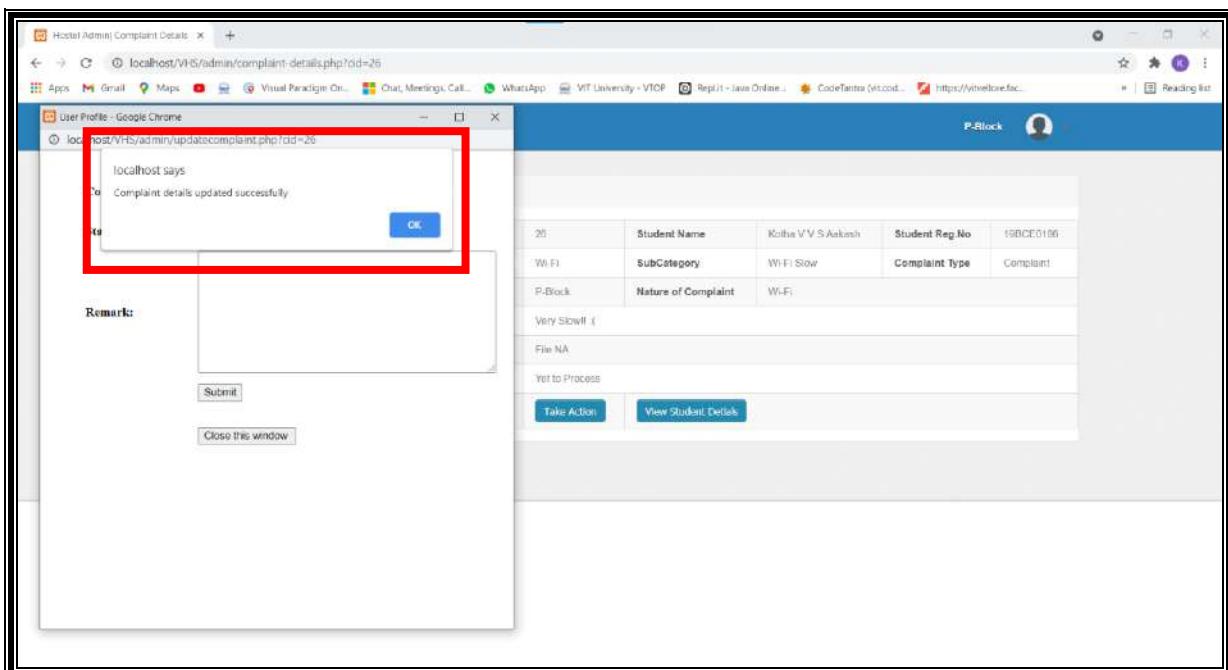
3.3.18.1 Present state of the System:



3.3.18.2 Test Input(s):



3.3.18.3 Output(s):



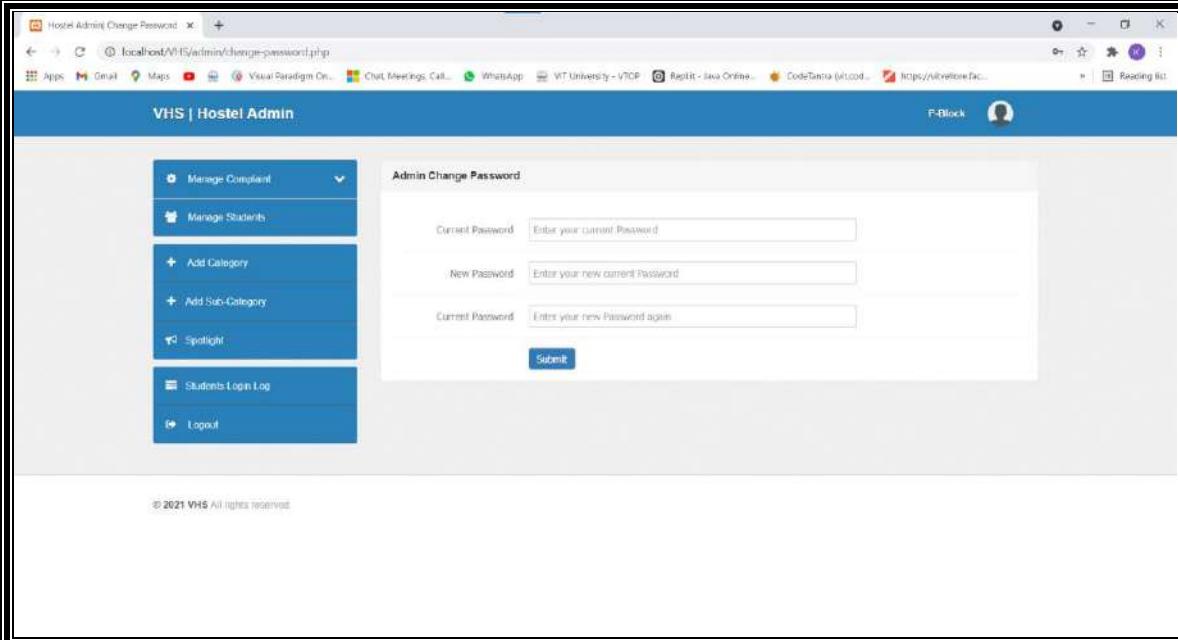
The screenshot shows a web browser window for 'VHS | Hostel Complaint Details' at the URL 'localhost/VHS/users/complaint-details.php?cid=26'. The page title is 'VIT HOSTEL SERVICES'. On the left, there's a sidebar with a user profile picture and names: 'Kotha V V S Aakash' and 'Spotlight'. Below the profile are links for 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Complaint Details' and contains the following data:

Complaint Number:	26	Reg. Date:	2021-05-23 15:07:52
Category:	Wi-Fi	Sub Category:	Wi-Fi Slow
Complaint Type:	Complaint	State:	P-Block
Nature of Complaint:	Wi-Fi	File:	File NA
Complaint Details		Very Slow!! :	
Remark:	Problem Solved!		
Remark Date:	2021-05-23 16:58:44		
Status:	closed		
Final Status:	closed		

As the Expected Output is same as the Output we got, The Test Case-18 (Hostel Admin Remark Test) is Passed!

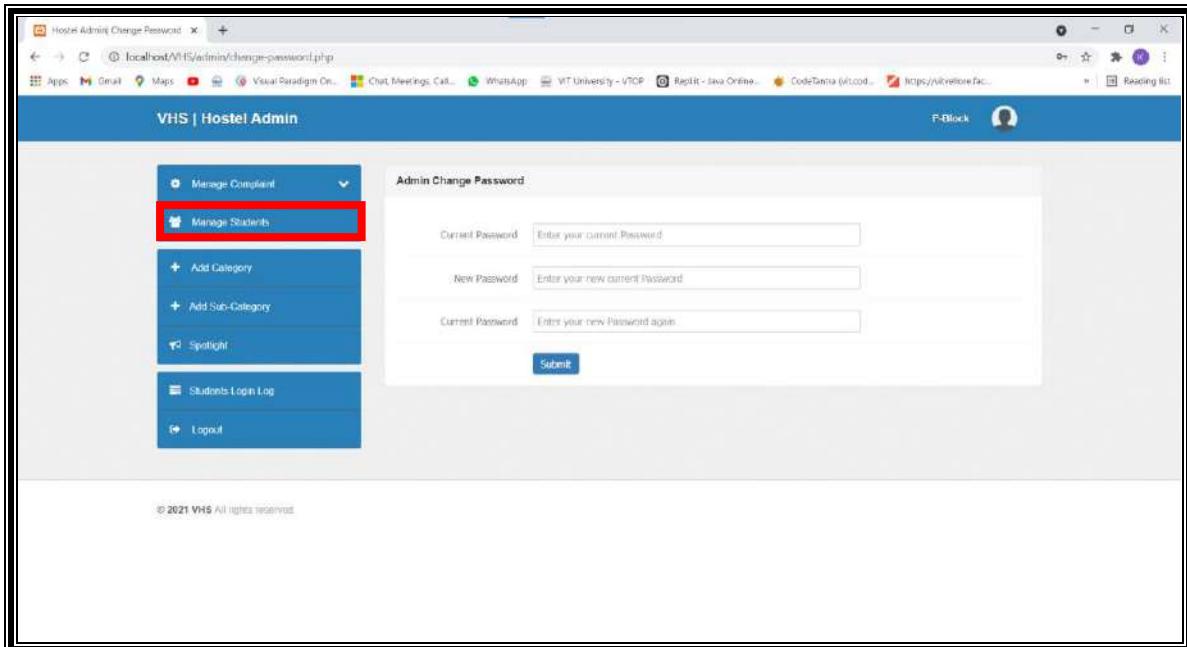
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.19.	Hostel Admin Manage Students Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Manage Students Option' in his/her Home Page.	The System should be directed to Hostel Admin Manage Students page, where the list of all the students present in the Database will be displayed in a tabular format.

3.3.19.1 Present state of the System:

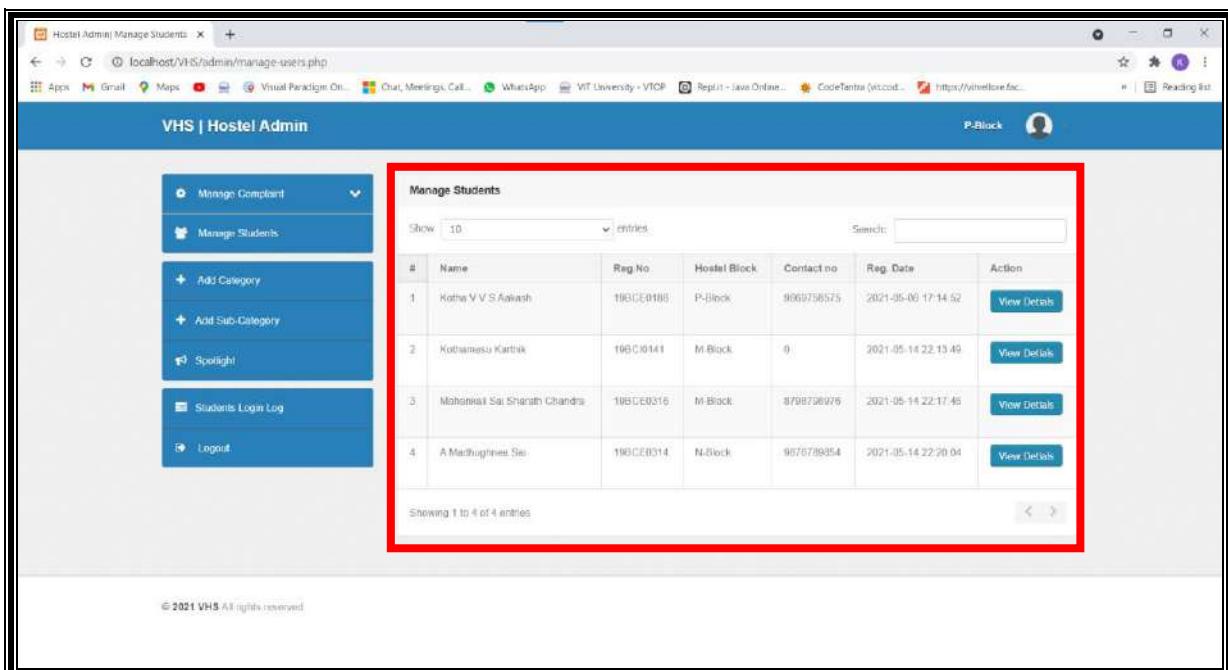


The screenshot shows a web browser window titled 'Hostel Admin Change Password'. The URL is 'localhost/VHS/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Hostel Admin' and a user profile icon. Below the header is a sidebar menu with the following items: 'Manage Complaint' (selected), 'Manage Students' (highlighted in blue), 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students LogIn Log', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A 'Submit' button is located at the bottom of the form. At the bottom left of the page, there is a small copyright notice: '© 2021 VHS All rights reserved.'

3.3.19.2 Test Input(s):



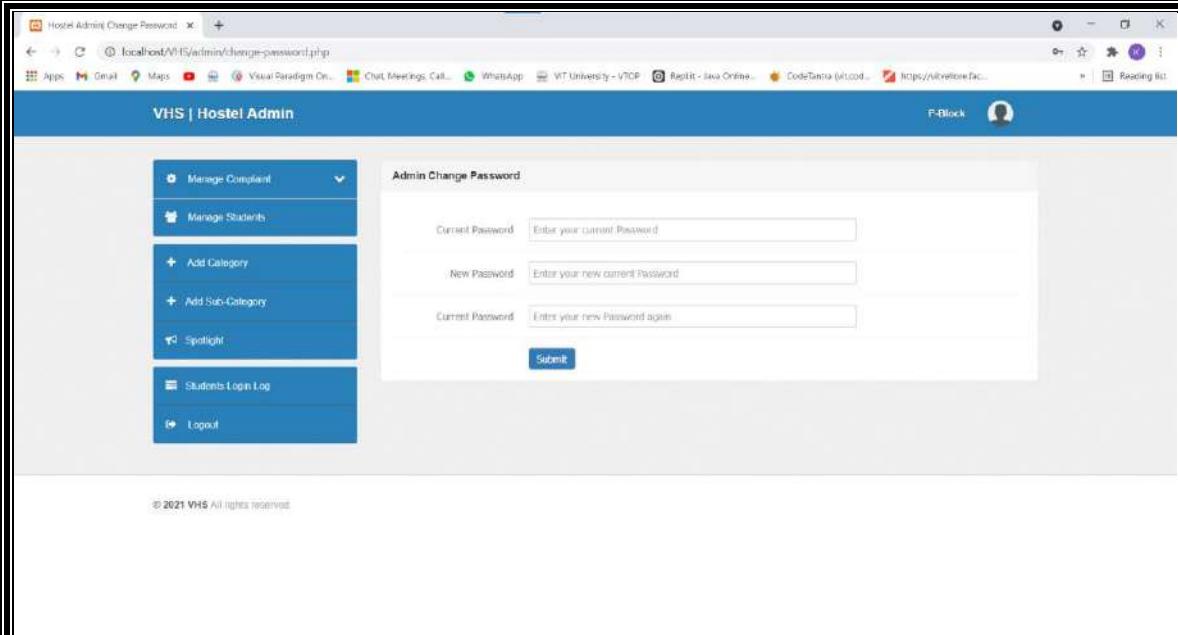
3.3.19.3 Output(s):



As the Expected Output is same as the Output we got, The Test Case-19 (Hostel Admin Manage Students Test) is Passed!

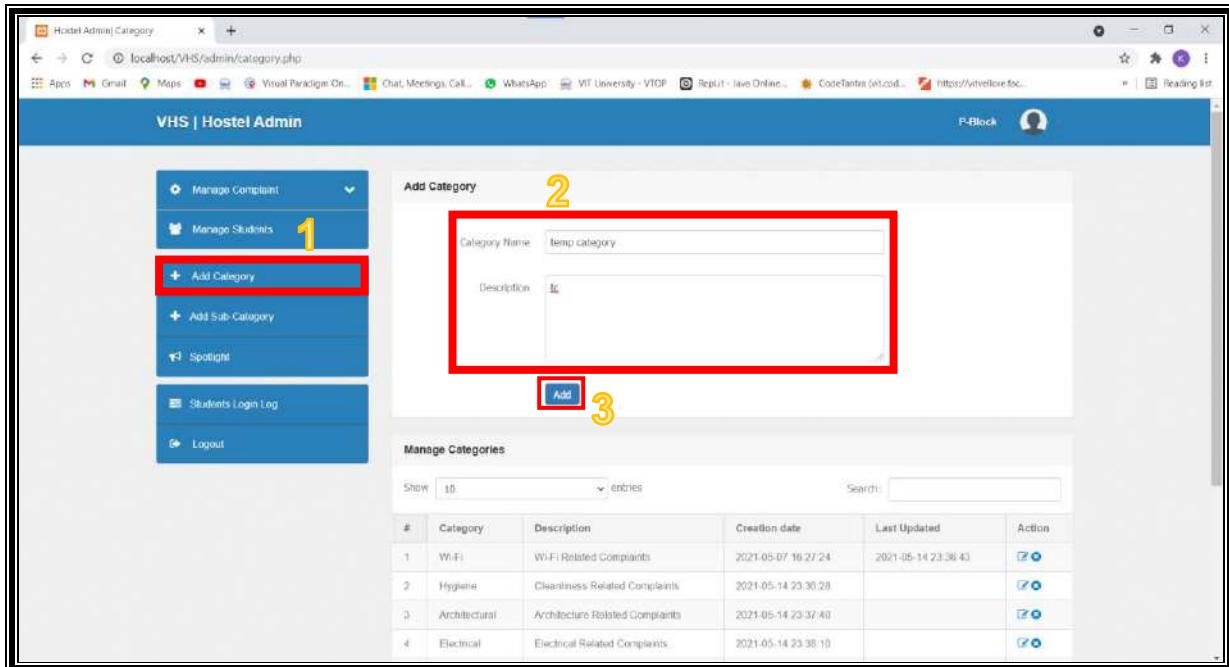
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.20.	Hostel Admin Add Category Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Add Category' in his/her Home Page and then fill the necessary details of New Complaint Category he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Complaint Category Added", And this New Complaint Category should be displayed in Hostel Complaint Registration page of Student Login.

3.3.20.1 Present state of the System:

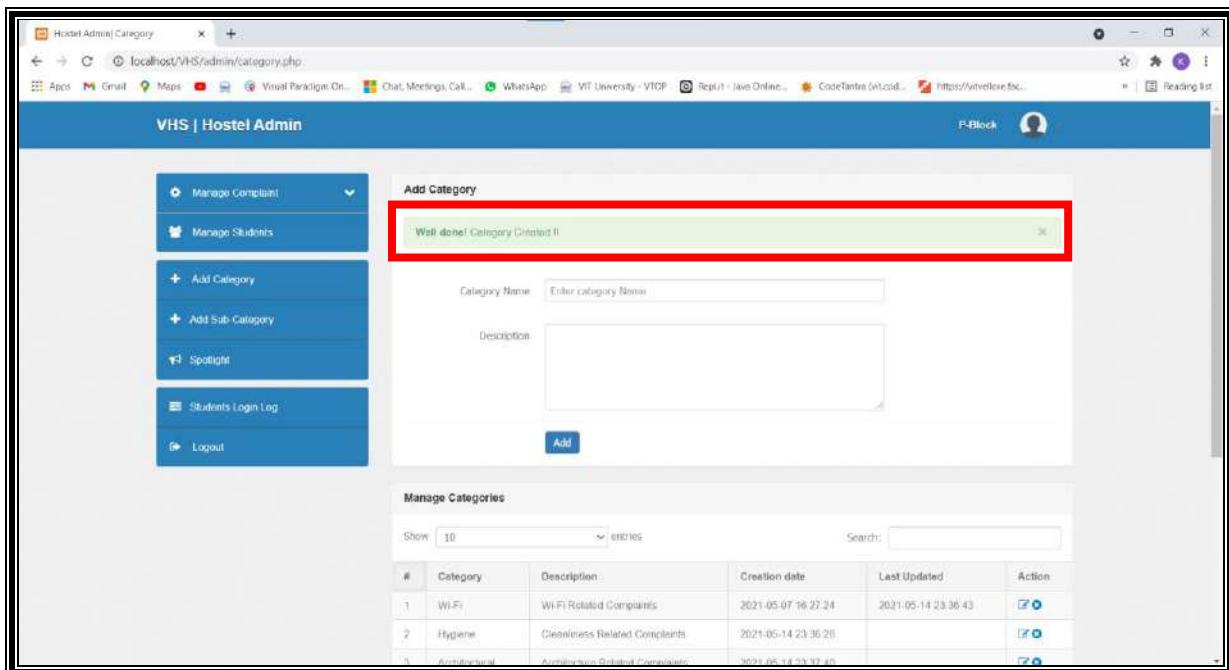


The screenshot shows a web browser window titled 'Hostel Admin Change Password'. The URL in the address bar is 'localhost/VHS/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Hostel Admin' and a user profile icon. Below the header is a sidebar menu with the following items: 'Manage Complaint' (selected), 'Manage Students', 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students Login Log', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A blue 'Submit' button is located at the bottom of the form. At the bottom left of the page, there is a copyright notice: '© 2021 VHS All rights reserved.'

3.3.20.2 Test Input(s):



3.3.20.3 Output(s):

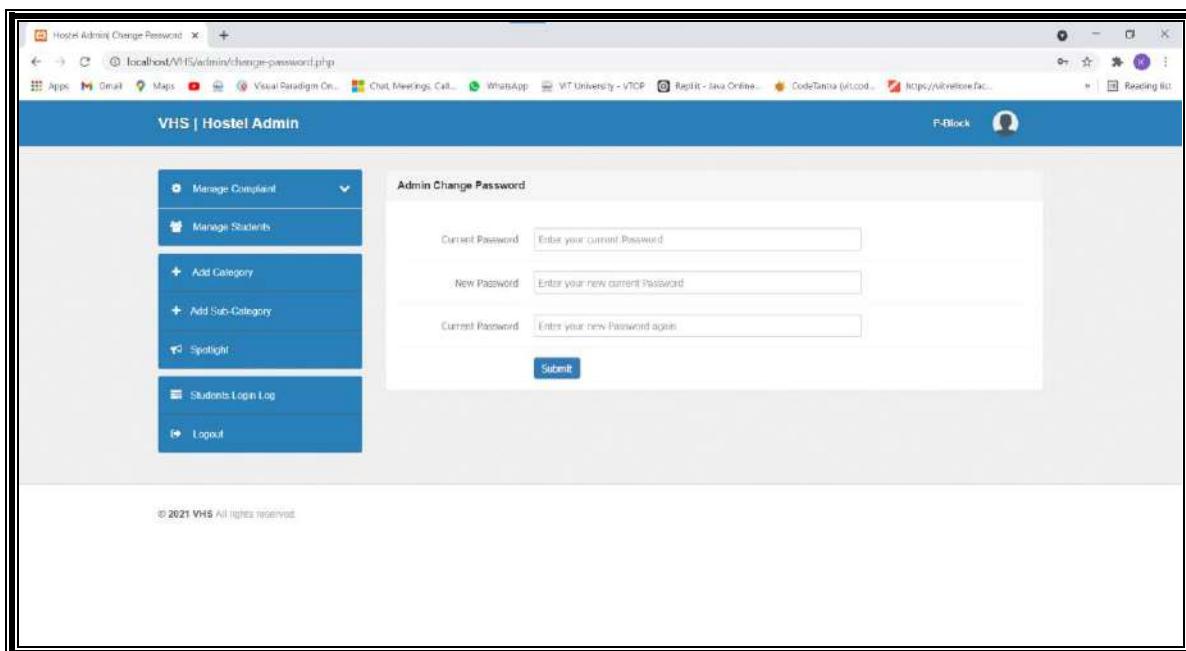


The screenshot shows a web browser window for 'VHS | Student Register Hostel Complaint' at 'localhost/VHS/users/register-complaint.php'. The user is logged in as '19BCE0186 (Student)'. On the left, there's a sidebar with links for 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Register Hostel Complaint'. It has fields for 'Category' (with a dropdown menu showing 'temp category' highlighted), 'Sub Category' (with a dropdown menu showing 'Hostel'), 'Complaint Type' (dropdown menu showing 'Select Complaint Category' with options like Wi-Fi, Hygiene, Architectural, Electrical, Health, Security, Other), 'Nature of Complaint' (dropdown menu showing 'Select Hostel Block'), 'Complaint Details (max 2000 words)', 'Complaint Related Doc (if any)' (file input field showing 'Choose File No file chosen'), and a 'Submit' button.

As the Expected Output is same as the Output we got, The Test Case-20 (Hostel Admin Add Category Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.21.	Hostel Admin Add Sub Category Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Add Sub Category' in his/her Home Page and then fill the necessary details of New Complaint Sub Category he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Complaint Sub Category Added", And this New Complaint Sub Category should be displayed in Hostel Complaint Registration page of Student Login.

3.3.21.1 Present state of the System:



3.3.21.2 Test Input(s):

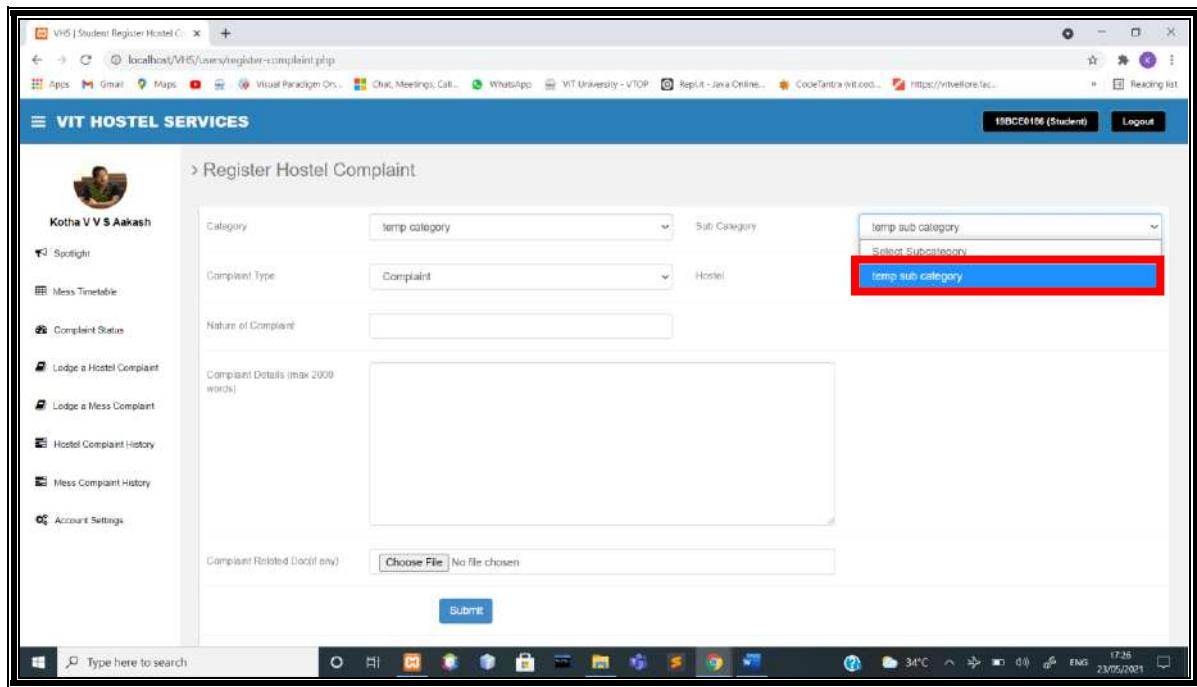
The screenshot shows the 'Add Sub-Category' form. A red box highlights the 'Add Sub-Category' button in the sidebar (labeled 1). A red box highlights the 'Select Category' dropdown and 'Sub-Category Name' input field (labeled 2). A red box highlights the 'Add' button (labeled 3).

#	Category	Sub-Category	Creation date	Last Updated	Action
1	Wi-Fi	Wi-Fi Slow	2021-05-14 23:43:20		
2	Wi-Fi	Wi-Fi Not Working	2021-05-14 23:43:48		
3	Hygiene	Room Cleaning	2021-05-14 23:44:49		
4	Hygiene	Un-Hygiene Washrooms	2021-05-14 23:45:41		
5	Architectural	Any Damage to Property	2021-05-14 23:47:26		
6	Architectural	Any Repair Required	2021-05-14 23:47:58		

3.3.21.3 Output(s):

The screenshot shows the 'Add Sub-Category' form with a green success message 'Well done! SubCategory Created !!' displayed in a red box above the input fields.

#	Category	Sub-Category	Creation date	Last Updated	Action
1	Wi-Fi	Wi-Fi Slow	2021-05-14 23:43:29		
2	Wi-Fi	Wi-Fi Not Working	2021-05-14 23:43:48		
3	Hygiene	Room Cleaning	2021-05-14 23:44:49		
4	Hygiene	Un-Hygiene Washrooms	2021-05-14 23:45:41		
5	Architectural	Any Damage to Property	2021-05-14 23:47:26		
6	Architectural	Any Repair Required	2021-05-14 23:47:58		



The screenshot shows a web browser window for 'VIT HOSTEL SERVICES'. The title bar says 'VHS | Student Register Hostel Complaints' and the address bar shows 'localhost/VHS/users/register-complaint.php'. The main content area is titled 'Register Hostel Complaint'. On the left, there's a sidebar with user info ('Kotha VVS Akash') and links like 'Spotlight', 'Mess Timetable', 'Complaint Status', etc. The main form has fields for 'Category' (dropdown: 'temp category'), 'Sub Category' (dropdown: 'Hostel'), 'temp sub category' (dropdown: 'Select Subcategory' is highlighted in red), 'Complaint Type' (dropdown: 'Complaint'), 'Nature of Complaint' (text area), 'Complaint Details (max 2000 chars)' (text area), 'Complaint Related (locif any)' (file input: 'Choose File' - 'No file chosen'), and a 'Submit' button. The status bar at the bottom shows system info: 'Type here to search', taskbar icons, '34°C', '17:25 23/05/2021', and battery level.

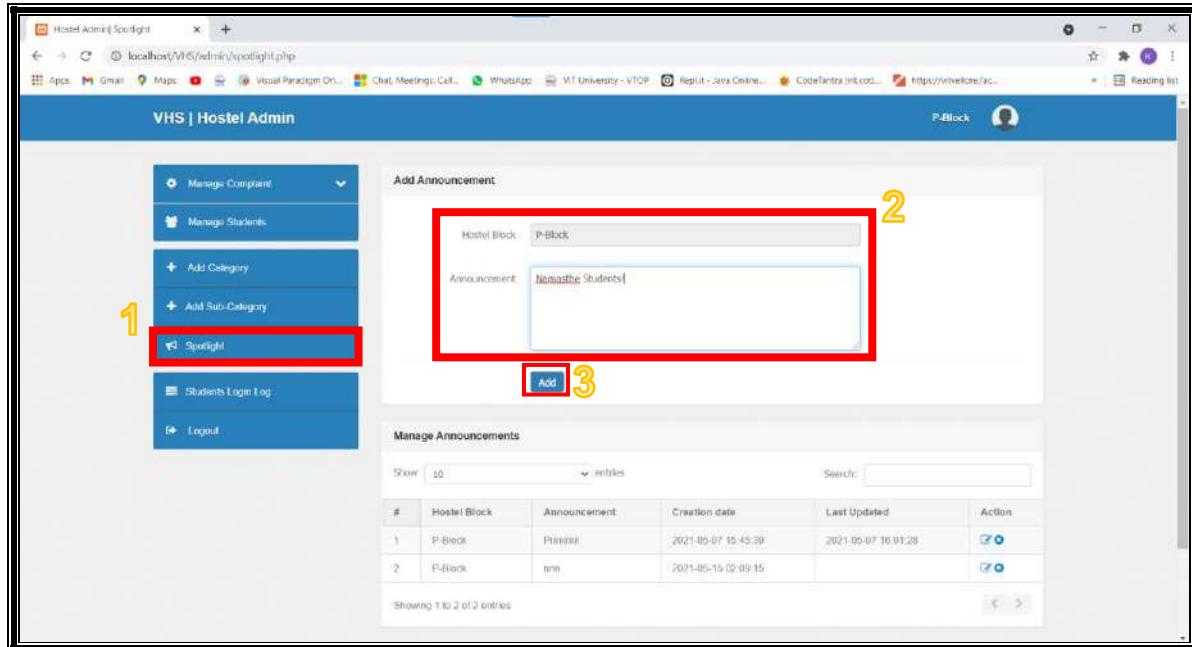
As the Expected Output is same as the Output we got, The Test Case-21 (Hostel Admin Add Sub Category Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.22.	Hostel Admin Spotlight Test	Hostel Admin 'Home' Page	Hostel Admin should be logged in.	Hostel Admin should click the 'Spotlight' in his/her Home Page and then fill the necessary details of New Announcement he/she wants to Add to Spotlight, and then click on 'Add' button.	The System should display msg- "Successfully Announcement Added", And this New Announcement should be displayed in Spotlight of Student (Who belong to this particular Hostel Block) Login.

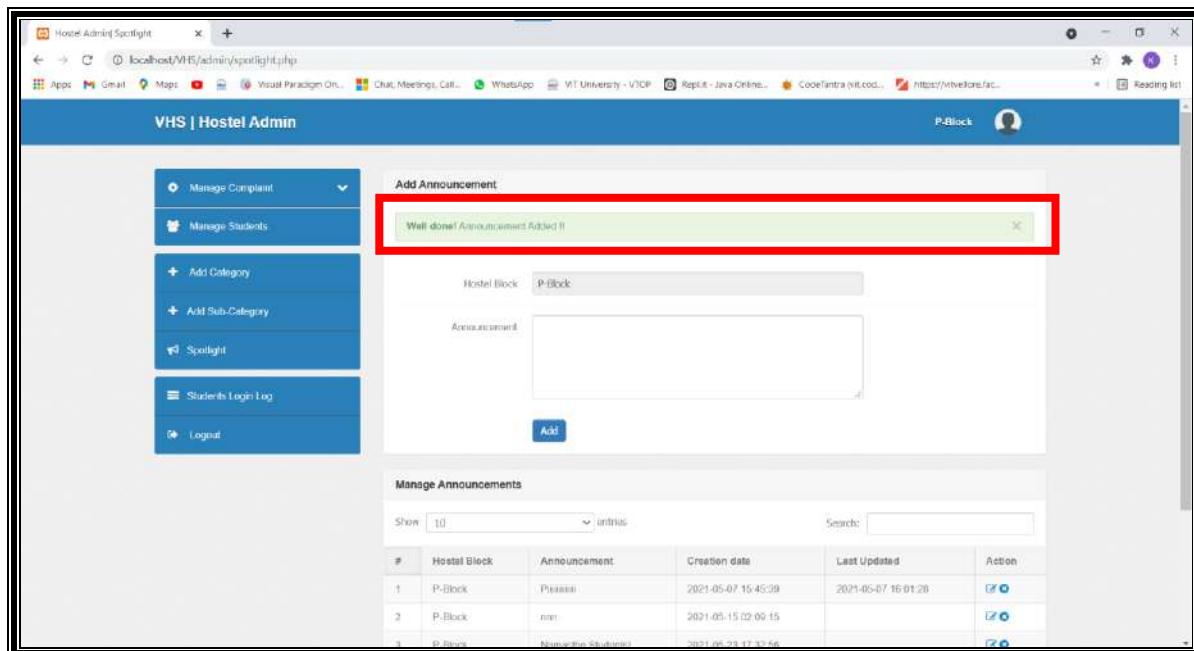
3.3.22.1 Present state of the System:

The screenshot shows a web browser window titled 'Hostel Admin Change Password'. The URL in the address bar is 'localhost/VHS/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Hostel Admin' and a user profile icon. Below the header is a navigation menu with the following items: 'Manage Complaint' (selected), 'Manage Students', 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students Login Log', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A blue 'Submit' button is located below the confirm password field. At the bottom left of the page, there is a small copyright notice: '© 2021 VHS All rights reserved.'

3.3.22.2 Test Input(s):



3.3.22.3 Output(s):



The screenshot shows a web browser window titled 'VHS | Spotlight' with the URL 'localhost/VHS/users/spotlight.php'. The page header includes the 'VIT HOSTEL SERVICES' logo, a user profile for 'Kotha V V S Akash', and navigation links like 'Logout'. The main content area is titled 'Spotlight' and displays a table of announcements:

Announcement By	Announcement	Announcement Date
P-Block	Passini	2021-05-07 15:45:39
P-Mess	Announcement 2	2021-05-09 19:31:23
P-Block	rrr	2021-05-15 02:00:15
P-Mess	Hi Students!	2021-05-22 16:31:11
P-Block	Nominee Students!	2021-05-23 17:32:50

At the bottom of the table, there is a footer note: '2021 - 19BCE0156 19BC0141 19BCE0314 19BCE0316'.

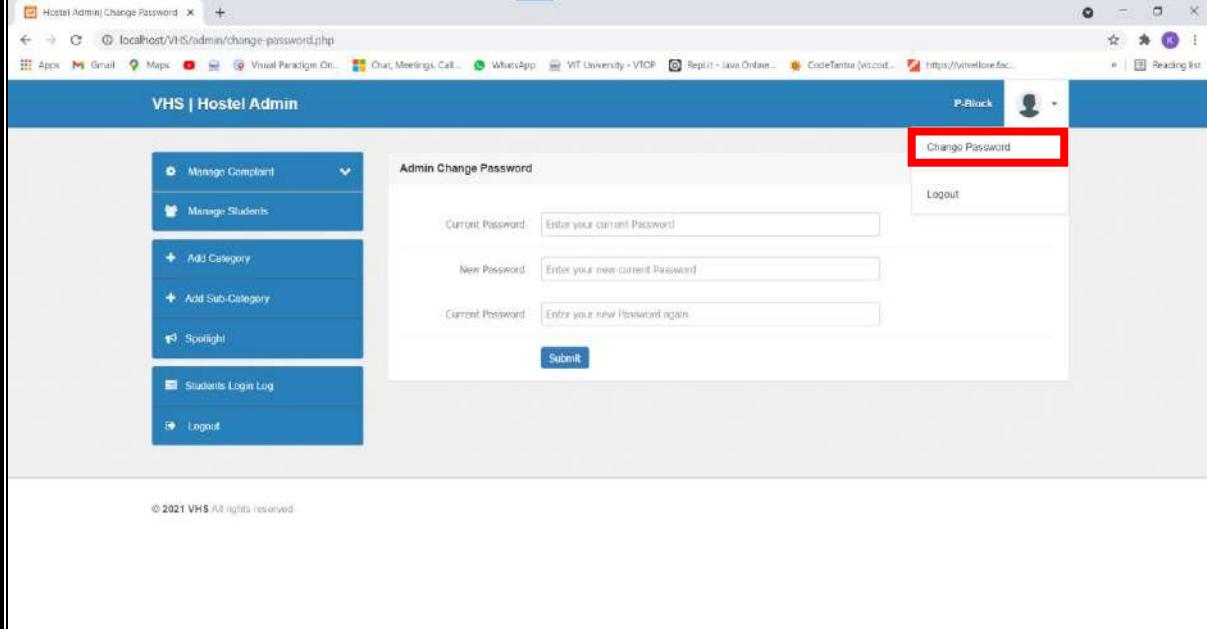
As the Expected Output is same as the Output we got, The Test Case-22 (Hostel Admin Spotlight Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.23.	Hostel Admin Change Password Test	Hostel Admin 'Home' Page	Hostel Admin should be already logged in.	Hostel Admin should click the 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same Hostel Admin login, he/she should use the New Password to get to his/her Home Page.

3.3.23.1 Present state of the System:

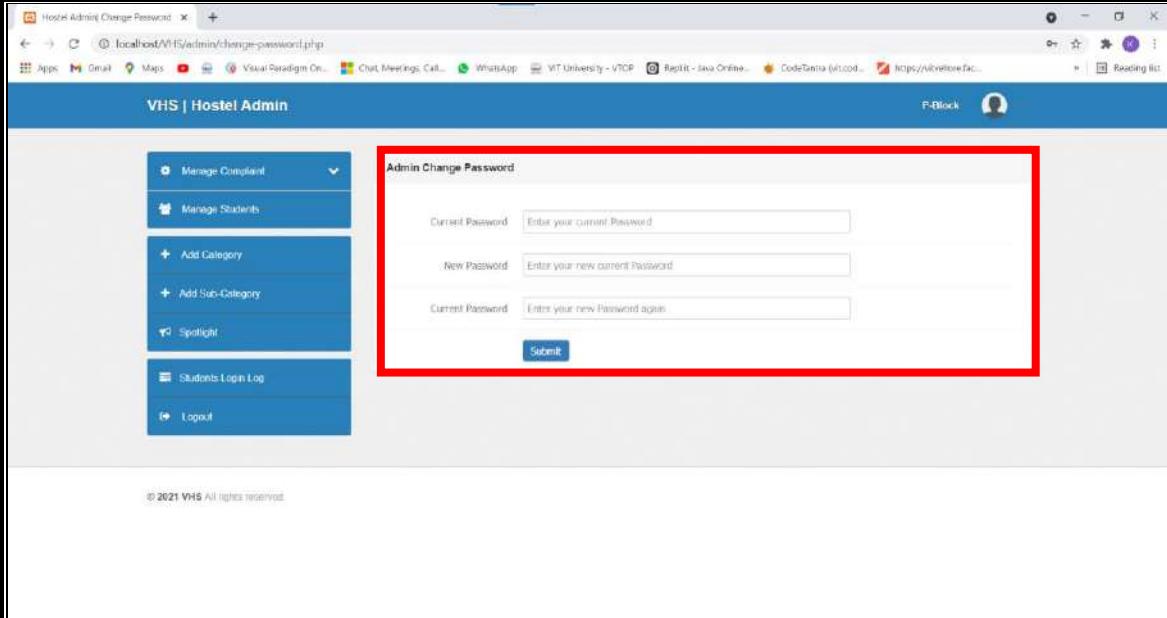
The screenshot shows a web browser window titled 'Hostel Admin Change Password'. The URL is 'localhost/VHS/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Hostel Admin'. On the left, there is a sidebar menu with the following options: 'Manage Complaint' (selected), 'Manage Students', 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students Login Log', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password', 'New Password', and 'Confirm Password', each with a placeholder 'Enter your current Password...'. Below these fields is a 'Submit' button. At the bottom of the page, there is a copyright notice: '© 2021 VHS All rights reserved.'

3.3.23.2 Test Input(s):



The screenshot shows a web browser window titled "Hostel Admin| Change Password". The URL is "localhost/VHS/admin/change-password.php". The page has a blue header bar with the text "VHS | Hostel Admin". On the left, there is a sidebar with several menu items: "Manage Complaint", "Manage Students" (which is currently selected), "Add Category", "Add Sub-Category", "Spotlight", "Students Login Log", and "Logout". The main content area is titled "Admin Change Password" and contains three input fields: "Current Password" (placeholder: "Enter your current Password"), "New Password" (placeholder: "Enter your new current Password"), and "Confirm Password" (placeholder: "Enter your new Password again"). Below these fields is a "Submit" button. A red box highlights the "Change Password" button at the top right of the form.

3.3.23.3 Output(s):

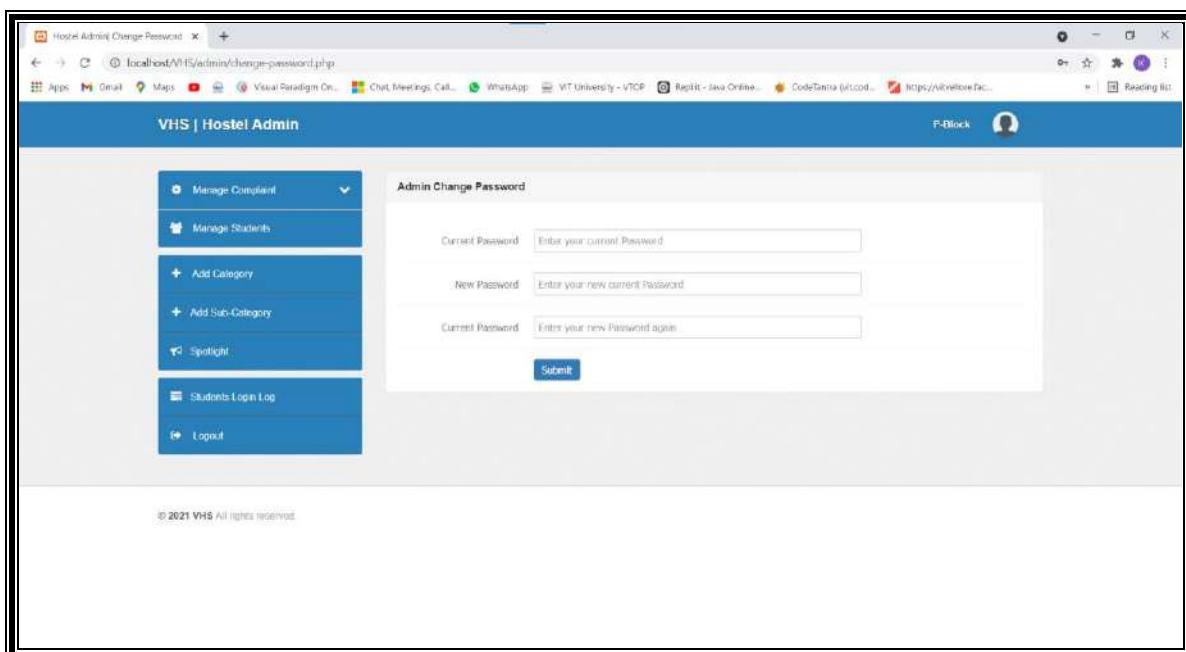


The screenshot shows the same "Hostel Admin| Change Password" page as the previous one. The URL is "localhost/VHS/admin/change-password.php". The sidebar and main content area are identical to the first screenshot. A large red box surrounds the entire "Admin Change Password" form area, which includes the title and all three input fields.

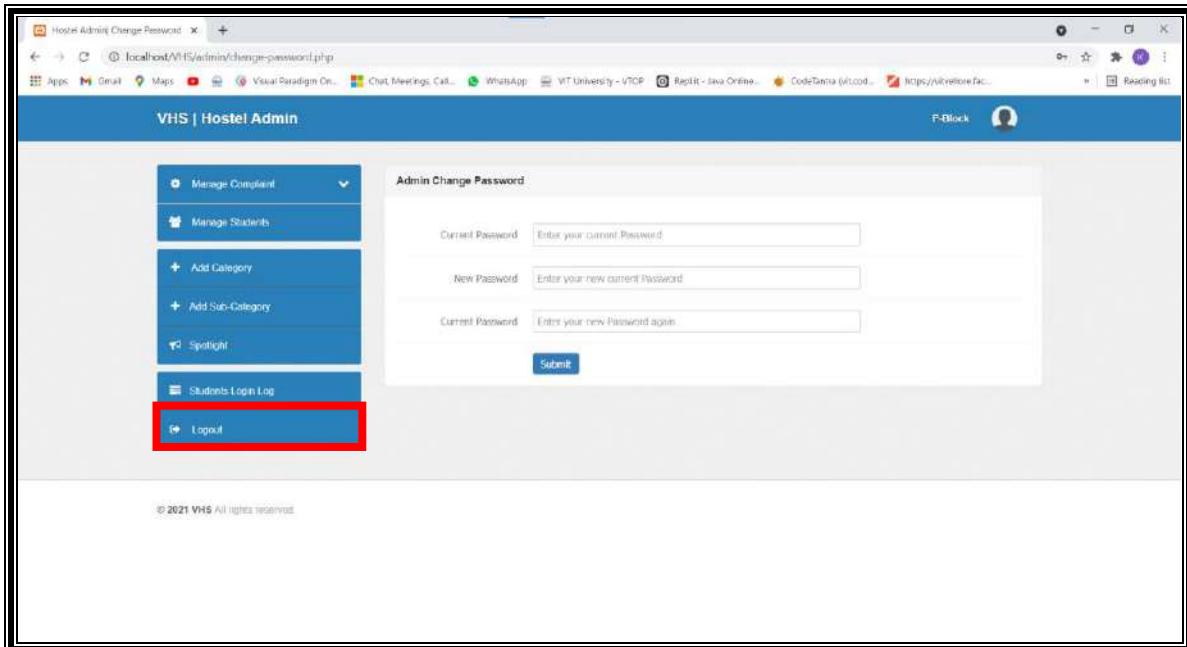
As the Expected Output is same as the Output we got, The Test Case-23 (Hostel Admin Change Password Test) is **Passed!**

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.24.	Hostel Admin Logout Test	Hostel Admin 'Home' Page	Hostel Admin should be already logged in.	Hostel Admin should click the 'Logout Option' in his/her Home Page.	The System should be directed to Hostel Admin Login page and a msg- "Successfully Logged out" will be displayed.

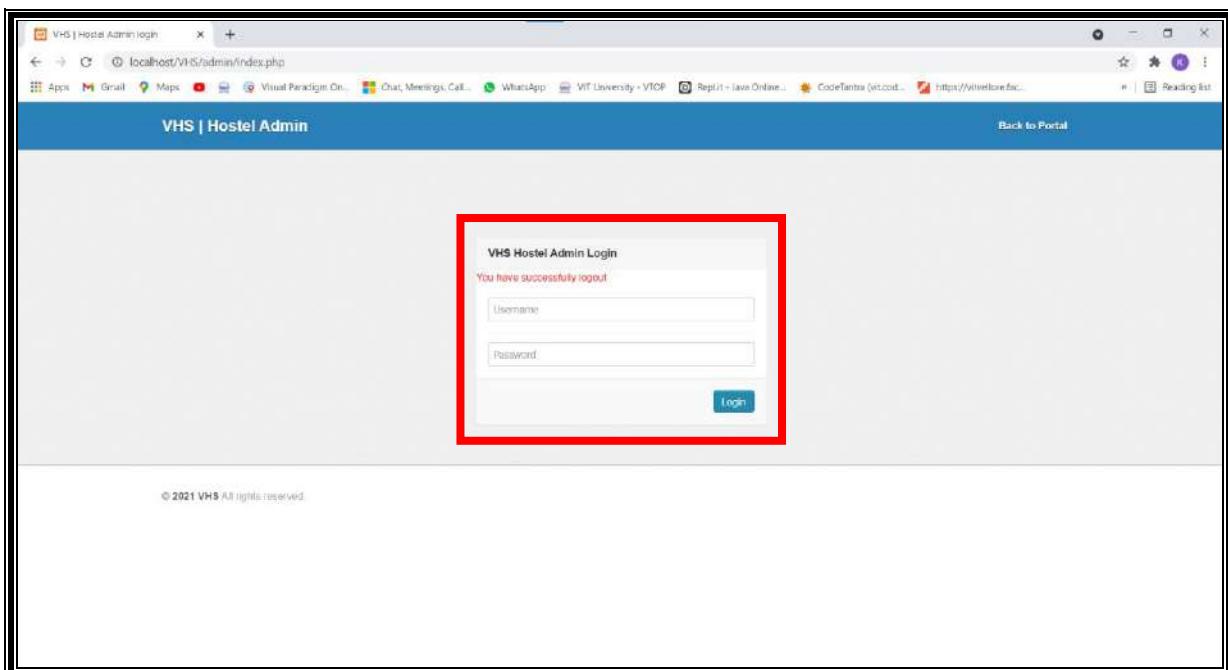
3.3.24.1 Present state of the System:



3.3.24.2 Test Input(s):



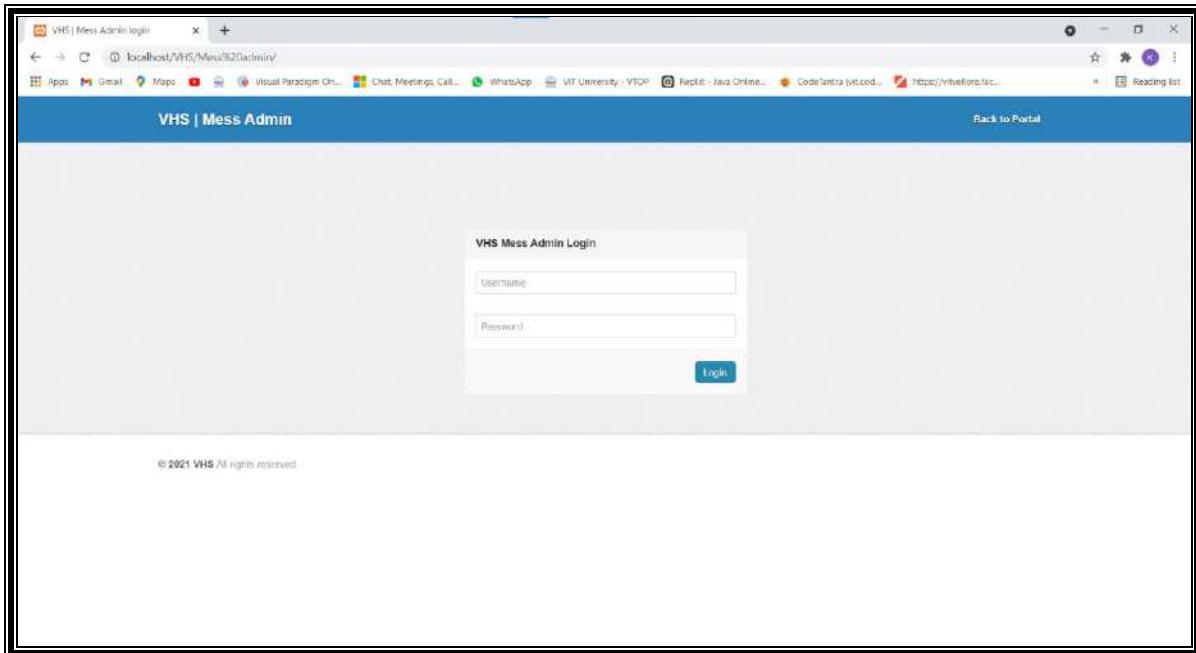
3.3.24.3 Output(s):



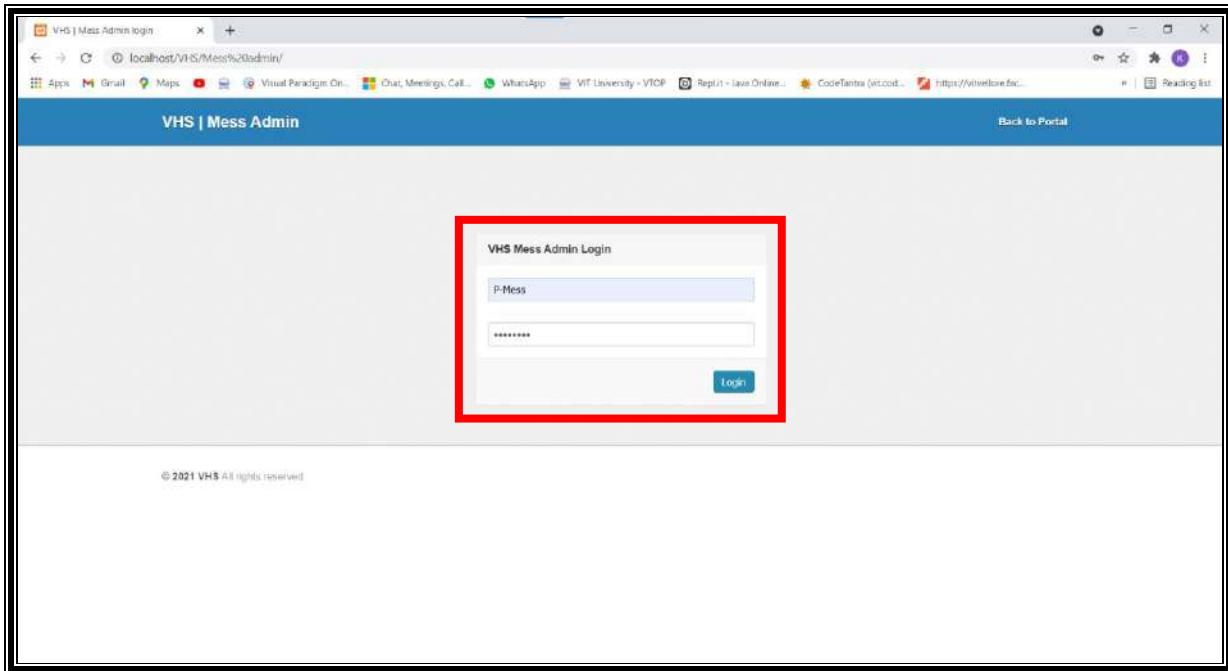
As the Expected Output is same as the Output we got, The Test Case-24 (Hostel Admin Logout Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.25.	Mess Admin Login Test	Mess Admin 'Login' Page	Mess Admin should already have a registered account.	Enter his/her valid set of Username and Password, then click on 'Login' Button.	The System should be directed to Mess Admin Home page of that Hostel Block.

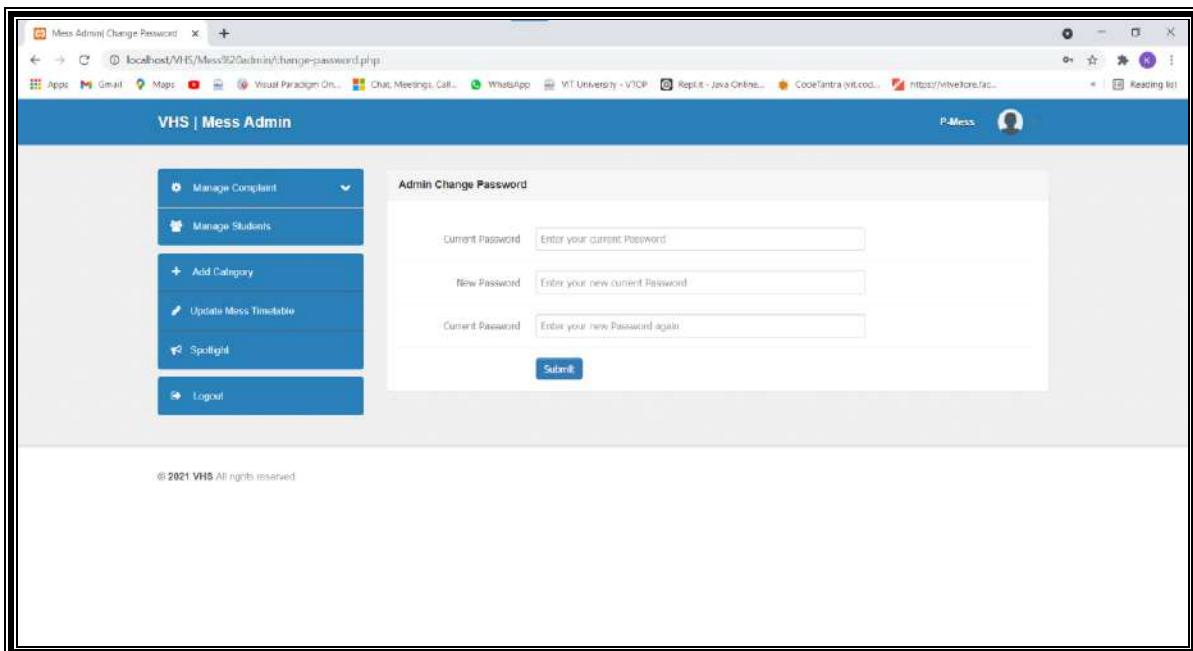
3.3.25.1 Present state of the System:



3.3.25.2 Test Input(s):



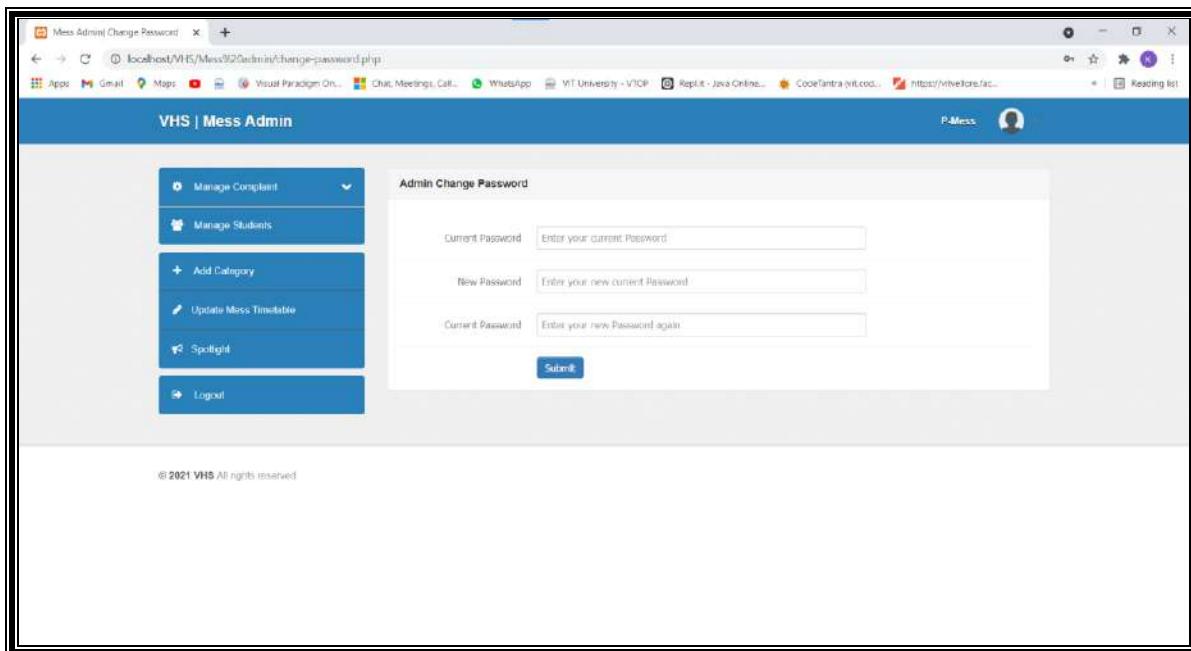
3.3.25.3 Output(s):



As the Expected Output is same as the Output we got, The Test Case-25 (Mess Admin Login Test) is Passed!

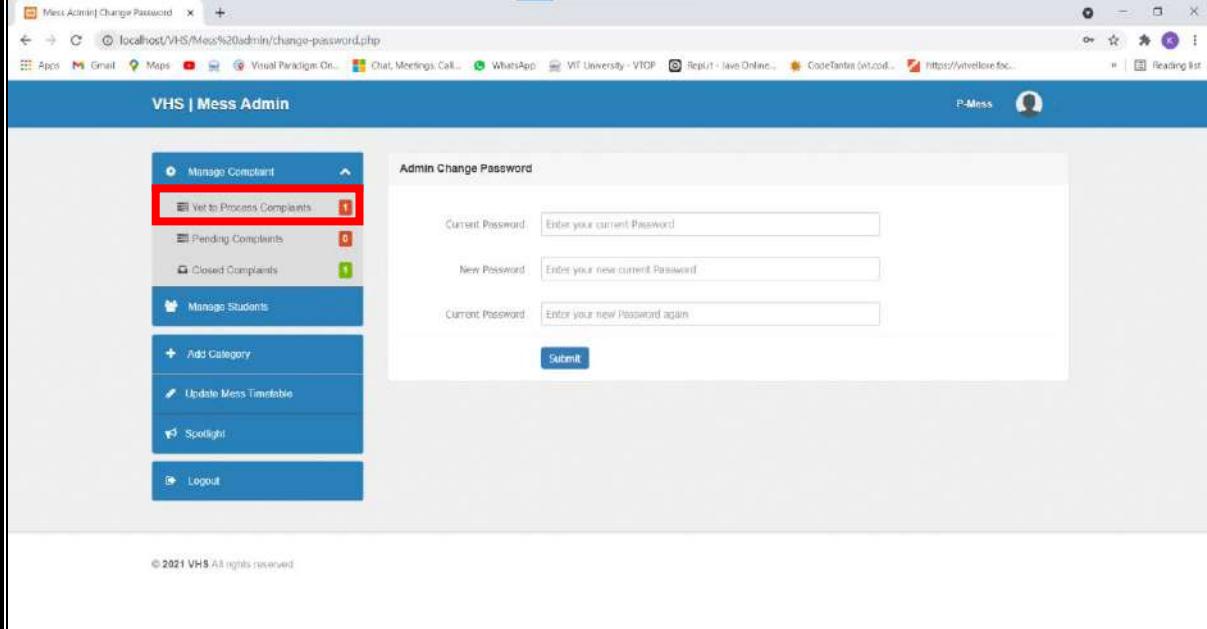
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.26.	Mess Admin Yet to Process Complaints Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Complaints Option' and then 'Yet to Process Complaints Option' in his/her Home Page.	The System should be directed to Mess Admin Yet to Process Complaints page, where the list of Yet to Process Complaints of that particular Mess Block will be displayed in a tabular format.

3.3.26.1 Present state of the System:



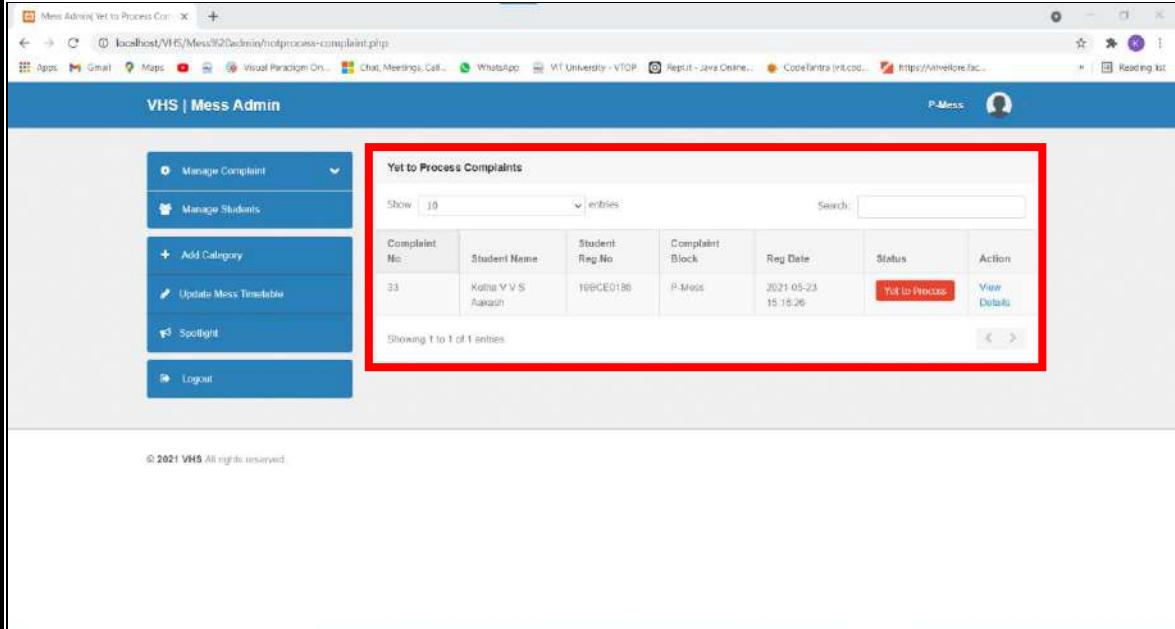
The screenshot shows a web browser window titled 'Mess Admin| Change Password'. The URL in the address bar is 'localhost/VHS/Mess32/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Mess Admin' and a user profile icon. Below the header is a sidebar menu with the following options: 'Manage Complaint', 'Manage Students', 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A 'Submit' button is located at the bottom of the form. At the bottom left of the page, there is a small copyright notice: '© 2021 VHS All rights reserved'.

3.3.26.2 Test Input(s):



Screenshot of the VHS Mess Admin Change Password page. The URL is localhost/VHS/Mess%20admin/change-password.php. The sidebar menu includes 'Manage Complaint' (with 'Yet to Process Complaints' highlighted), 'Manage Students', 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Admin Change Password' with fields for 'Current Password', 'New Password', and 'Confirm Password', each with an 'Enter your current password' placeholder. A 'Submit' button is at the bottom.

3.3.26.3 Output(s):



Screenshot of the VHS Mess Admin Yet to Process Complaints page. The URL is localhost/VHS/Mess%20admin/notprocess-complaint.php. The sidebar menu is identical to the previous screenshot. The main content area shows a table titled 'Yet to Process Complaints' with one entry:

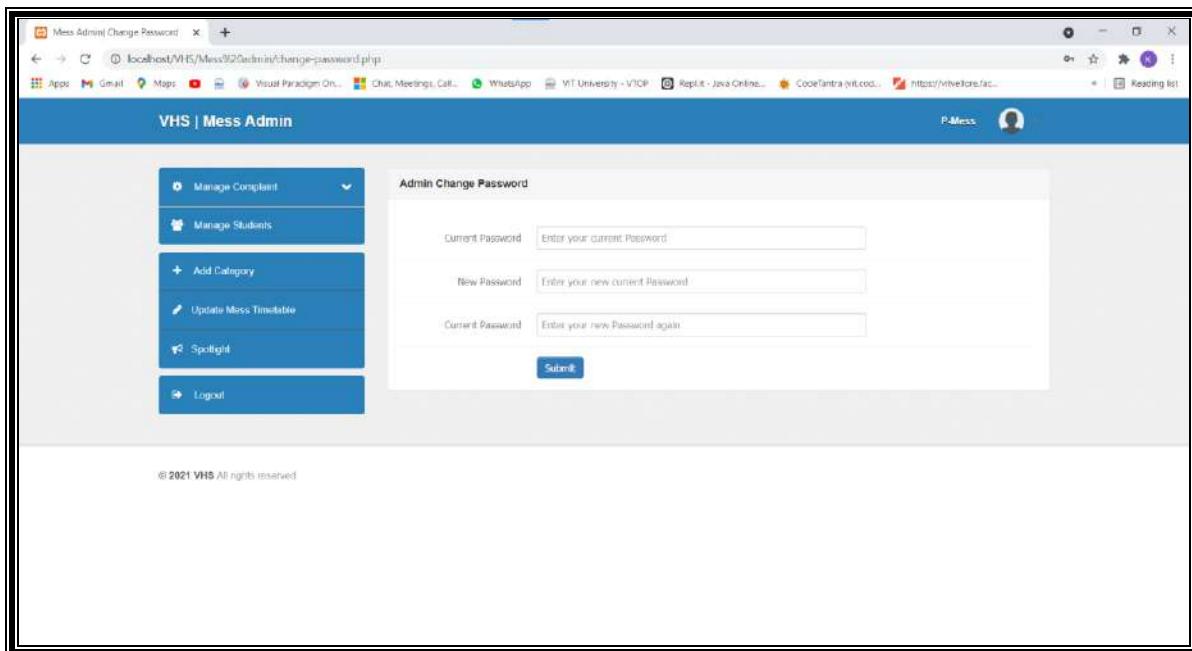
Complaint No.	Student Name	Student Reg.No	Complaint Block	Reg Date	Status	Action
33	Kotha V V S Akash	16BCE0186	P-Mess	2021-05-23 15:18:26	Yet to Process	View Details

Showing 1 to 1 of 1 entries

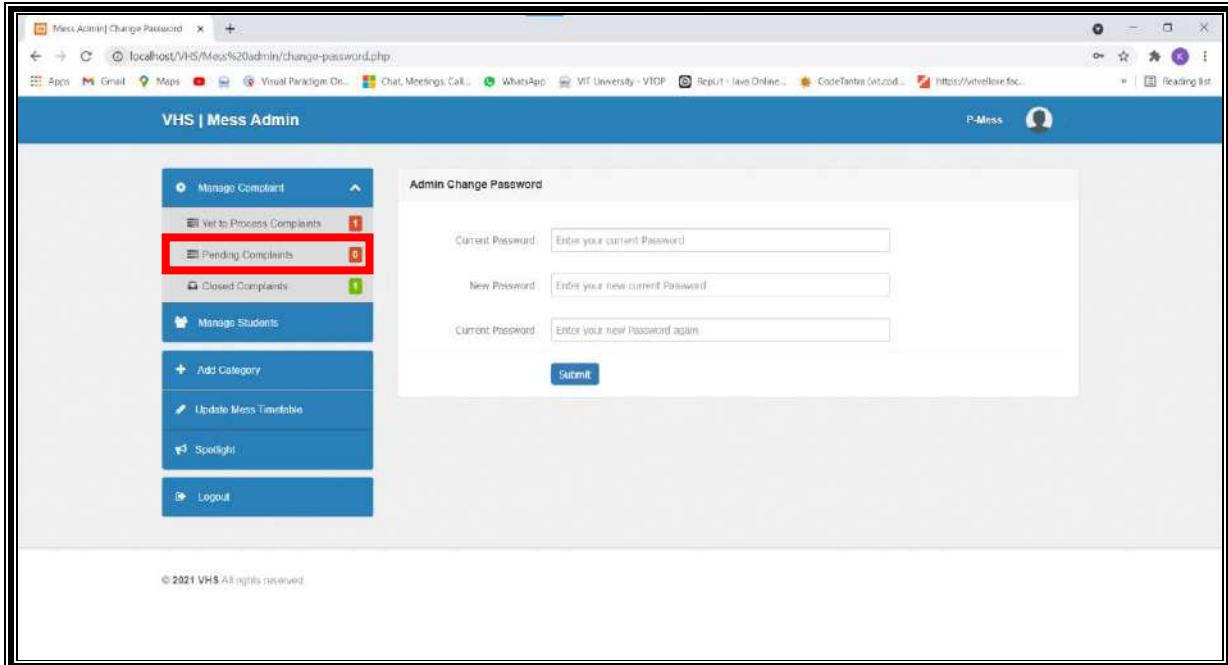
As the Expected Output is same as the Output we got, The Test Case-26 (Mess Admin Yet to Process Complaints Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.27.	Mess Admin Pending Complaints Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Complaints Option' and then 'Pending Complaints Option' in his/her Home Page.	The System should be directed to Mess Admin Pending Complaints page, where the list of Pending Complaints of that particular Mess Block will be displayed in a tabular format.

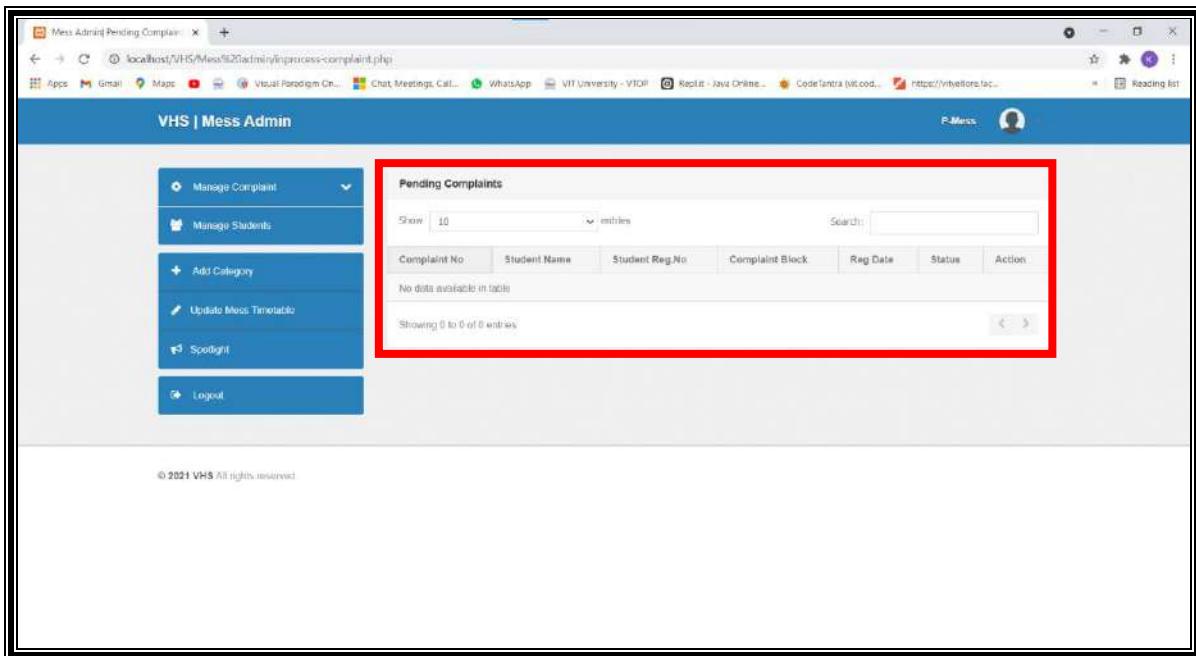
3.3.27.1 Present state of the System:



3.3.27.2 Test Input(s):



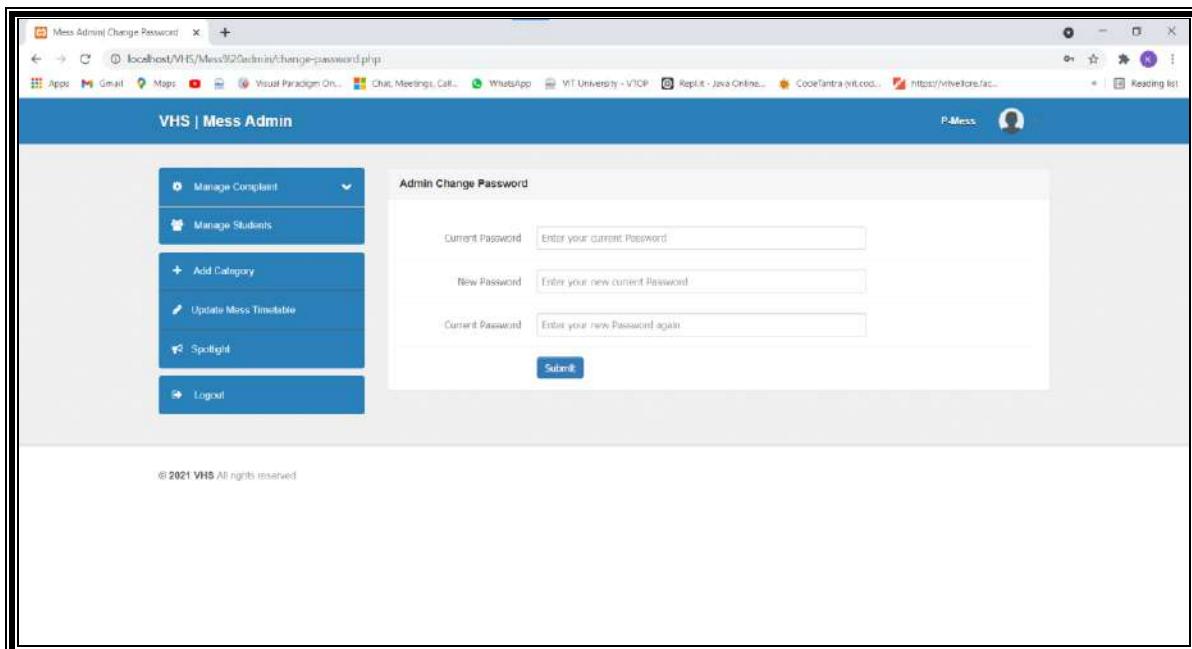
3.3.27.3 Output(s):



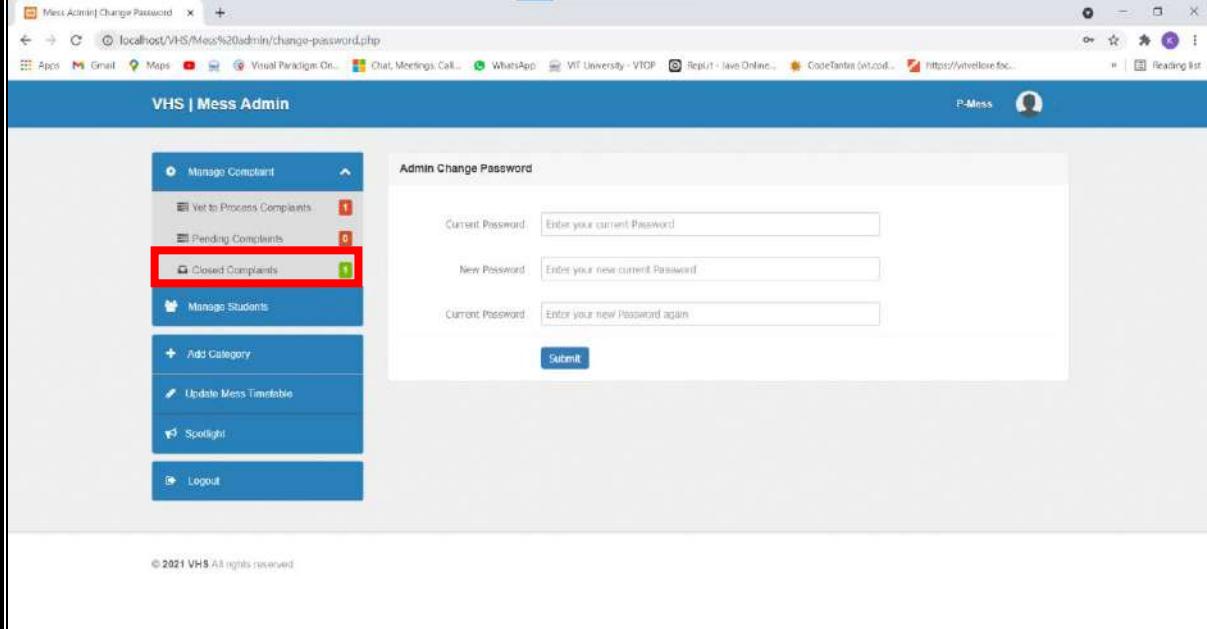
As the Expected Output is same as the Output we got, The Test Case-27 (Mess Admin Pending Complaints Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.28.	Mess Admin Closed Complaints Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Complaints Option' and then 'Closed Complaints Option' in his/her Home Page.	The System should be directed to Mess Admin Closed Complaints page, where the list of Closed Complaints of that particular Mess Block will be displayed in a tabular format.

3.3.28.1 Present state of the System:

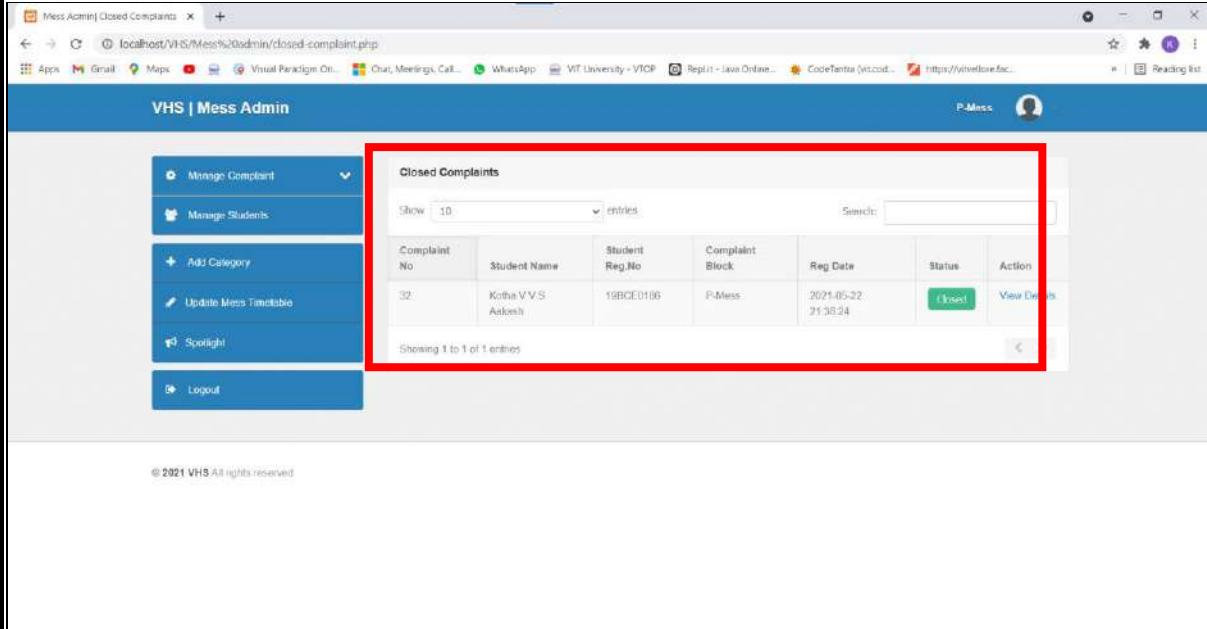


3.3.28.2 Test Input(s):



Screenshot of the VHS Mess Admin Change Password page. The sidebar on the left shows 'Manage Complaint' with 'Closed Complaints' highlighted with a red box. The main area is titled 'Admin Change Password' with fields for Current Password, New Password, and Current Password again, followed by a 'Submit' button.

3.3.28.3 Output(s):



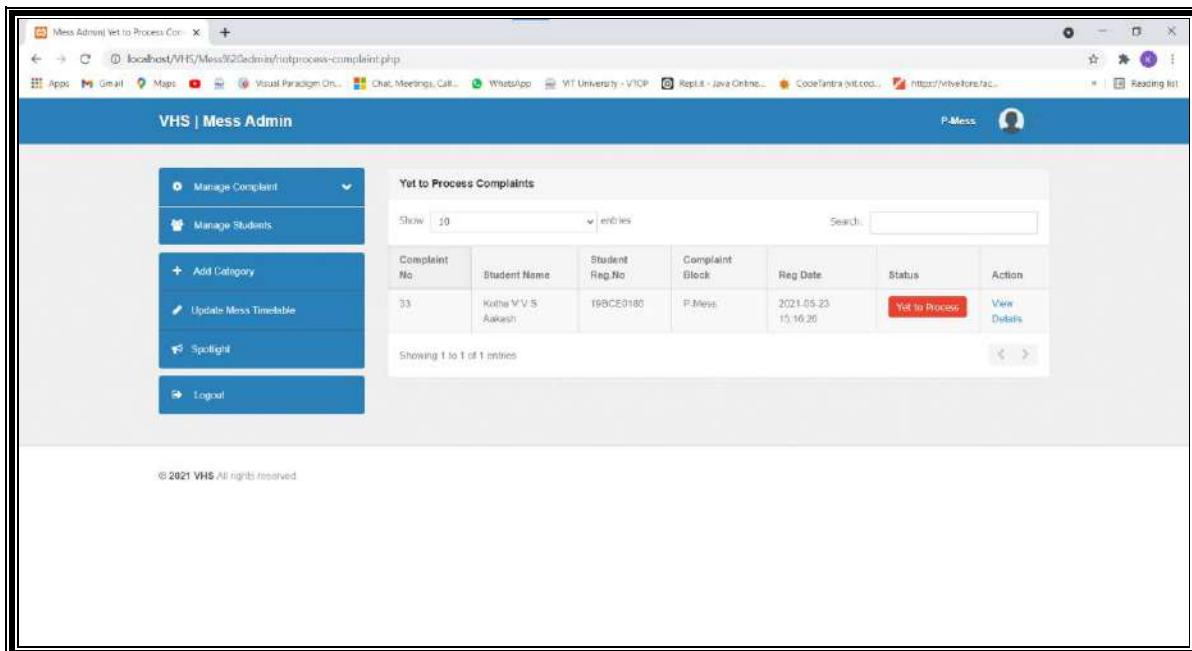
Screenshot of the VHS Mess Admin Closed Complaints page. The sidebar on the left shows 'Manage Complaint' with 'Closed Complaints' highlighted with a red box. The main area is titled 'Closed Complaints' and displays a table with one entry:

Complaint No	Student Name	Student Reg.No	Complaint Block	Reg Date	Status	Action
32	Kotha V.V.S Aakashi	19BCE0186	P-Mess	2021-05-22 21-08-24	Closed	View Details

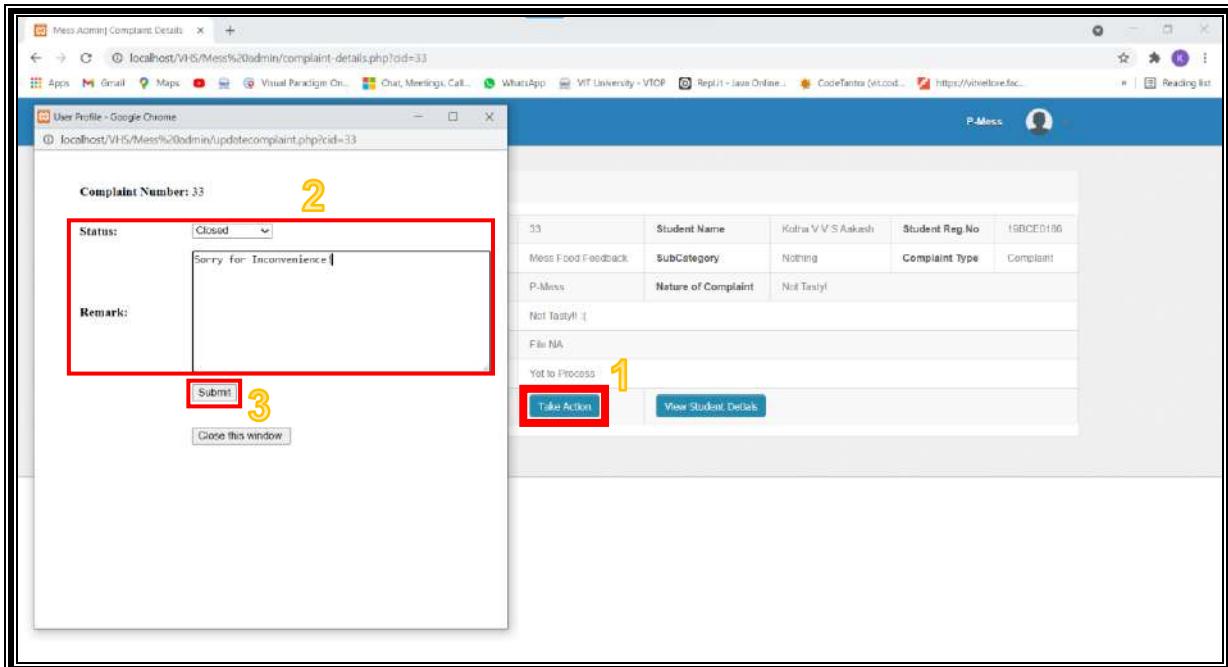
As the Expected Output is same as the Output we got, The Test Case-28 (Mess Admin Closed Complaints Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.29.	Mess Admin Remark Test	Mess Admin 'Yet to Process Complaints' Page	Mess Admin should be logged in.	Mess Admin should click the 'View Details Option of any complaint' and then 'Take Action' and fill the Remark and then click on Submit button.	The System should display msg- "Successful", this remark should be displayed in the login of that particular student who raised that particular Mess complaint.

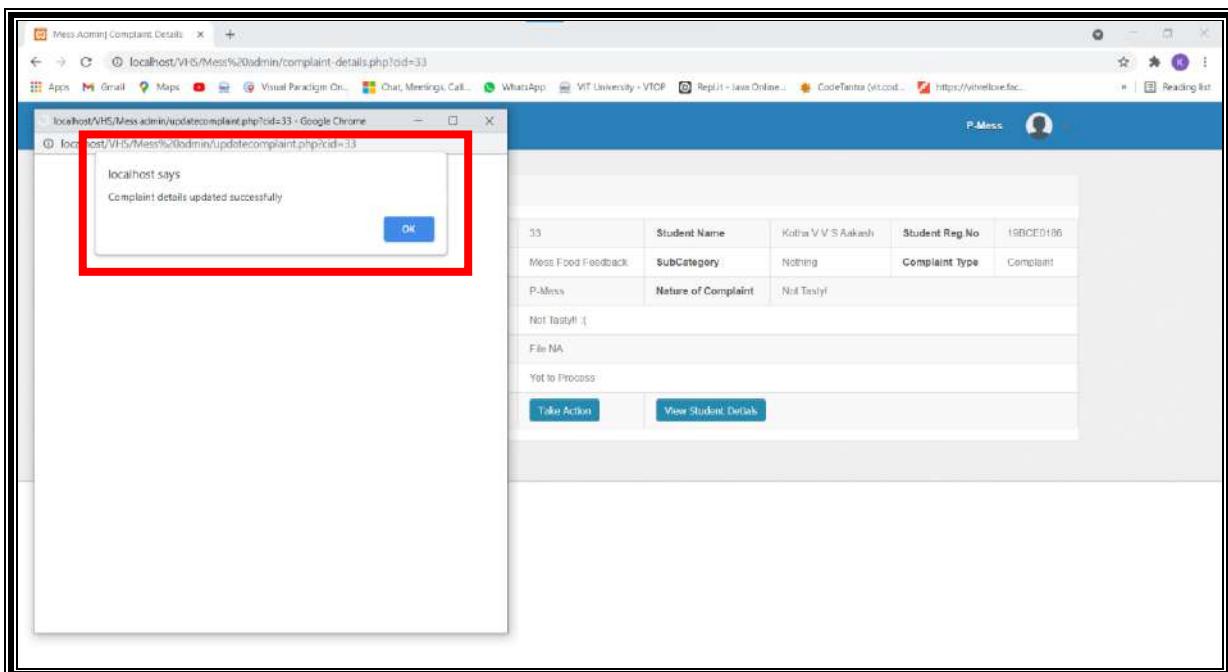
3.3.29.1 Present state of the System:



3.3.29.2 Test Input(s):



3.3.29.3 Output(s):



The screenshot shows a web browser window titled 'VHS | Mess Complaint Details' with the URL 'localhost/VHS/news/complaint-details1.php?cid=33'. The page is titled 'Complaint Details' and displays a single complaint record. The complaint details are as follows:

Complaint Number	33	Reg. Date	2021-05-23 15:16:26
Category	Mess Food Feedback		
Complaint Type	Complaint	State	P-Mess
Nature of Complaint	Not Tasty!	File	File NA
Complaint Details		Not Tasty!! :)	
Remark	Sorry for Inconvenience!		
Remark Date	2021-05-23 18:11:36		
Status	closed		
Final Status	closed		

A red box highlights the 'Remark' field which contains the text 'Sorry for Inconvenience!'. The status 'closed' is also highlighted in red.

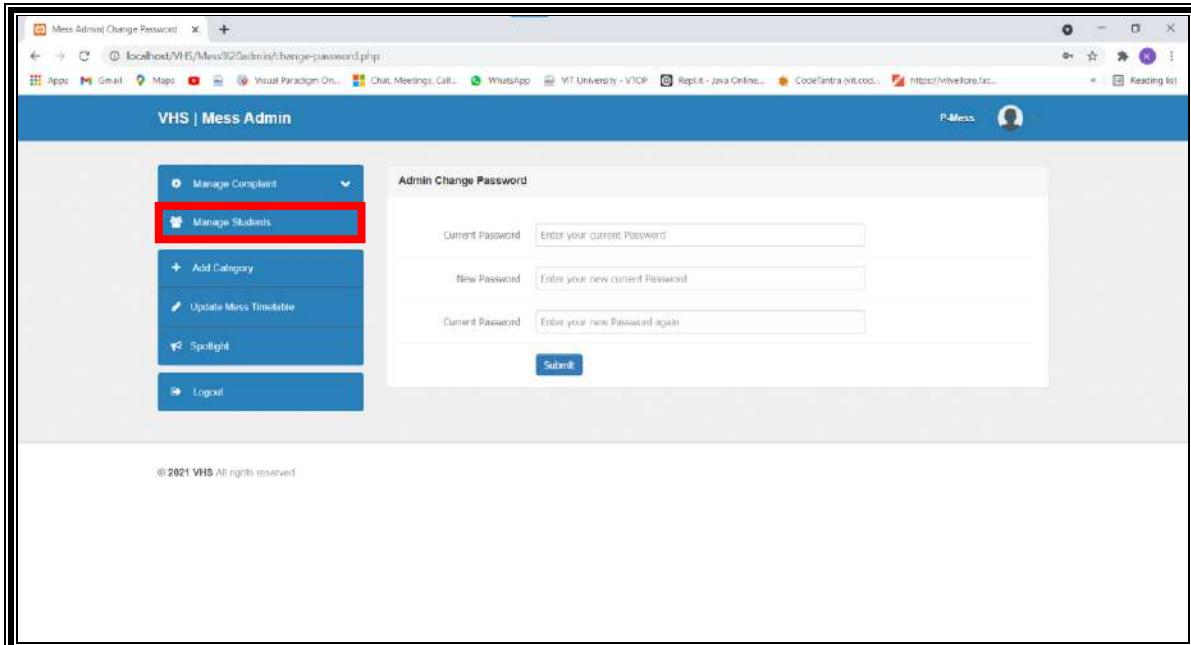
As the Expected Output is same as the Output we got, The Test Case-29 (Mess Admin Remark Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.30.	Mess Admin Manage Students Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Manage Students Option' in his/her Home Page.	The System should be directed to Mess Admin Manage Students page, where the list of all the students present in the Database will be displayed in a tabular format.

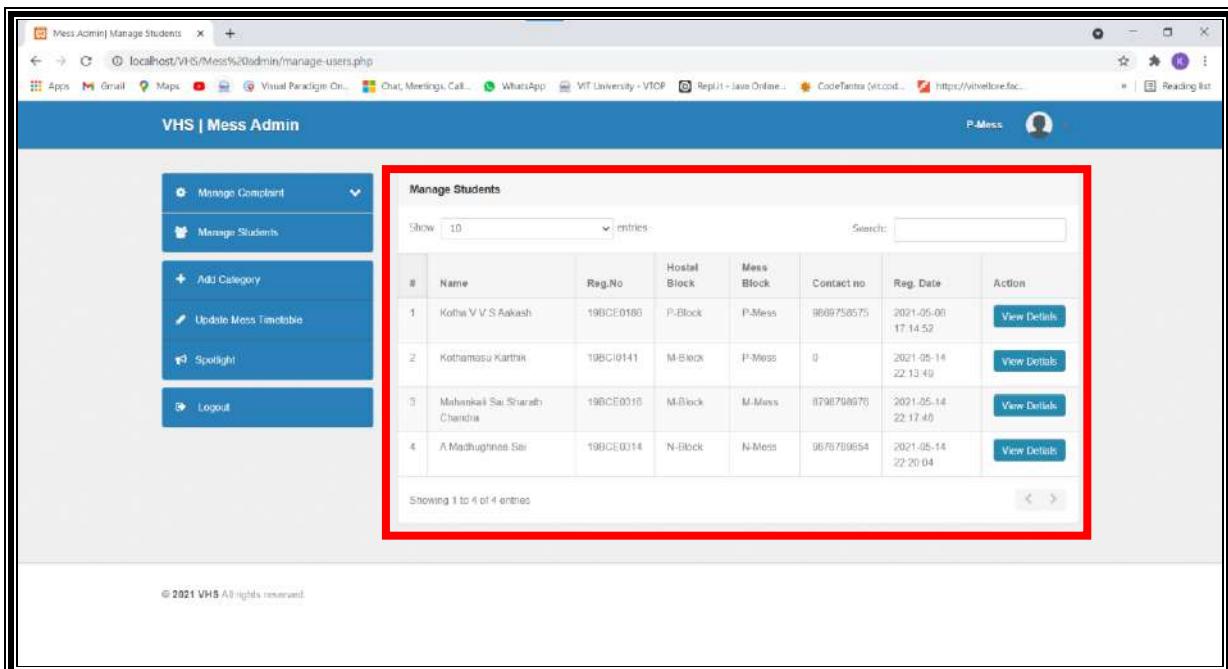
3.3.30.1 Present state of the System:

The screenshot shows a web application interface for 'VHS | Mess Admin'. The main content area is titled 'Admin Change Password'. It contains three input fields: 'Current Password', 'New Password', and 'Confirm Password', each with a placeholder text. Below these fields is a 'Submit' button. To the left of the main content, there is a sidebar with several menu items: 'Manage Complaint', 'Manage Students' (highlighted in blue), 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The URL in the browser's address bar is 'localhost/VHS/Mess32/admin/change-password.php'.

3.3.30.2 Test Input(s):



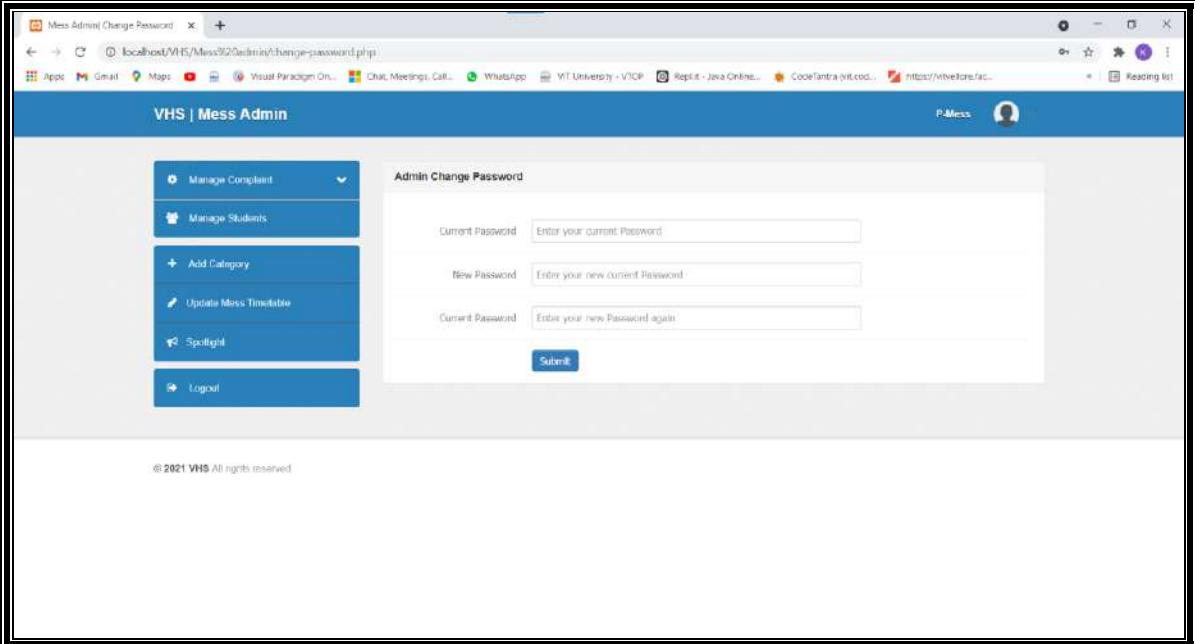
3.3.30.3 Output(s):



As the Expected Output is same as the Output we got, The Test Case-30 (Mess Admin Manage Students Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.31.	Mess Admin Add Category Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Add Category' in his/her Home Page and then fill the necessary details of New Complaint Category he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Complaint Category Added", And this New Complaint Category should be displayed in Mess Complaint Registration page of Student Login.

3.3.31.1 Present state of the System:



The screenshot shows a web browser window titled 'Mess Admin|Change Password'. The URL in the address bar is 'localhost/VHS/Mess92/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Mess Admin' and a user profile icon. On the left, there is a sidebar menu with the following items: 'Manage Complaint', 'Manage Students', 'Add Category' (which is highlighted in blue), 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). Below these fields is a 'Submit' button. At the bottom of the page, there is a footer note: '© 2021 VHS All rights reserved'.

3.3.31.2 Test Input(s):

The screenshot shows the 'Add Category' form in the VHS Mess Admin interface. A red box highlights the 'Category Name' input field, which contains 'temp category'. A yellow '2' is placed above this field. Another red box highlights the 'Add' button at the bottom of the form. A yellow '3' is placed next to this button. The left sidebar has a red box around the 'Add Category' menu item, with a yellow '1' placed to its left.

Add Category

Category Name: temp category

Description:

Add

Manage Categories

#	Category	Description	Creation date	Last Updated	Action
1	Mess Cleanliness	Mess Cleanliness Related	2021-05-07 18:27:13	2021-05-14 23:59:10	
2	Mess Food Feedback	Mess Food Feedback Related	2021-05-09 20:11:58	2021-05-15 00:00:34	
3	Theft Related	Theft Related	2021-05-15 00:00:19		

Showing 1 to 3 of 3 entries

3.3.31.3 Output(s):

The screenshot shows the 'Add Category' form with a green success message box at the top stating 'Well done! Category Created !!'. The 'Category Name' input field is empty and highlighted with a red box. The 'Add' button is visible below it. The left sidebar has a red box around the 'Add Category' menu item, with a yellow '1' placed to its left. The 'Manage Categories' table shows the newly created category.

Add Category

Well done! Category Created !!

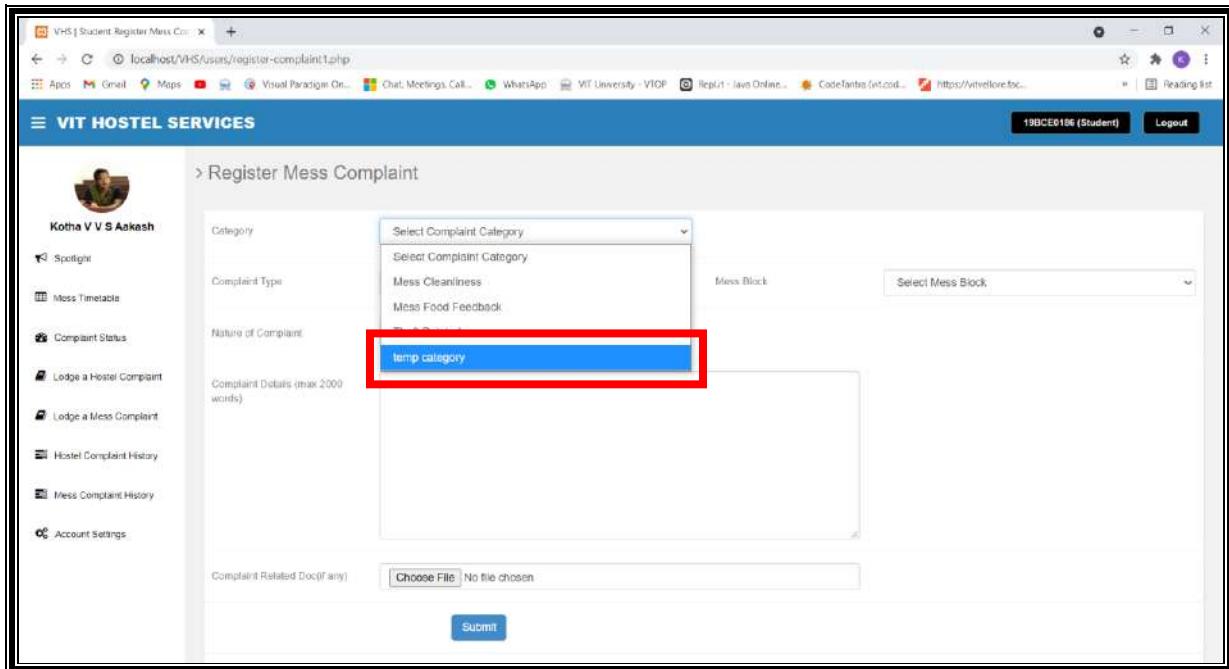
Category Name: Enter category Name

Description:

Add

Manage Categories

#	Category	Description	Creation date	Last Updated	Action
1	Mess Cleanliness	Mess Cleanliness Related	2021-05-07 18:27:13	2021-05-14 23:59:10	
2	Mess Food Feedback	Mess Food Feedback Related	2021-05-09 20:11:58	2021-05-15 00:00:34	
3	Theft Related	Theft Related	2021-05-15 00:00:19		

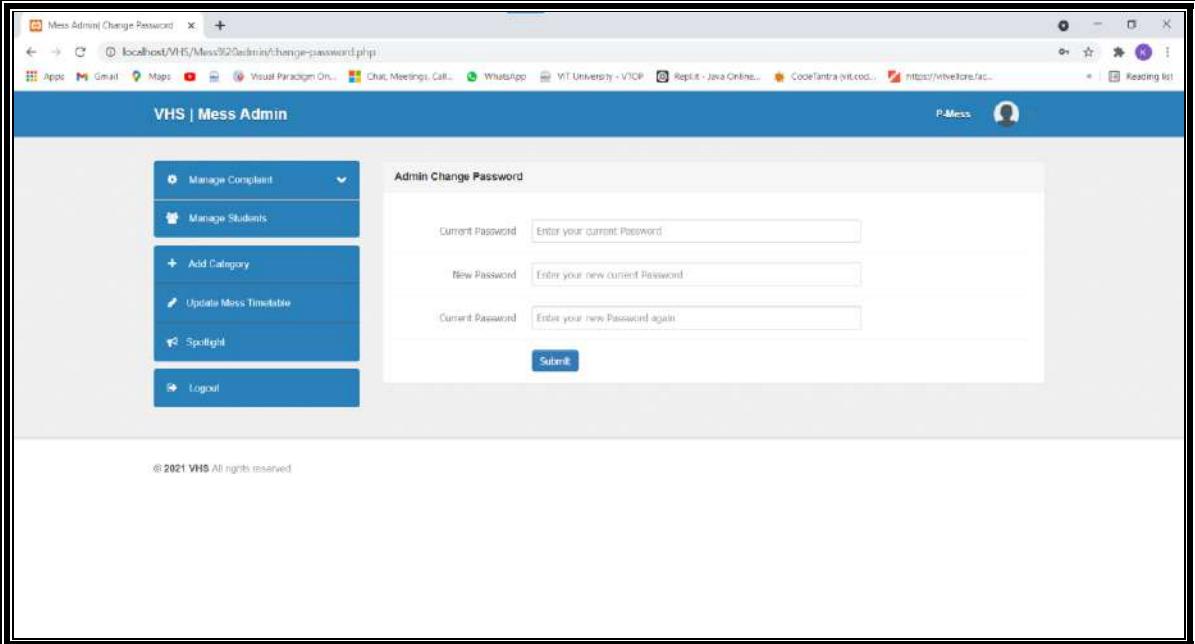


The screenshot shows a web browser window for 'VHS | Student Register Mess Complain' at 'localhost/VHS/users/register-complaint.php'. The user is identified as 'Kotha V V S Akash'. On the left, there's a sidebar with links like 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Register Mess Complaint'. It has fields for 'Category' (a dropdown menu with 'temp category' highlighted in blue and surrounded by a red box), 'Complaint Type' (dropdown menu showing 'Mess Cleanliness' and 'Mess Food Feedback'), 'Nature of Complaint' (text area), 'Complaint Details (max 2000 words)' (text area), 'Complaint Related Doc(if any)' (file upload field), and a 'Submit' button.

As the Expected Output is same as the Output we got, The Test Case-31 (Mess Admin Add Category Test) is Passed!

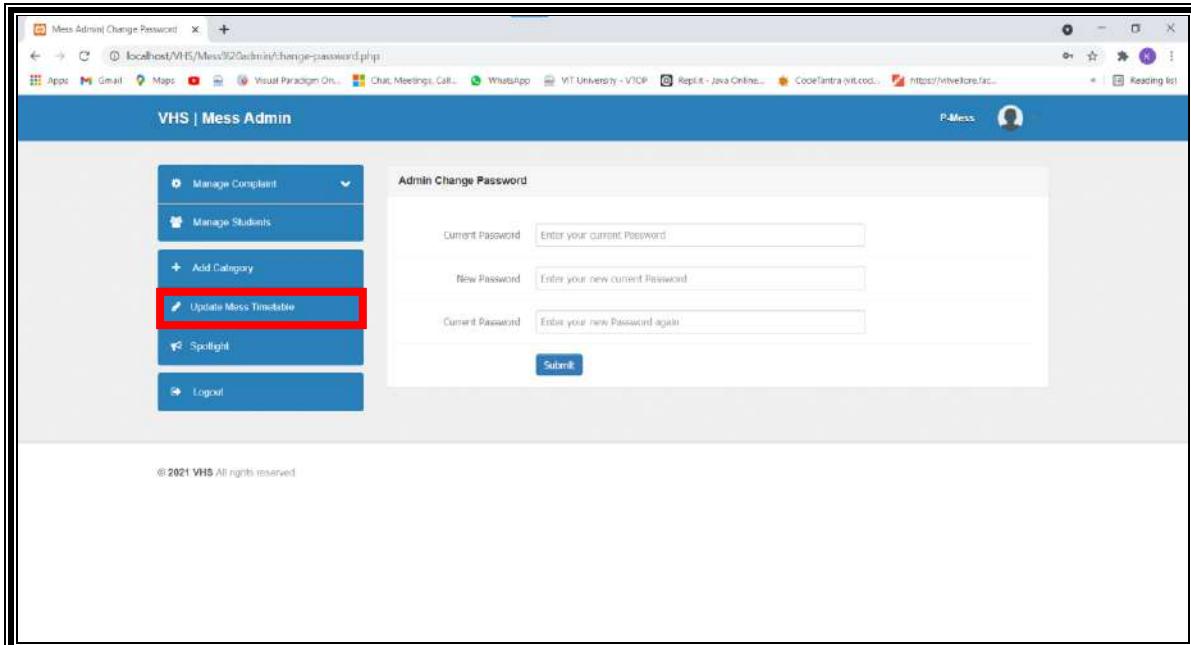
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.32.	Mess Admin Update Mess Timetable Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Update Mess Timetable' in his/her Home Page and then click on 'Modify Option' and the modify the necessary Details then click on 'Update' button.	The System should display msg- "Successfully Mess Timetable Updated", And this New Updated Mess Timetable should be displayed in Mess Timetable page of Student (Who belong to this particular Mess Block) Login.

3.3.32.1 Present state of the System:



The screenshot shows a web browser window titled 'Mess Admin|Change Password'. The URL in the address bar is 'localhost/VHS/Mess%20admin/change-password.php'. The page has a blue header bar with the text 'VHS | Mess Admin' and a user profile icon. On the left, there is a sidebar menu with the following items: 'Manage Complaint' (selected), 'Manage Students', 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). Below these fields is a 'Submit' button. At the bottom of the page, there is a footer note: '© 2021 VHS All rights reserved'.

3.3.32.2 Test Input(s):



3.3.32.3 Output(s):

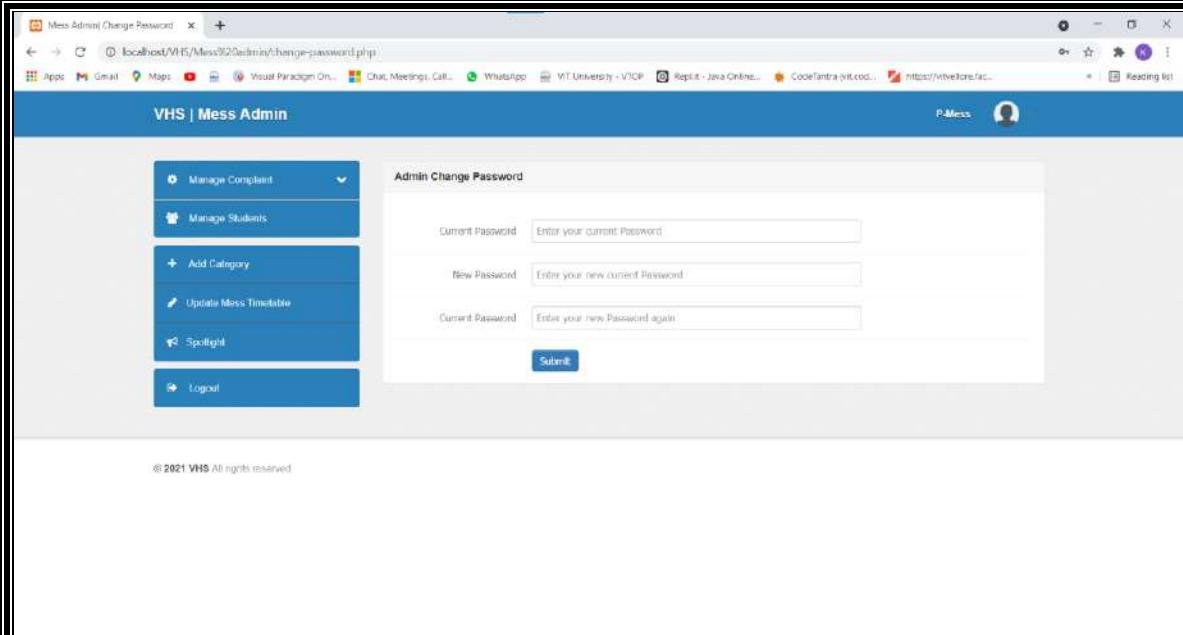
The screenshot shows a web browser window titled 'Mess Admin| Mess Timetable'. The URL is 'localhost/VHS/Mess%20admin/messtt.php'. The page has a blue header bar with the title 'VHS | Mess Admin'. The sidebar on the left is identical to the previous screenshot. The main content area is titled 'Mess Timetable' and displays a table of data. The table has columns: '#', 'Mess Block', 'Day', 'Breakfast', 'Lunch', 'Snacks', 'Dinner', 'Last Updated At', and 'Action'. There are 7 rows of data, each representing a meal entry for a specific day. The entire table is highlighted with a large red box.

#	Mess Block	Day	Breakfast	Lunch	Snacks	Dinner	Last Updated At	Action
1	P-Mess	Monday	Idly	Samosa	Samosa	Curd	2021-05-22 16:32:34	
2	P-Mess	Tuesday	Dosa	Ravaam	Sandwich	Roli	2021-05-09 20:12:24	
3	P-Mess	Wednesday	Upma	Dal	Chips	Dosa	2021-05-09 20:12:31	
4	P-Mess	Thursday	Idly	Curd	Biscuit	Ghephati	2021-05-09 20:12:37	
5	P-Mess	Friday	Poha	Carrot	Puff	Rumali Roli	2021-05-09 20:12:45	
6	P-Mess	Saturday	Dosa	Potato	Samosa	Nan	2021-05-09 20:12:51	
7	P-Mess	Sunday	Upma	Sambal	Chips	Roli	2021-05-09 20:12:56	

As the Expected Output is same as the Output we got, The Test Case-32 (Mess Admin Update Mess Timetable Test) is Passed!

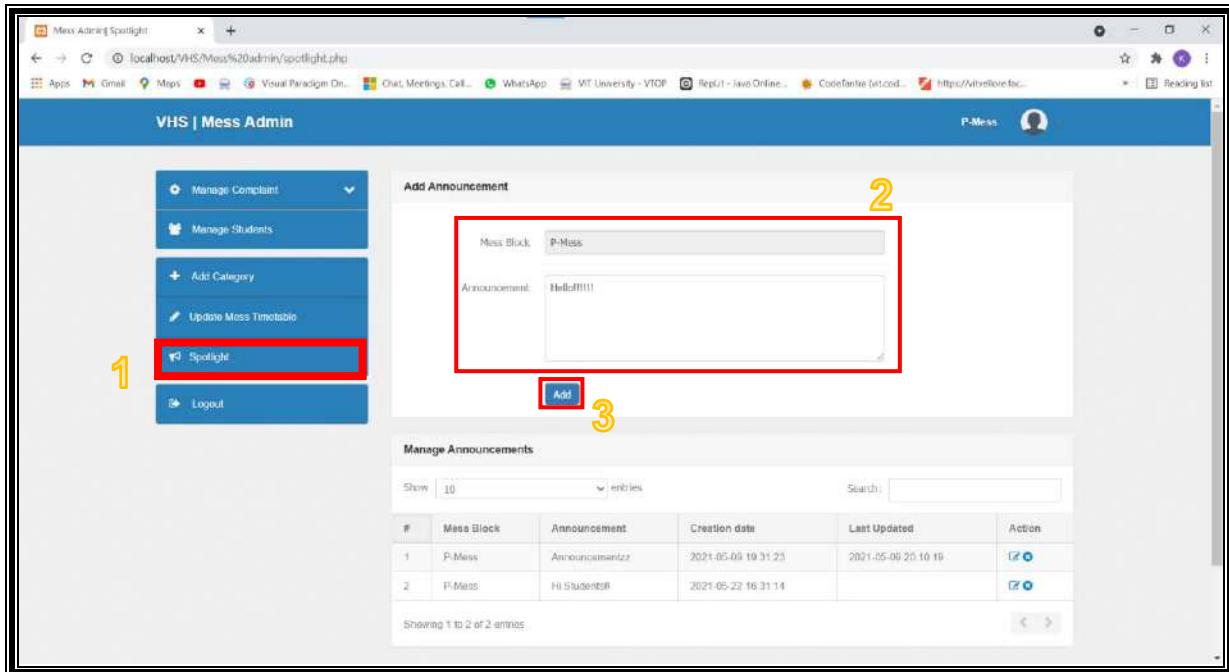
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.33.	Mess Admin Spotlight Test	Mess Admin 'Home' Page	Mess Admin should be logged in.	Mess Admin should click the 'Spotlight' in his/her Home Page and then fill the necessary details of New Announcement he/she wants to Add to Spotlight, and then click on 'Add' button.	The System should display msg- "Successfully Announcement Added", And this New Announcement should be displayed in Spotlight of Student (Who belong to this particular Mess Block) Login.

3.3.33.1 Present state of the System:

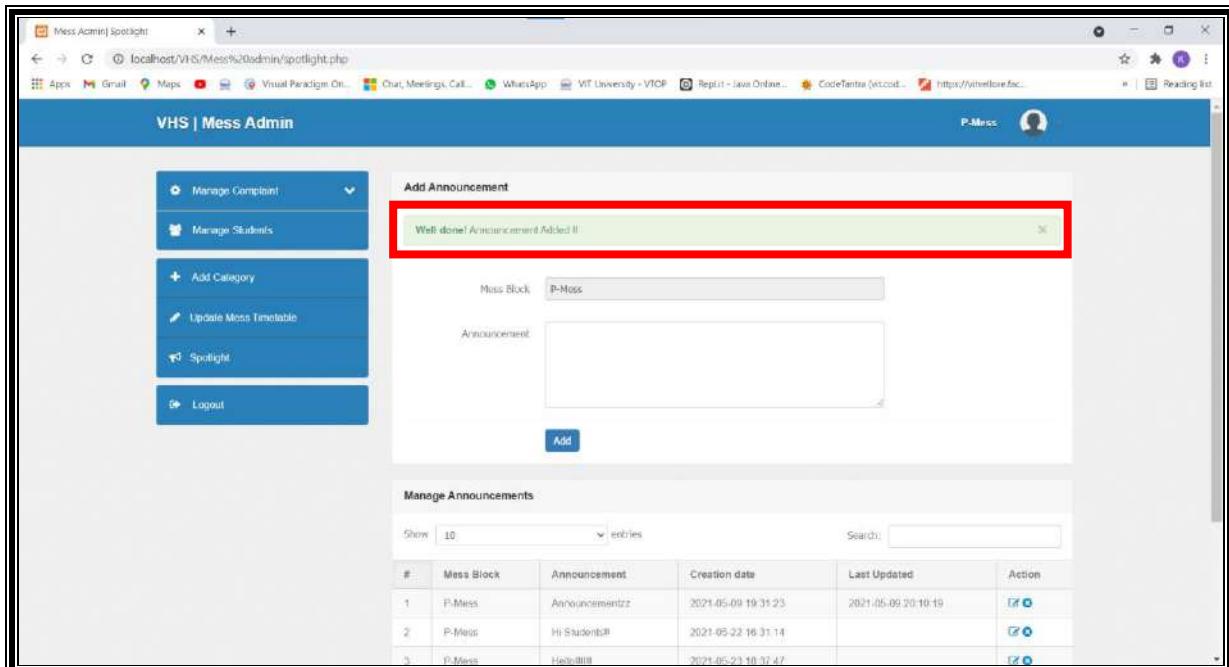


The screenshot shows a web browser window titled 'Mess Admin|Change Password'. The URL in the address bar is 'localhost/VHS/Mess92/admin/change-password.php'. The page has a blue header bar with the text 'VHS | Mess Admin' and a user profile icon. On the left, there is a sidebar menu with the following items: 'Manage Complaint' (selected), 'Manage Students', 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A 'Submit' button is located below these fields. At the bottom of the page, there is a footer note: '© 2021 VHS All rights reserved'.

3.3.33.2 Test Input(s):



3.3.33.3 Output(s):



The screenshot shows a web browser window titled 'VHS | Spotlight' with the URL 'localhost/VHS/users/spotlight.php'. The page header includes the 'VIT HOSTEL SERVICES' logo, a user profile for 'Kotha V V S Akash', and navigation links for 'Logout' and '19BCE0106 (Student)'. On the left, a sidebar lists various services: 'Spotlight' (selected), 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Spotlight' and displays a table of announcements:

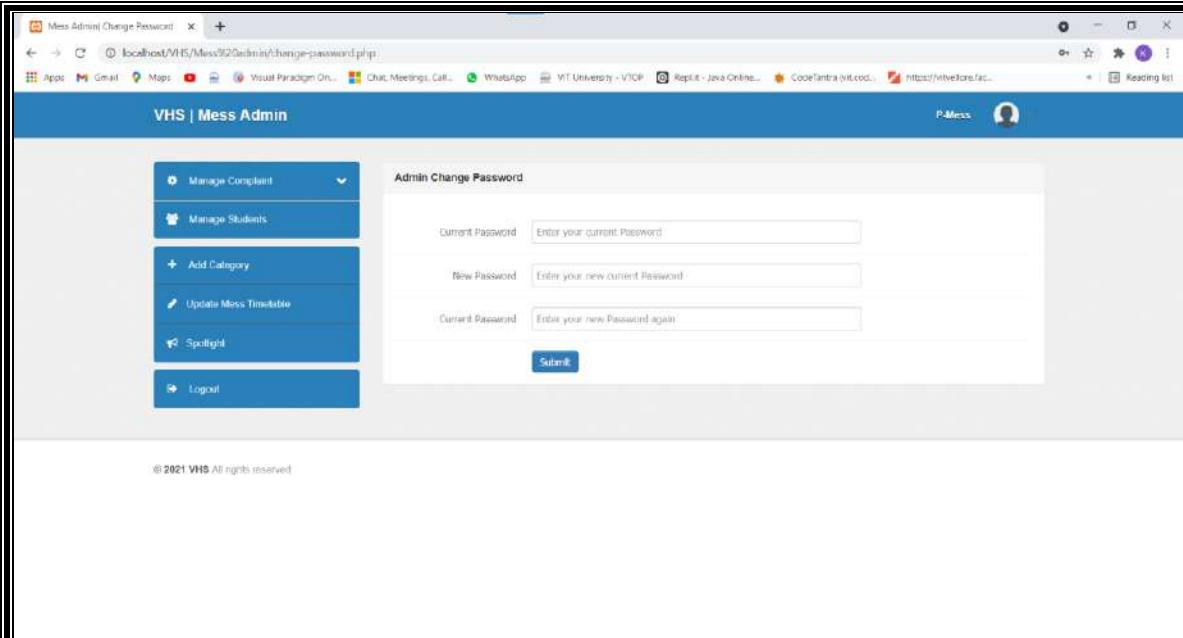
Announcement By	Announcement	Announcement Date
P-Block	Prithvi	2021-05-07 15:45:39
P-Mess	Announcementzz	2021-05-09 19:31:23
P-Block	HII	2021-05-15 02:00:15
P-Mess	Hi Students!!	2021-05-22 16:31:14
P-Block	Nameshe Students!!	2021-05-23 17:32:50
P-Mess	16-07-2021	2021-06-23 10:37:47

A red box highlights the last row of the table.

As the Expected Output is same as the Output we got, The Test Case-33 (Mess Admin Spotlight Test) is Passed!

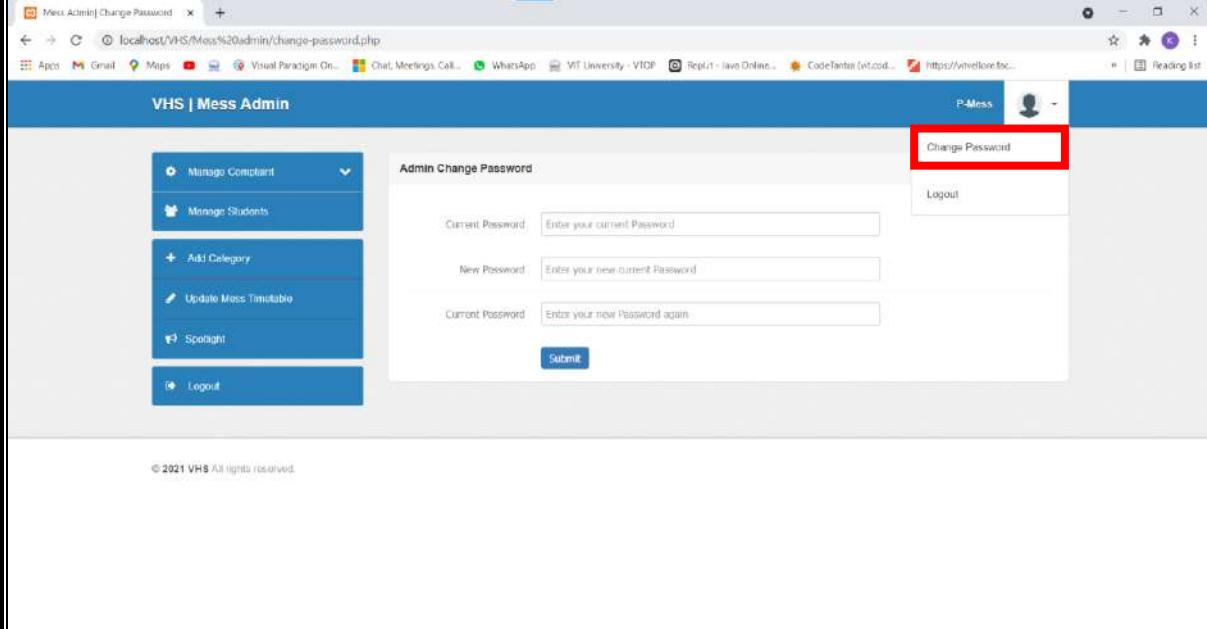
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.34.	Mess Admin Change Password Test	Mess Admin 'Home' Page	Mess Admin should be already logged in.	Mess Admin should click the 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same Mess Admin login, he/she should use the New Password to get to his/her Home Page.

3.3.34.1 Present state of the System:



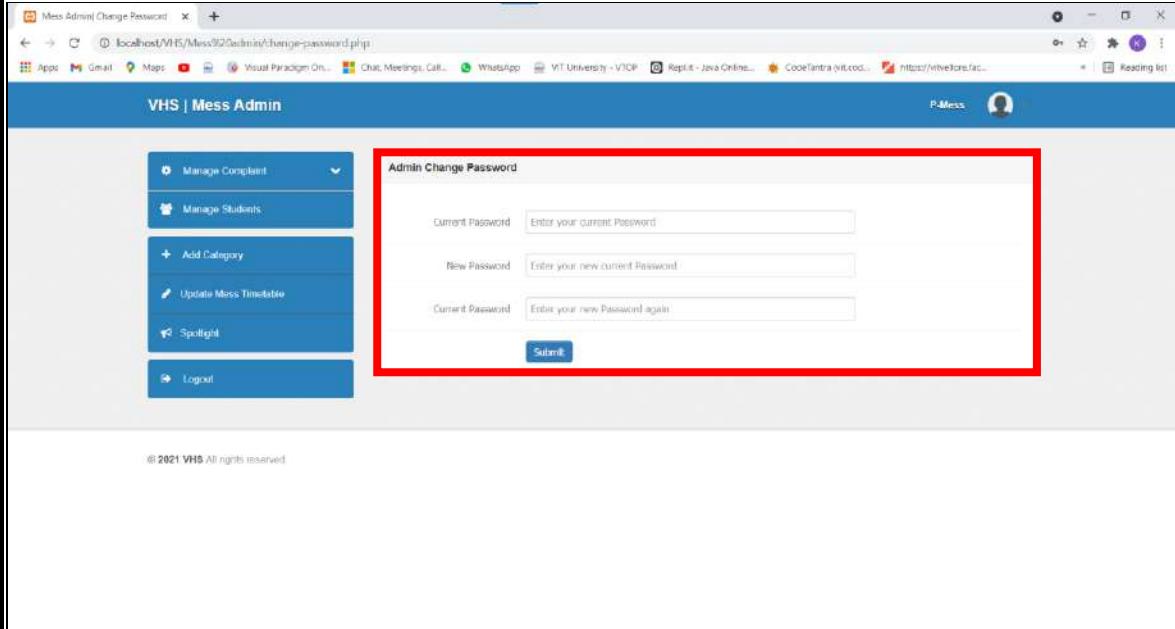
The screenshot shows a web browser window titled 'Mess Admin| Change Password'. The URL in the address bar is 'localhost/VHS/Mess32/admin/change-password.php'. The page header includes the text 'VHS | Mess Admin' and a user profile icon labeled 'P-Mess'. On the left, there is a vertical sidebar menu with the following items: 'Manage Complaint' (selected), 'Manage Students', 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). A blue 'Submit' button is located at the bottom of the form. At the bottom of the page, there is a footer note: '© 2021 VHS All rights reserved'.

3.3.34.2 Test Input(s):



The screenshot shows a web browser window titled "Mess Admin| Change Password". The URL is "localhost/VHS/Mess%20admin/change-password.php". The page has a blue header bar with the text "VHS | Mess Admin". On the left, there is a sidebar with several menu items: "Manage Complaint", "Manage Students", "+ Add Category", "Update Mess Timetable", "Spotlight", and "Logout". The main content area is titled "Admin Change Password" and contains three input fields: "Current Password" (placeholder: "Enter your current Password"), "New Password" (placeholder: "Enter your new current Password"), and "Confirm Password" (placeholder: "Enter your new Password again"). A "Submit" button is located at the bottom right of the form. The "Change Password" button is highlighted with a red border.

3.3.34.3 Output(s):

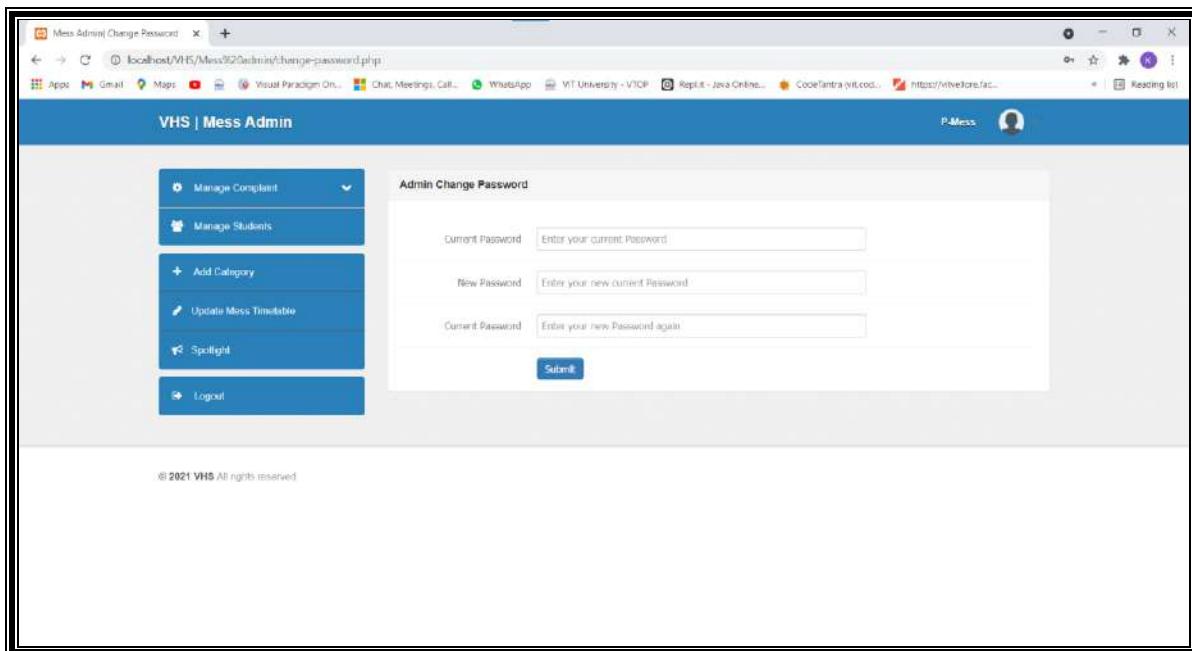


This screenshot is identical to the one above, showing the "Admin Change Password" form. The entire input area, including the "Change Password" button, is highlighted with a large red box.

As the Expected Output is same as the Output we got, The Test Case-34 (Mess Admin Change Password Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.35.	Mess Admin Logout Test	Mess Admin 'Home' Page	Mess Admin should be already logged in.	Mess Admin should click the 'Logout Option' in his/her Home Page.	The System should be directed to Mess Admin Login page and a msg- "Successfully Logged out" will be displayed.

3.3.35.1 Present state of the System:



3.3.35.2 Test Input(s):

The screenshot shows a web browser window titled 'Mess Admin| Change Password'. The URL is 'localhost/VHS/Mess%20admin/change-password.php'. The page has a blue header bar with the text 'VHS | Mess Admin'. On the left, there is a sidebar with several options: 'Manage Complaint', 'Manage Students', 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder 'Enter your current Password'), 'New Password' (placeholder 'Enter your new current Password'), and 'Confirm Password' (placeholder 'Enter your new Password again'). Below these fields is a 'Submit' button. A red box highlights the 'Logout' button in the sidebar.

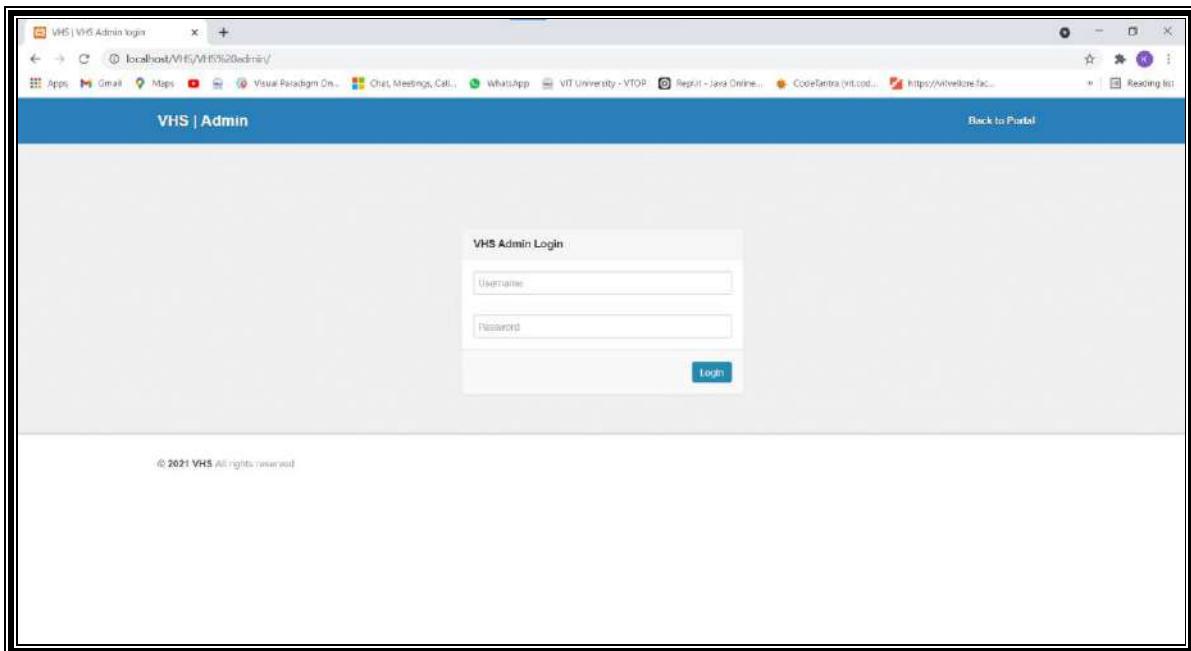
3.3.35.3 Output(s):

The screenshot shows a web browser window titled 'VHS | Mess Admin login'. The URL is 'localhost/VHS/Mess%20admin/index.php'. The page has a blue header bar with the text 'VHS | Mess Admin' and a 'Back to Portal' link. The main content area displays a message: 'VHS Mess Admin Login' followed by 'You have successfully logged out.' Below this message is a login form with fields for 'Username' and 'Password', and a 'Login' button. A red box highlights the entire login form area.

As the Expected Output is same as the Output we got, The Test Case-35 (Mess Admin Logout Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.36.	VHS Admin Login Test	VHS Admin 'Login' Page	VHS Admin should already have a registered account.	Enter his/her valid set of Username and Password, then click on 'Login' Button.	The System should be directed to VHS Admin Home page.

3.3.36.1 Present state of the System:



3.3.36.2 Test Input(s):

The screenshot shows a web browser window titled "VHS | Admin". The URL in the address bar is "localhost/VHS/VHS%20admin/". The main content area is titled "VHS Admin Login". It contains two input fields: one for "Admin ID" containing "Admin1" and another for "Password" containing "*****". A blue "Login" button is located at the bottom right of the form. The entire login form is highlighted with a thick red border.

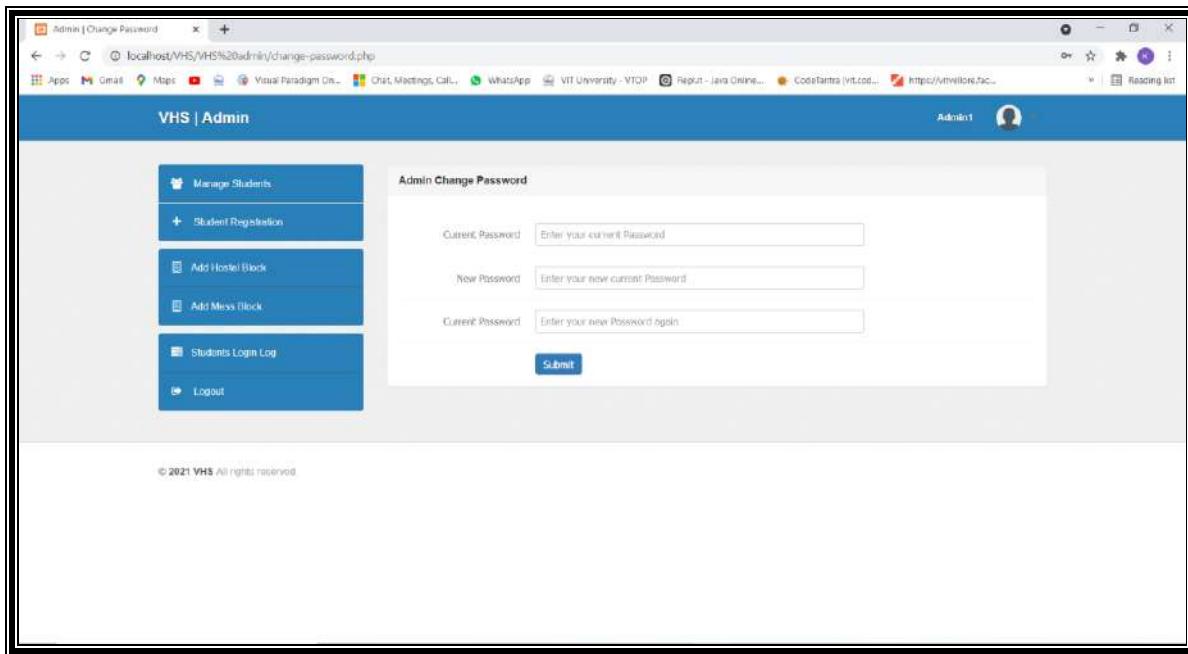
3.3.36.3 Output(s):

The screenshot shows a web browser window titled "Admin | Change Password". The URL in the address bar is "localhost/VHS/VHS%20admin/change-password.php". The main content area is titled "Admin Change Password". It contains three input fields: "Current Password" (placeholder: "Enter your current Password"), "New Password" (placeholder: "Enter your new current Password"), and "Confirm Password" (placeholder: "Enter your new Password again"). A blue "Submit" button is located at the bottom right of the form.

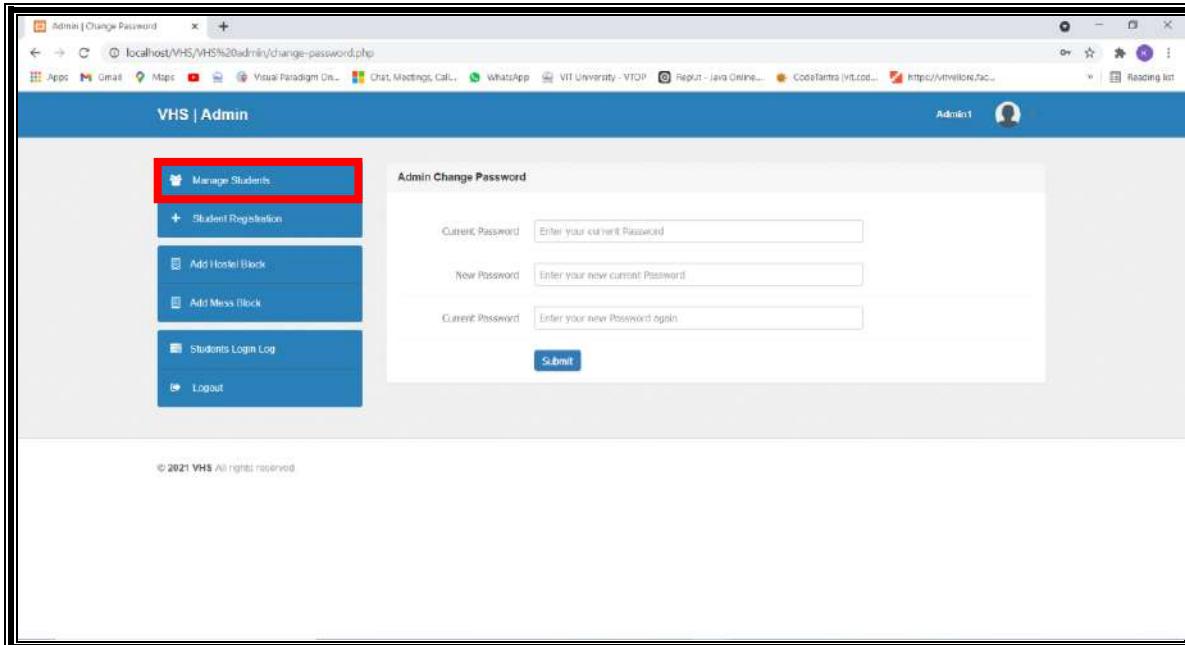
As the Expected Output is same as the Output we got, The Test Case-36 (VHS Admin Login Test) is **Passed!**

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.37.	VHS Admin Manage Students Test	VHS Admin 'Home' Page	VHS Admin should be logged in.	VHS Admin should click the 'Manage Students Option' in his/her Home Page.	The System should be directed to VHS Admin Manage Students page, where the list of all the students present in the Database will be displayed in a tabular format.

3.3.37.1 Present state of the System:



3.3.37.2 Test Input(s):



3.3.37.3 Output(s):

The screenshot shows a web browser window titled 'Admin | Manage Students'. The URL is 'localhost/VHS/VHS%20admin/manage-users.php'. The page has a blue header bar with the text 'VHS | Admin' and a user profile icon. On the left, there is a sidebar with buttons: 'Manage Students' (highlighted with a red box), 'Student Registration', 'Add Hostel Block', 'Add Mess Block', 'Students Login Log', and 'Logout'. The main content area is titled 'Manage Students' and displays a table of student records. The table has columns: #, Name, Reg.No, Hostel Block, Mess Block, Contact no, Reg. Date, and Action. There are four entries:

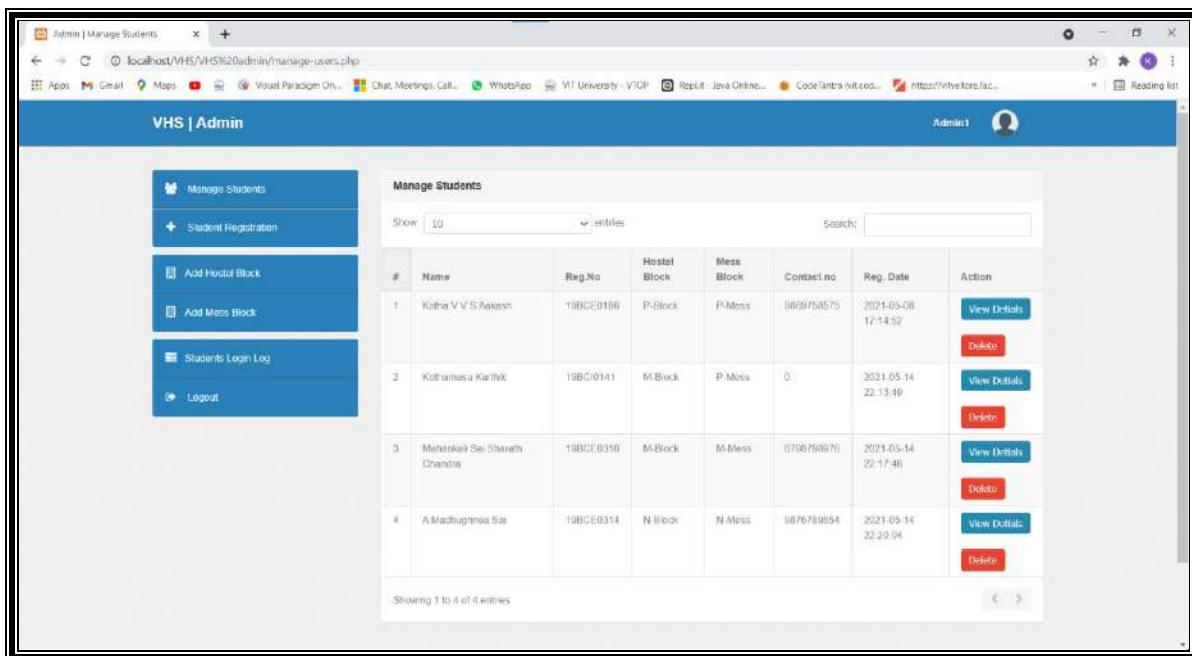
#	Name	Reg.No	Hostel Block	Mess Block	Contact no	Reg. Date	Action
1	Kotha V V S Akash	19BCE0186	P-Block	P-Mess	9899758575	2021-05-08 17:14:52	View Details Delete
2	Kothamasu Karthik	19BCE0141	6L-Block	P-Mess	0	2021-05-14 22:13:49	View Details Delete
3	Mahankali Sei Sharath Chandra	19BCE0316	M-Block	M-Mess	6799798876	2021-05-14 22:17:46	View Details Delete
4	A Madhugnanu Sai	19BCE0314	N-Block	N-Mess	9876789854	2021-05-14 22:20:04	View Details Delete

At the bottom of the table, it says 'Showing 1 to 4 of 4 entries'.

As the Expected Output is same as the Output we got, The Test Case-37 (VHS Admin Manage Students Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.38.	VHS Admin View Student Details Test	VHS Admin 'Manage Students' Page	VHS Admin should be logged in.	VHS Admin should click the 'Manage Students Option' and then 'View Details Option of any Student' in his/her Home Page.	The System should display the Complete academic and personal information of that particular Student in a New Window.

3.3.38.1 Present state of the System:



3.3.38.2 Test Input(s):

The screenshot shows the 'Manage Students' section of the VHS Admin interface. On the left sidebar, there are links for 'Manage Students', 'Student Registration', 'Add Hostel Block', 'Add Mess Block', 'Students Login Log', and 'Logout'. The main area displays a table of student records with columns: #, Name, Reg.No, Hostel Block, Mess Block, Contact no, Reg. Date, and Action. The first row, for 'Kotha V V S Akash', has a 'View Details' button highlighted with a red box.

#	Name	Reg.No	Hostel Block	Mess Block	Contact no	Reg. Date	Action
1	Kotha V V S Akash	19BCE0186	P-Block	P-Mess	9869758575	2021-05-08 17:14:52	View Details
2	Kothamasu Karthik	19BCE0141	M-Block	P-Mess	0	2021-05-14 22:13:49	View Details
3	Mehenki Sei Sharath Chandra	19BCE0316	M-Block	M-Mess	8798798976	2021-05-14 22:17:46	View Details
4	A Madhuginea Sai	19BCE0314	N-Block	N-Mess	9876789854	2021-05-14 22:20:04	View Details

3.3.38.3 Output(s):

The screenshot shows the 'Manage Students' section of the VHS Admin interface. A modal window titled 'User Profile - Google Chrome' is open, displaying the details of the first student, 'Kotha V V S Akash'. The modal contains the following information:

- Reg Date: 2021-05-08 17:14:52
- Registration No: 19BCE0186
- Student VIT mail ID: kothav.vsaakash2019@vitstudent.ac.in
- Student Contact-No: 9869758575
- DOB: 2002-08-03
- Branch: CSE
- Specialization: CORE
- School: SCOPE
- Hostel Block: P-Block
- Hostel Room-No: 649
- Mess Block: P-Mess

As the Expected Output is same as the Output we got, The Test Case-38 (VHS Admin View Student Details Test) is **Passed!**

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.39.	VHS Admin Add Hostel Block Test	VHS Admin 'Home' Page	VHS Admin should be logged in.	VHS Admin should click the 'Add Hostel Block' in his/her Home Page and then fill the necessary details of New Hostel Block he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Hostel Block Added", And this New Hostel Block should be displayed in Hostel Complaint Registration page of Student Login.

3.3.39.1 Present state of the System:

The screenshot shows a web browser window for 'Admin | Change Password' at the URL 'localhost/VHS/VHS%20admin/change-password.php'. The browser's address bar also shows 'localhost/VHS/VHS%20admin/'. The page has a blue header bar with the text 'VHS | Admin' and a user profile icon. On the left, there is a sidebar with several menu items: 'Manage Students', 'Student Registration', 'Add Hostel Block' (which is highlighted in blue), 'Add Mess Block', 'Students Login Log', and 'Logout'. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password' (placeholder: 'Enter your current Password'), 'New Password' (placeholder: 'Enter your new current Password'), and 'Confirm Password' (placeholder: 'Enter your new Password again'). Below these fields is a 'Submit' button. At the bottom of the page, there is a copyright notice: '© 2021 VHS All rights reserved'.

3.3.39.2 Test Input(s):

The screenshot shows the 'VHS | Admin' dashboard. On the left sidebar, the 'Add Hostel Block' button is highlighted with a red box and labeled '1'. In the main content area, a modal window titled 'Add Hostel Block' is open. Inside the modal, the 'Block Name' field contains 'temp hostel' and is highlighted with a red box and labeled '2'. At the bottom of the modal is a blue 'Add' button, which is also highlighted with a red box and labeled '3'.

3.3.39.3 Output(s):

The screenshot shows the 'VHS | Admin' dashboard after a successful operation. A green notification bar at the top of the 'Add Hostel Block' modal states 'Well done! Hostel Block added Successfully !!'. The rest of the interface is identical to the previous screenshot, showing the sidebar with 'Add Hostel Block' highlighted and the 'Manage Hostel Blocks' table below.

The screenshot shows a Windows desktop environment with a browser window open to the 'VHS | Student Register Hostel' website. The user is logged in as '19BCE0166 (Student)'. The main menu on the left includes 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The central panel is titled 'Register Hostel Complaint' and contains fields for 'Category' (dropdown), 'Sub Category' (dropdown), 'Select Complaint Subcategory' (dropdown), 'Complaint Type' (dropdown set to 'Complaint'), 'Nature of Complaint' (text input), 'Complaint Details (max 2000 words)' (text area), 'Complaint Related Doc(s) (any)' (file upload input), and a 'Submit' button. The 'Select Complaint Subcategory' dropdown is open, showing options: 'temp hostel', 'Select Hostel Block', 'M-Block', 'P-Block', 'N-Block', and 'Q-Block'. The 'temp hostel' option is highlighted with a red box.

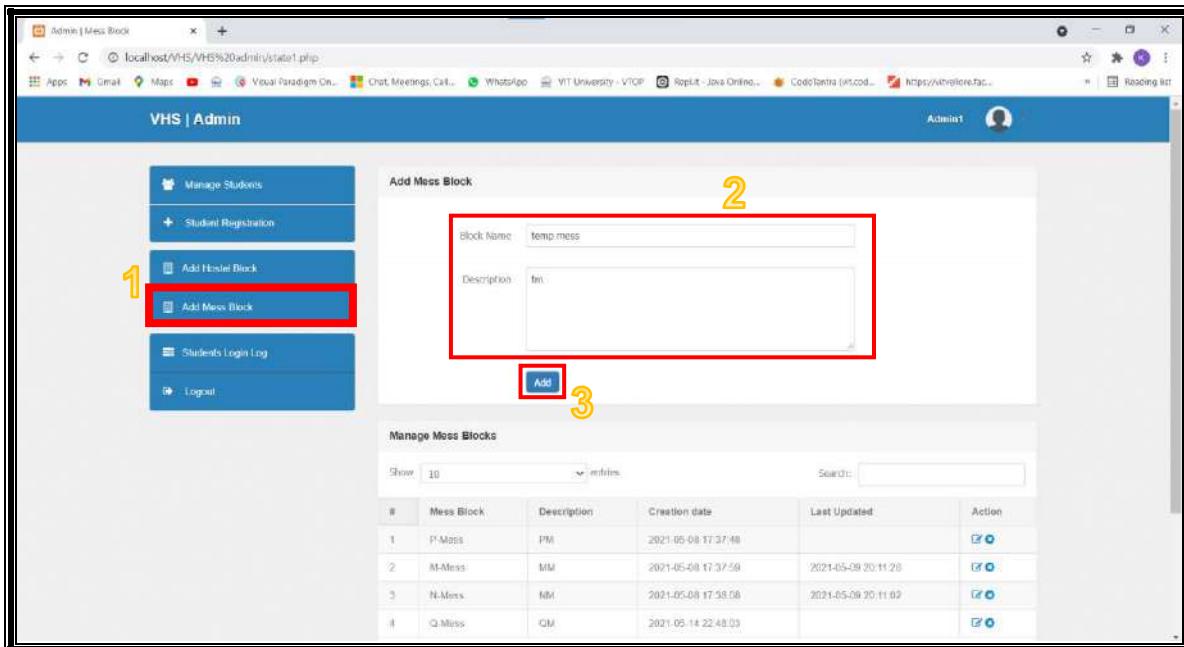
As the Expected Output is same as the Output we got, The Test Case-39 (VHS Admin Add Hostel Block Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.40.	VHS Admin Add Mess Block Test	VHS Admin 'Home' Page	VHS Admin should be logged in.	VHS Admin should click the 'Add Mess Block' in his/her Home Page and then fill the necessary details of New Mess Block he/she wants to Add, and then click on 'Add' button.	The System should display msg- "Successfully Mess Block Added", And this New Mess Block should be displayed in Mess Complaint Registration page of Student Login.

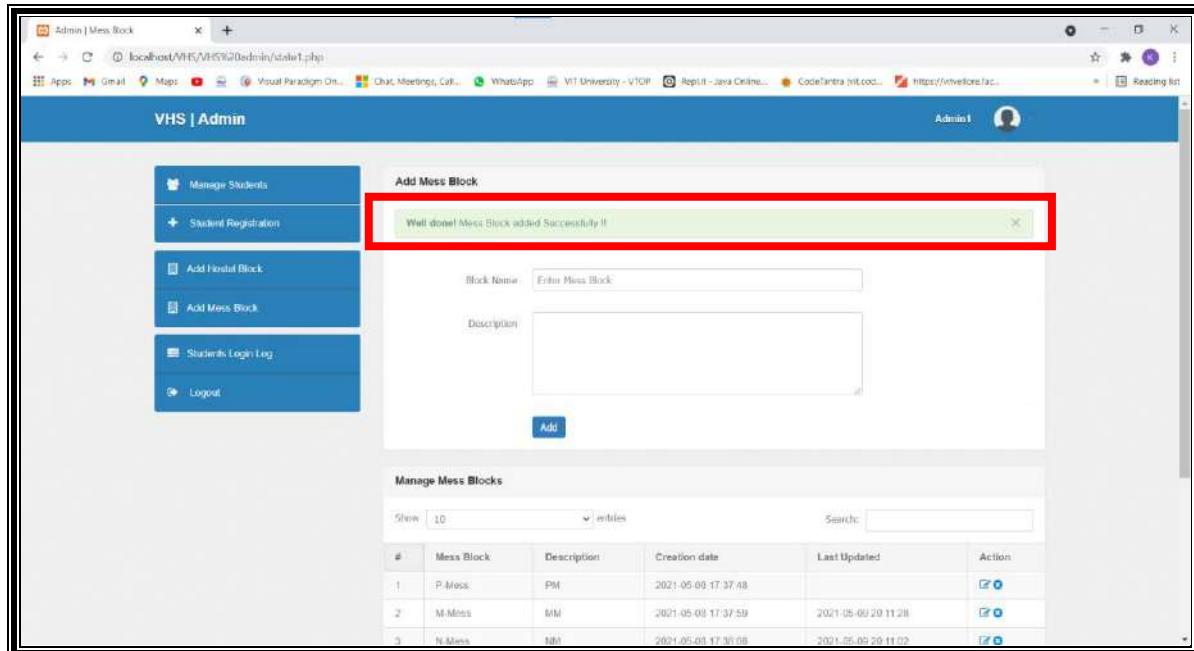
3.3.40.1 Present state of the System:

The screenshot shows a web browser window titled "Admin | Change Password". The URL is "localhost/VHS/VHS%20admin/change-password.php". The page has a blue header bar with the text "VHS | Admin" and a user profile icon. On the left, there is a sidebar with several menu items: "Manage Students", "Student Registration", "Add Hostel Block", "Add Mess Block" (which is highlighted in blue), "Students Login Log", and "Logout". The main content area is titled "Admin Change Password" and contains three input fields: "Current Password" (placeholder: Enter your current Password), "New Password" (placeholder: Enter your new current Password), and "Confirm Password" (placeholder: Enter your new Password again). Below these fields is a "Submit" button. At the bottom of the page, there is a copyright notice: "© 2021 VHS All rights reserved".

3.3.40.2 Test Input(s):



3.3.40.3 Output(s):



The screenshot shows a web browser window for 'VHS | Student Register Mess Complain'. The URL is 'localhost/VHS/users/register-complain1.php'. The page title is 'VIT HOSTEL SERVICES'. On the left, there's a sidebar with a user profile picture and names, followed by links: 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area has a heading 'Register Mess Complaint'. It includes fields for 'Category' (dropdown), 'Complaint Type' (dropdown set to 'Complaint'), 'Nature of Complaint' (text input), 'Complaint Details (max 2000 words)' (text area), 'Complaint Related Doc(if any)' (file input), and a 'Submit' button. To the right, a dropdown menu titled 'Select Mess Block' lists 'temp mess', 'P-Mess', 'M-Mess', 'N-Mess', and 'O-Mess', with 'temp mess' highlighted in blue.

As the Expected Output is same as the Output we got, The Test Case-40 (VHS Admin Add Mess Block Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.41.	VHS Admin Change Password Test	VHS Admin 'Home' Page	VHS Admin should be already logged in.	VHS Admin should click the 'Change Password' in his/her Home Page, and then fill the necessary details to change the password (if necessary).	The System should display the msg- "Successfully Changed", and when next time the same VHS Admin login, he/she should use the New Password to get to his/her Home Page.

3.3.41.1 Present state of the System:

The screenshot shows the 'Admin | Change Password' page from the VHS Admin interface. The URL in the browser is 'localhost/VHS%20admin/change-password.php'. The page has a blue header bar with the title 'VHS | Admin' and a user profile icon. On the left, there's a sidebar with various administrative options like 'Manage Students', 'Student Registration', etc. The main content area is titled 'Admin Change Password' and contains three input fields: 'Current Password', 'New Password', and 'Confirm Password', each with a placeholder message. A 'Submit' button is located at the bottom of the form.

3.3.41.2 Test Input(s):

The screenshot shows a web browser window titled "Admin | Change Password". The URL is "localhost/VHS/VHS%20admin/change-password.php". The page has a blue header bar with the text "VHS | Admin" and a user profile icon labeled "Admin". On the left, there is a sidebar with several buttons: "Manage Students", "Student Registration", "Add Hostel Block", "Add Mess Block", "Students Login Log", and "Logout". The main content area is titled "Admin Change Password" and contains three input fields: "Current Password" (placeholder: "Enter your current Password"), "New Password" (placeholder: "Enter your new current Password"), and "Confirm Password" (placeholder: "Enter your new Password again"). A red rectangular box highlights the "Change Password" button at the top right of the form.

3.3.41.3 Output(s):

The screenshot shows the same "Admin | Change Password" page as the previous one. The URL is "localhost/VHS/VHS%20admin/change-password.php". The layout is identical, including the sidebar and the "Admin Change Password" form. However, a large red rectangular box now surrounds the entire "Admin Change Password" form, encompassing all its input fields and the "Submit" button.

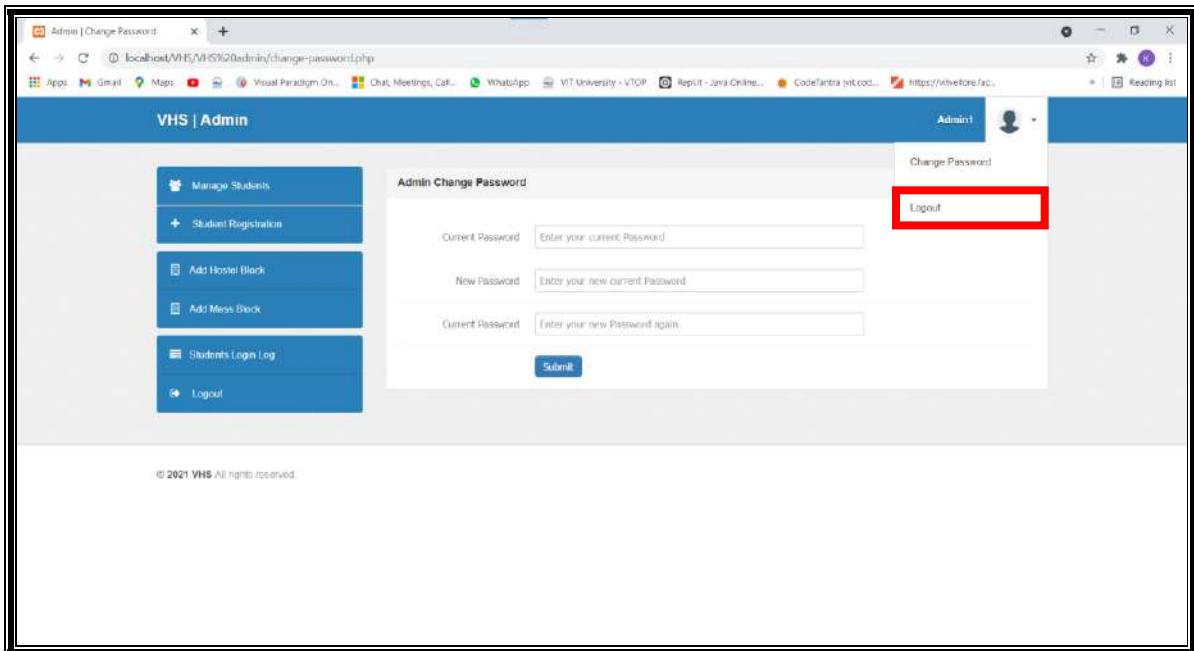
As the Expected Output is same as the Output we got, The Test Case-41 (VHS Admin Change Password Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.3.42.	VHS Admin Logout Test	VHS Admin 'Home' Page	VHS Admin should be already logged in.	VHS Admin should click the 'Logout Option' in his/her Home Page.	The System should be directed to VHS Admin Login page and a msg- "Successfully Logged out" will be displayed.

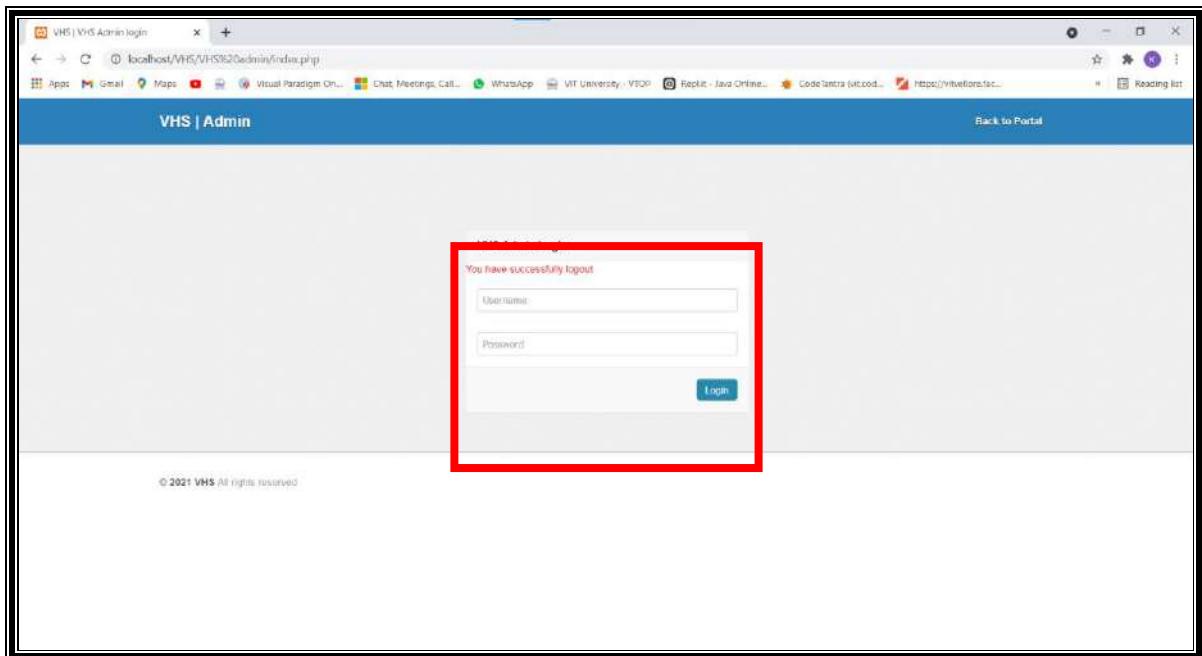
3.3.42.1 Present state of the System:

The screenshot shows a web application interface for 'VHS Admin'. The main page is titled 'Admin Change Password'. It features a sidebar with various administrative functions like 'Manage Students' and 'Logout'. The central part of the page is a form for changing a password, requiring the user to enter their current password, a new password, and confirm it. The entire interface is designed with a clean, modern look using a blue and white color scheme.

3.3.42.2 Test Input(s):



3.3.42.3 Output(s):



As the Expected Output is same as the Output we got, The Test Case-42 (VHS Admin Logout Test) is Passed!

3.4 Negative Test cases of our System generated using Basis path testing

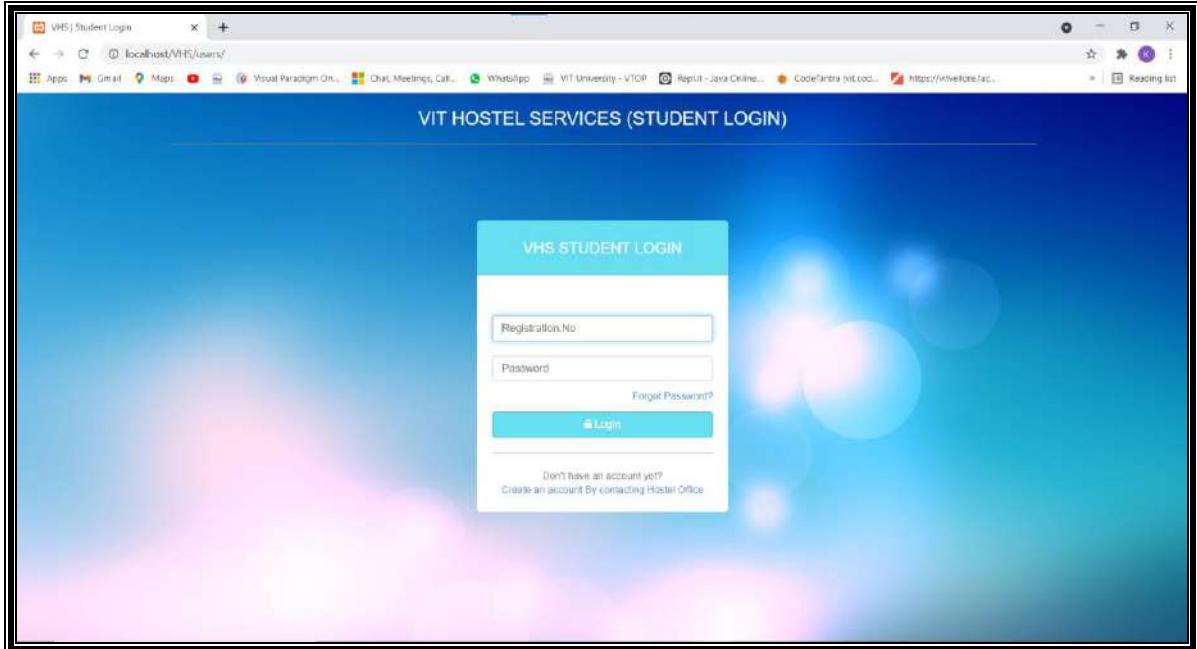
S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
1.	Student Invalid Login Test	Student 'Login' Page	Student should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"
2.	Student Hostel Complaint Registration missing fields Test	Student 'Hostel Complaint Registration' Page	Student should be already logged in.	Student should fill only some of the Complaint Details (Not every Detail).	The System should display a msg- "Please fill all the fields"
3.	Student Invalid Change Password Test 1	Student 'Change Password' Page	Student should be already logged in.	Student should fill the Old Password wrong.	The System should display a msg- "Old Password doesn't match".
4.	Student Invalid Change Password Test 2	Student 'Change Password' Page	Student should be already logged in.	Student should fill the new password and confirm password fields differently.	The System should display a msg- "new password and confirm password field doesn't match".
5.	Hostel Admin Invalid Login Test	Hostel Admin 'Login' Page	Hostel Admin should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"
6.	Hostel Admin Invalid Student Search Test	Hostel Admin 'Manage Students' Page	Hostel Admin should be already logged in.	Hostel Admin input some invalid word in search box.	The System should display a msg- "No Results Found".
7.	VHS Admin Invalid Login Test	VHS Admin 'Login' Page	VHS Admin should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"
8.	VHS Admin Invalid Student	VHS Admin 'Student'	VHS Admin should be already logged in.	VHS Admin input Invalid Mail-ID.	The System should display a msg- "Invalid Mail-ID".

	Registration Test 1	Registration' Page			
9.	VHS Admin Invalid Student Registration Test 2	VHS Admin 'Student Registration' Page	VHS Admin should be already logged in.	VHS Admin input already registered Mail-ID.	The System should display a msg- "Mail-ID Not Available".
10.	Mess admin Invalid Login Test	Mess admin 'Login' Page	Mess admin should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"
11.	Mess Admin Invalid Student Search Test	Mess Admin 'Manage Students' Page	Mess Admin should be already logged in.	Mess Admin input some invalid word in search box.	The System should display a msg- "No Results Found".

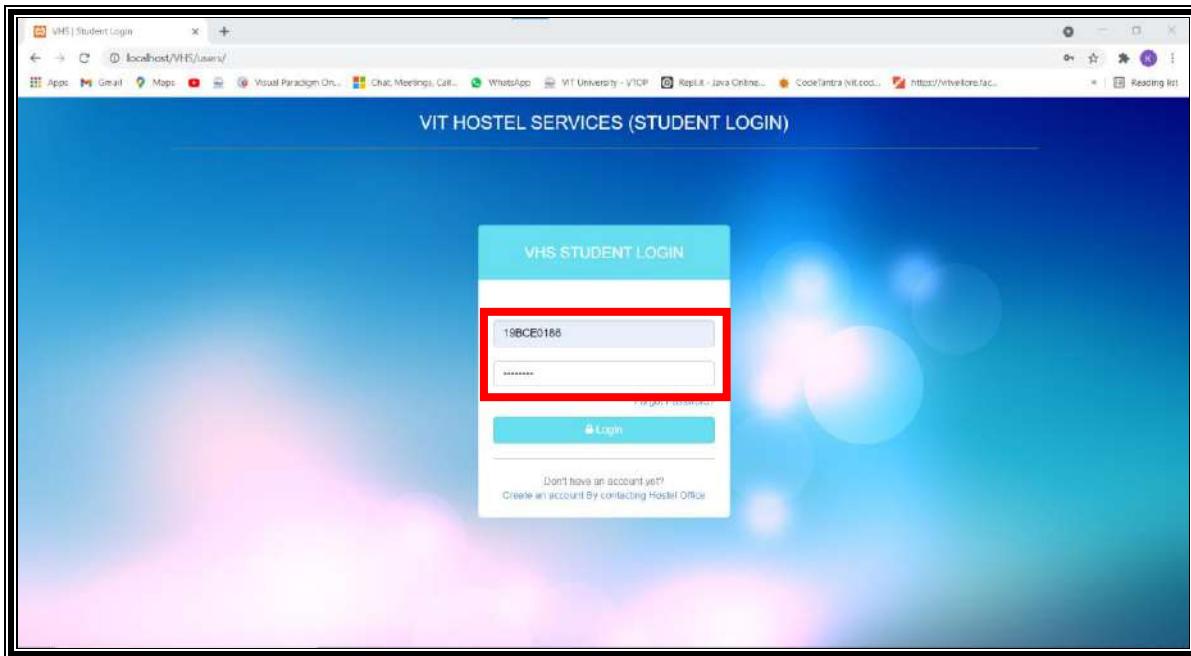
3.5 Evaluation of Negative Test cases generated using Basis path testing

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.1.	Student Invalid Login Test	Student 'Login' Page	Student should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"

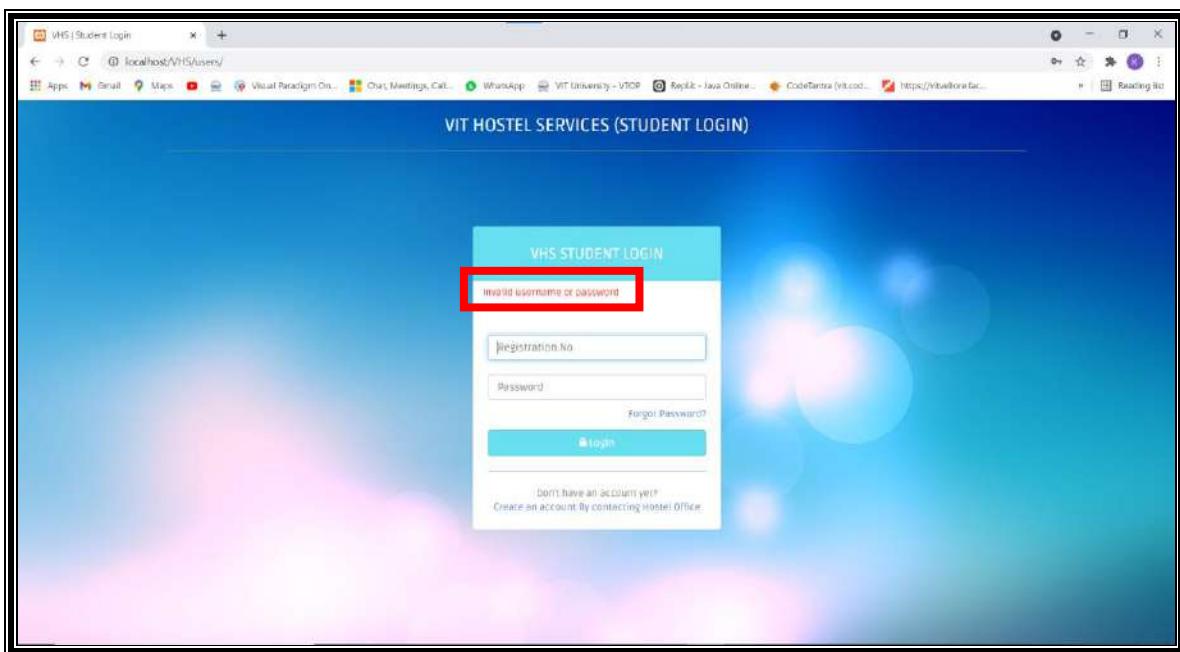
3.5.1.1 Present state of the System:



3.5.1.2 Test Input(s):



3.5.1.3 Output(s):



As the Expected Output is same as the Output we got, The Negative Test Case-1 (Student Invalid Login Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.2.	Student Hostel Complaint Registration missing fields Test	Student 'Hostel Complaint Registration' Page	Student should be already logged in.	Student should fill only some of the Complaint Details (Not every Detail).	The System should display a msg- "Please fill all the fields"

3.5.2.1 Present state of the System:

The screenshot shows the 'Register Hostel Complaint' page of the VIT Hostel Services system. The page has a blue header with the title 'VIT HOSTEL SERVICES'. On the left, there is a sidebar with various icons and links: 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area is titled 'Register Hostel Complaint'. It contains several input fields: 'Category' (dropdown menu), 'Sub Category' (dropdown menu), 'Complaint Type' (dropdown menu), 'Hostel Block' (dropdown menu), 'Nature of Complaint' (text input), 'Complaint Details (max 2000 words)' (text area), and a 'Choose File' button for 'Complaint Related Document(s)'. A 'submit' button is at the bottom. The user 'Kotha VVS Akash' is logged in, as shown in the top right corner.

3.5.2.2 Test Input(s):

The screenshot shows the 'Register Hostel Complaint' form. The highlighted input fields are:

- Category: Wi-Fi
- Sub Category: Wi-Fi Slow
- Complaint type: General Query
- Hostel: Hostel
- Nature of Complaint: Wi-Fi

3.5.2.3 Output(s):

The screenshot shows the same 'Register Hostel Complaint' form. A red box highlights the 'Choose File' button, which has a tooltip message: "Please fill out this field."

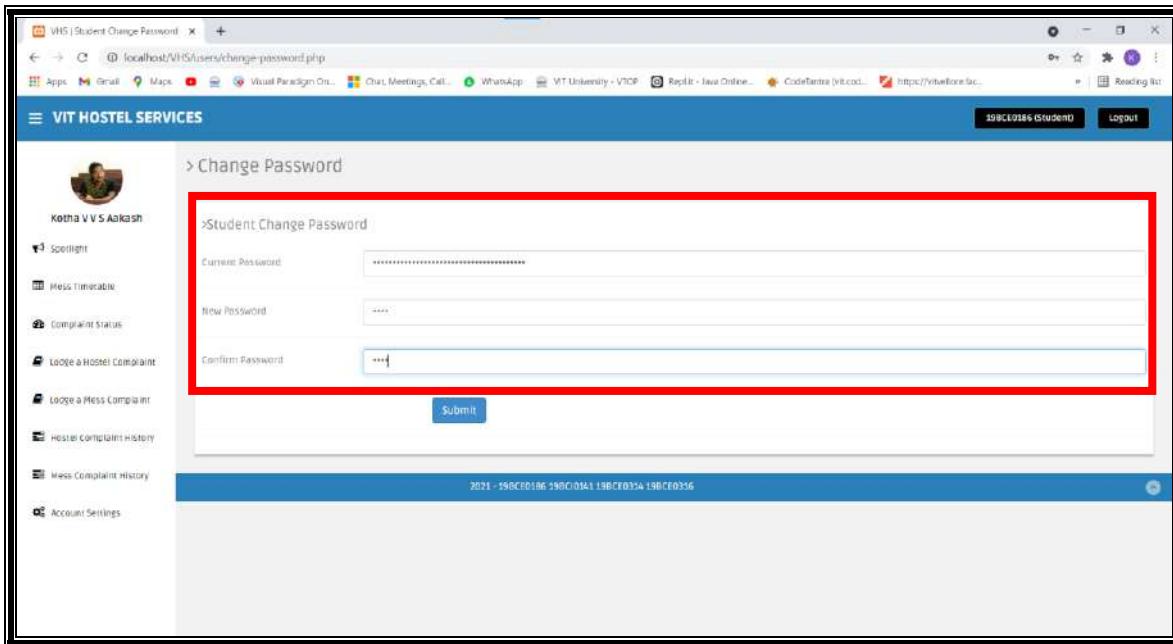
As the Expected Output is same as the Output we got, The Negative Test Case-2 (Student Hostel Complaint Registration missing fields Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.3.	Student Invalid Change Password Test 1	Student 'Change Password' Page	Student should be already logged in.	Student should fill the Old Password wrong.	The System should display a msg- "Old Password doesn't match".

3.5.3.1 Present state of the System:

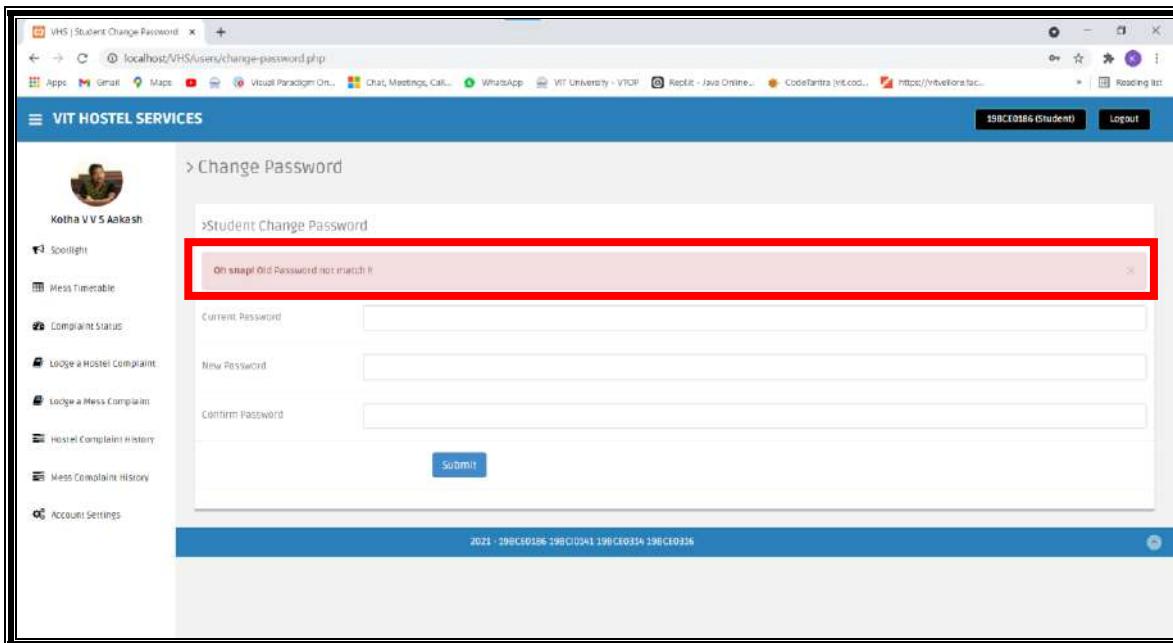
The screenshot shows a web browser window titled 'VHS | Student Change Password'. The URL in the address bar is 'localhost/VHS/users/change-password.php'. The page itself is titled 'Change Password' and has a sub-section title 'Student Change Password'. It contains three input fields: 'Current Password', 'New Password', and 'Confirm Password', each with a corresponding text input box. Below these fields is a blue 'Submit' button. On the left side of the page, there is a sidebar with various icons and links, including 'Spotlight', 'Mess Timetable', 'Complaint Status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. At the bottom of the page, there is a footer with the text '2021-19BCE0166 19BC0144 19BC0314 19BC0316'.

3.5.3.2 Test Input(s):



The screenshot shows the 'Change Password' form. It has three input fields: 'Current Password', 'New Password', and 'Confirm Password'. A red box highlights the entire input area. Below the inputs is a blue 'Submit' button.

3.5.3.3 Output(s):



The screenshot shows the same 'Change Password' form as above, but with an error message: 'Oh snap! Old Password not match !!'. This message is highlighted with a red box. The rest of the page, including the input fields and the 'Submit' button, appears identical to the first screenshot.

As the Expected Output is same as the Output we got, The Negative Test Case-3 (Student Invalid Change Password Test 1) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.4.	Student Invalid Change Password Test 2	Student 'Change Password' Page	Student should be already logged in.	Student should fill the new password and confirm password fields differently.	The System should display a msg- "new password and confirm password field doesn't match".

3.5.4.1 Present state of the System:

VHS | Student Change Password

localhost/VHS/users/change-password.php

Kotha VVS Akash

Spotlight

Mess Timetable

Complaint Status

Lodge a Hostel Complaint

Lodge a Mess Complaint

Hostel Complaint History

Mess Complaint History

Account Settings

> Change Password

>Student Change Password

Current Password

New Password

Confirm Password

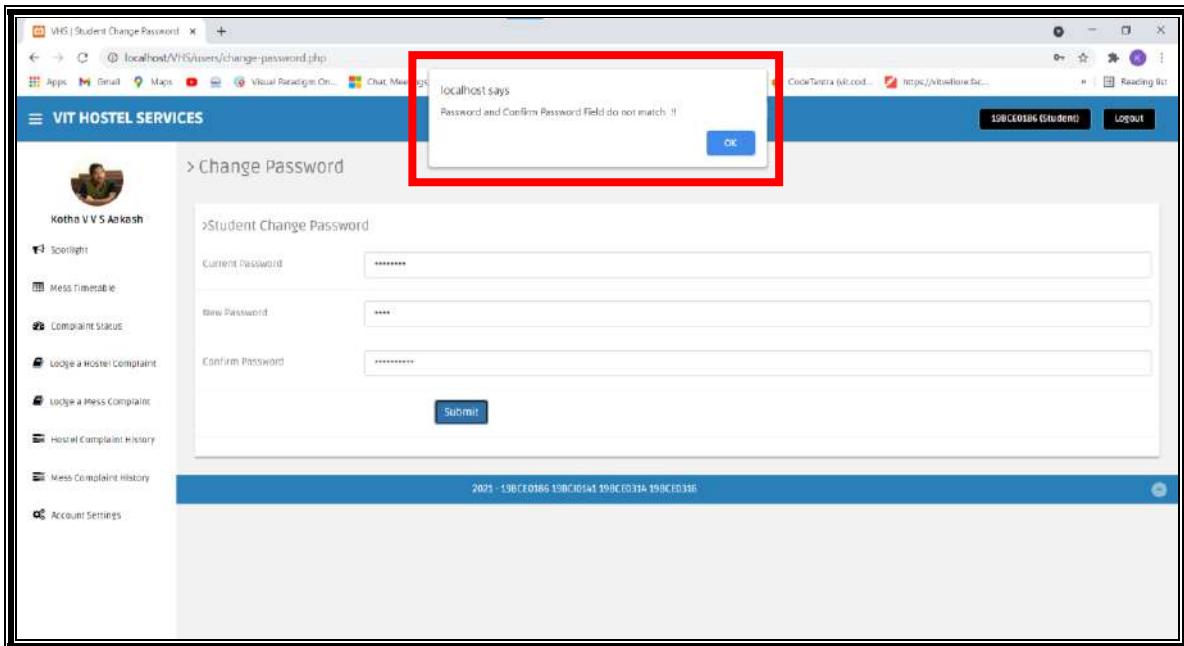
Submit

2021-19BCE0166 19BC0145 19BC0314 19BC0316

3.5.4.2 Test Input(s):

The screenshot shows the 'Change Password' page of the VIT Hostel Services website. The URL is `localhost/VHS/users/change-password.php`. The page title is 'VIT HOSTEL SERVICES'. On the left, there's a sidebar with a user profile picture and names ('Kotha VVS Akash'), followed by links for 'Spotlight', 'Mess Timetable', 'Complaint status', 'Lodge a Hostel Complaint', 'Lodge a Mess Complaint', 'Hostel Complaint History', 'Mess Complaint History', and 'Account Settings'. The main content area has a heading 'Student Change Password' and three input fields: 'Current Password', 'New Password', and 'Confirm Password', all enclosed in a red box. Below these is a 'Submit' button.

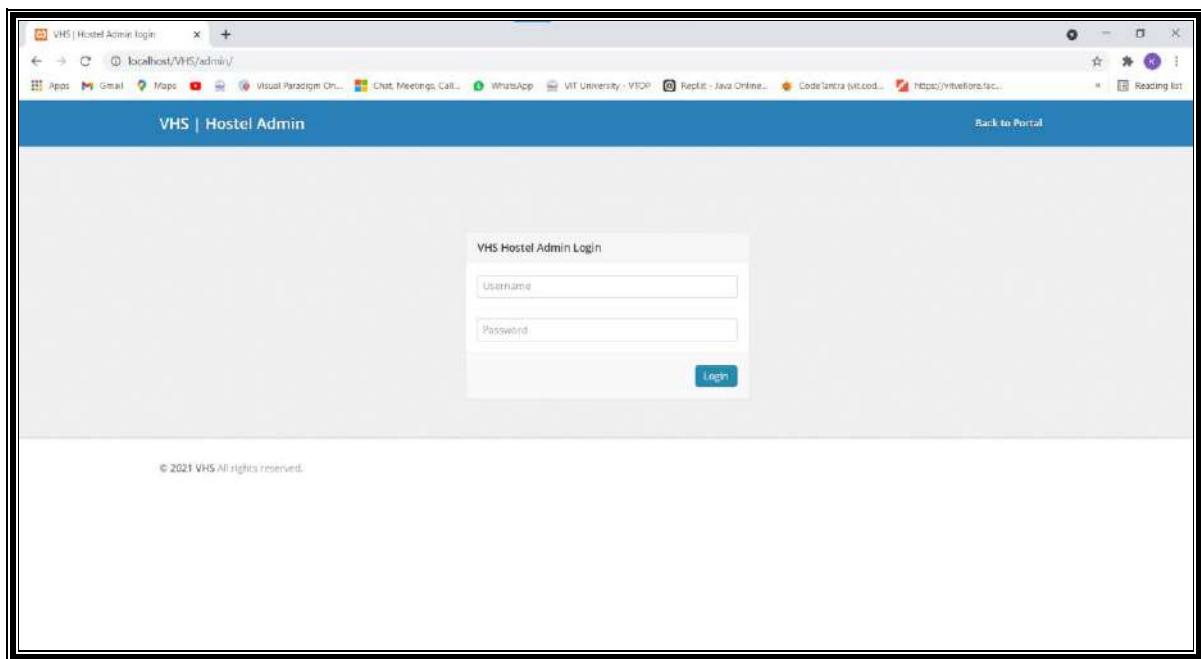
3.5.4.3 Output(s):



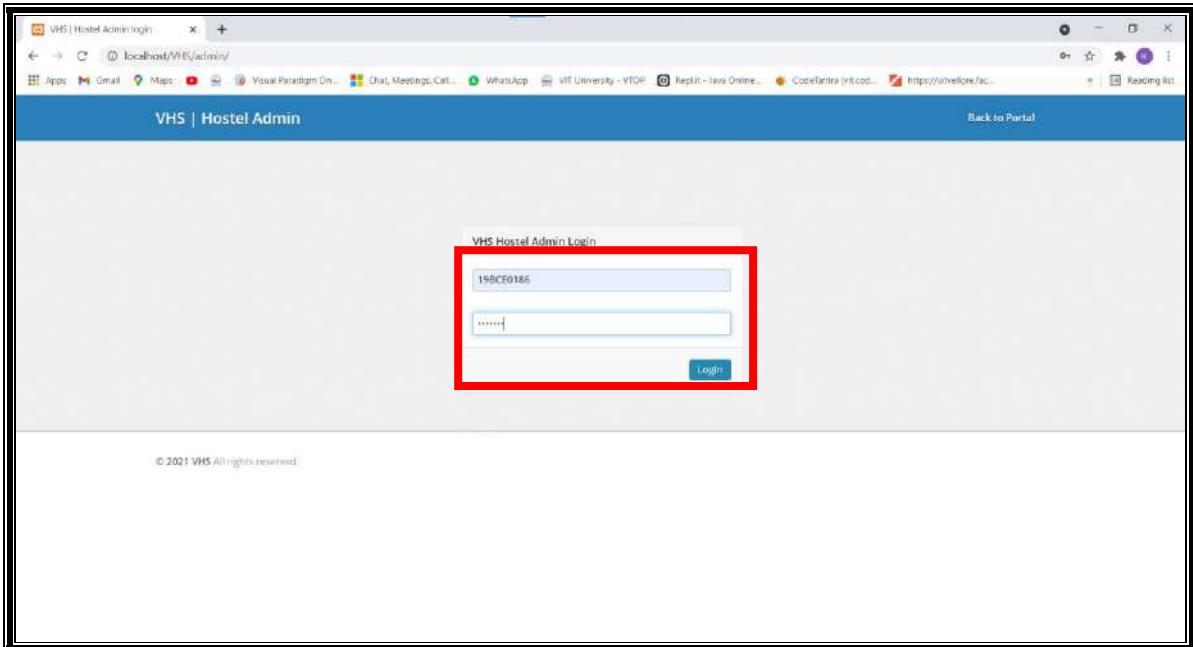
As the Expected Output is same as the Output we got, The Negative Test Case-4 (Student Invalid Change Password Test 2) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.5.	Hostel Admin Invalid Login Test	Hostel Admin 'Login' Page	Hostel Admin should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"

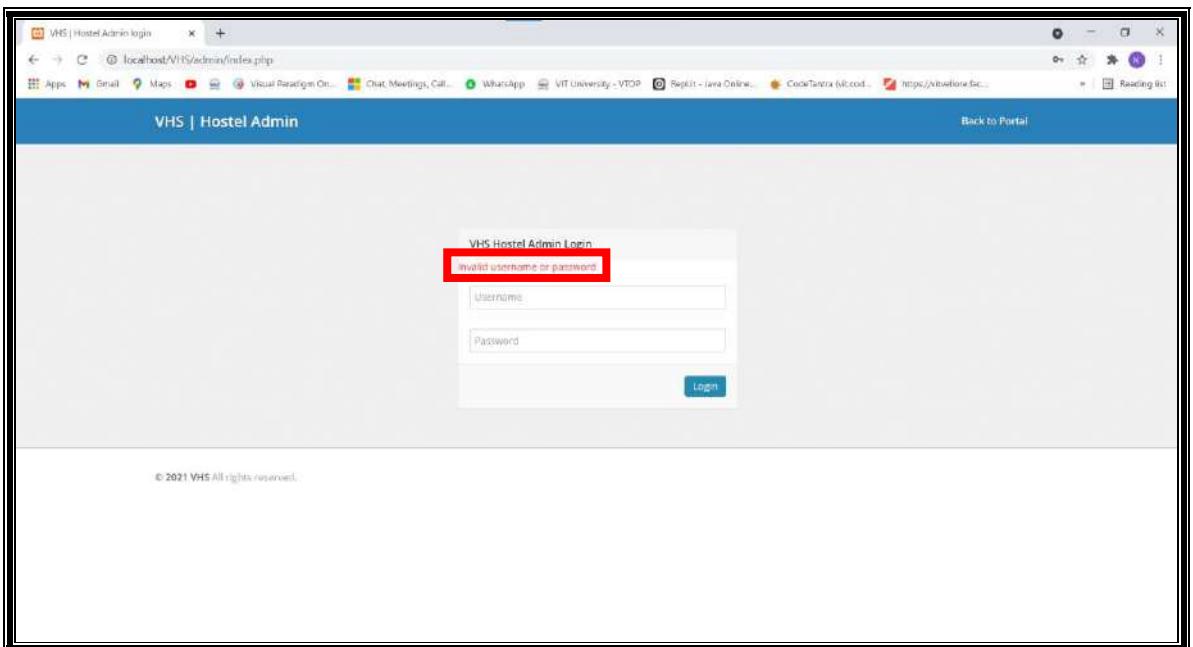
3.5.5.1 Present state of the System:



3.5.5.2 Test Input(s):



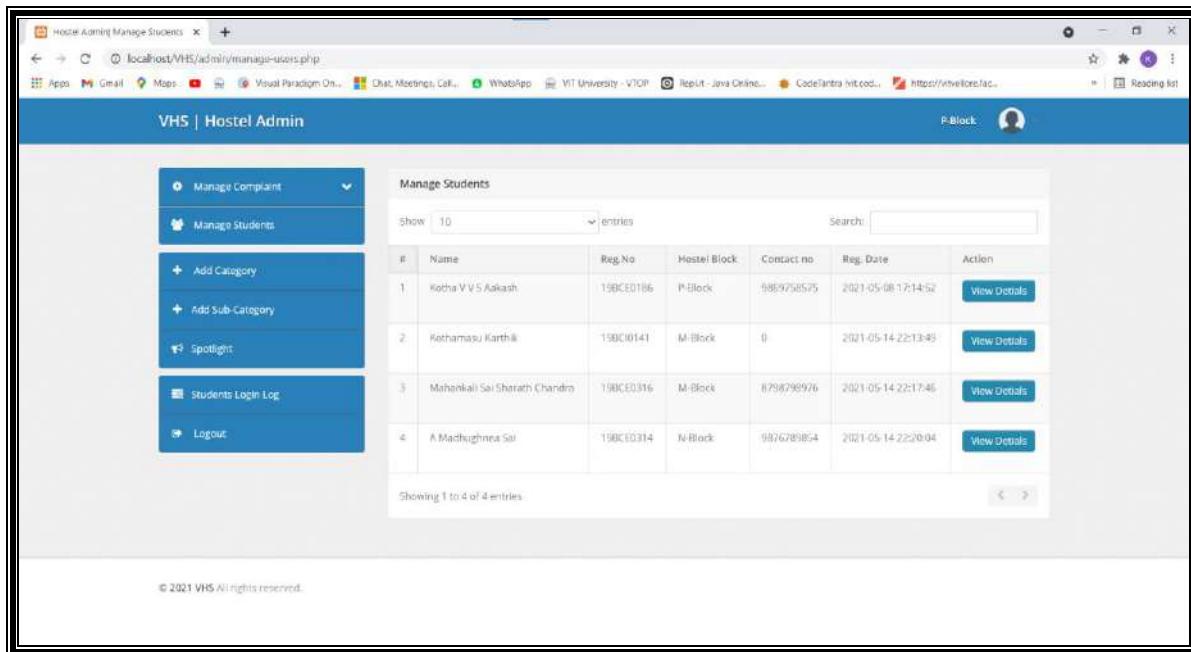
3.5.5.3 Output(s):



As the Expected Output is same as the Output we got, The Negative Test Case-5 (Hostel Admin Invalid Login Test) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.6.	Hostel Admin Invalid Student Search Test	Hostel Admin ‘Manage Students’ Page	Hostel Admin should be already logged in.	Hostel Admin input some invalid word in search box.	The System should display a msg- “No Results Found”.

3.5.6.1 Present state of the System:

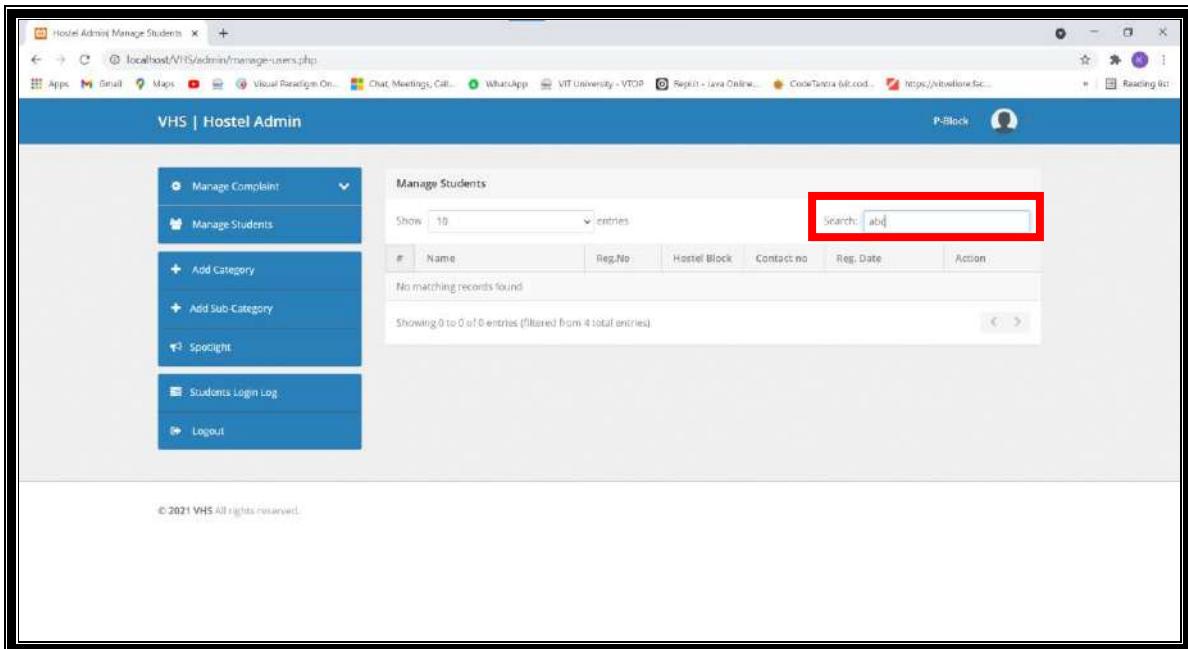


The screenshot shows a web browser window titled 'Hostel Admin Manage Students'. The URL is 'localhost/VHS/admin/manage-users.php'. The page has a blue header bar with the text 'VHS | Hostel Admin'. On the left, there is a sidebar menu with options: 'Manage Complaint' (selected), 'Manage Students' (highlighted in blue), 'Add Category', 'Add Sub-Category', 'Spotlight', 'Students Login Log', and 'Logout'. The main content area is titled 'Manage Students' and shows a table with 4 entries. The table columns are: #, Name, Reg. No, Hostel Block, Contact no, Reg. Date, and Action. The entries are:

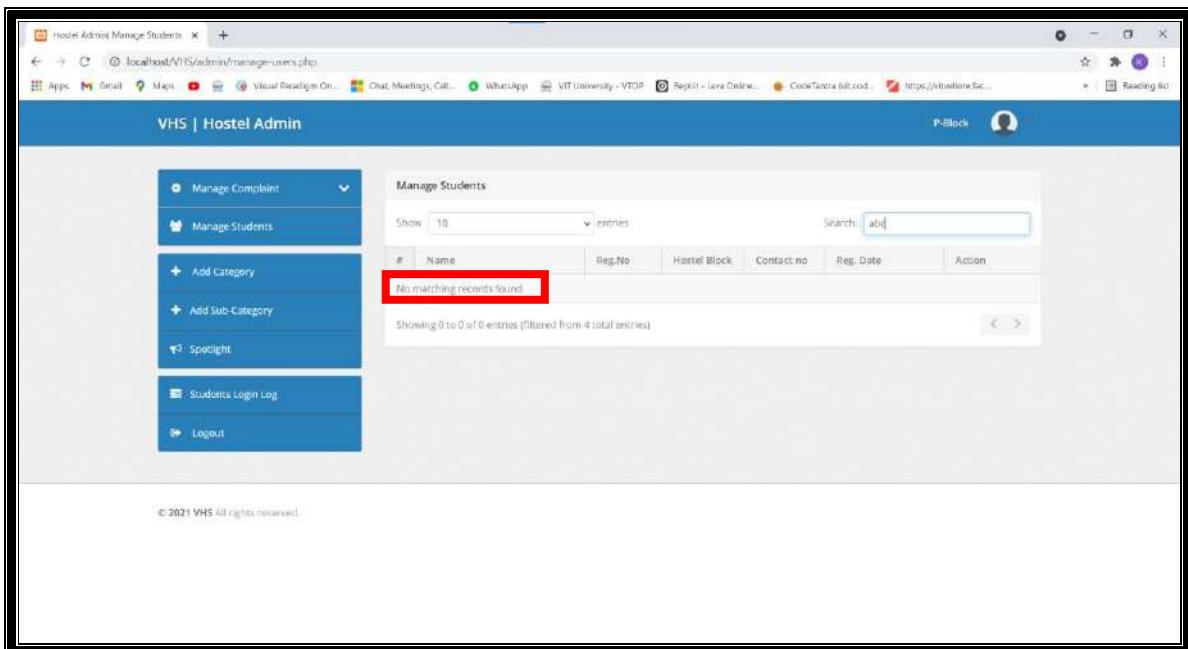
#	Name	Reg. No	Hostel Block	Contact no	Reg. Date	Action
1	Kotha V V S Aakash	19BCE0106	M-Block	9869758575	2021-05-08 17:14:52	<button>View Details</button>
2	Kethamasu Karthik	19BCE0141	M-Block	0	2021-05-14 22:13:49	<button>View Details</button>
3	Mahanalli Sai Sharath Chandro	19BCE0316	M-Block	8798299976	2021-05-14 22:17:46	<button>View Details</button>
4	A Madhugneha Sai	19BCE0314	N-Block	9876700054	2021-05-14 22:20:04	<button>View Details</button>

At the bottom of the page, it says 'Showing 1 to 4 of 4 entries.' and has navigation arrows. The footer of the page says '© 2021 VHS All rights reserved.'

3.5.6.2 Test Input(s):



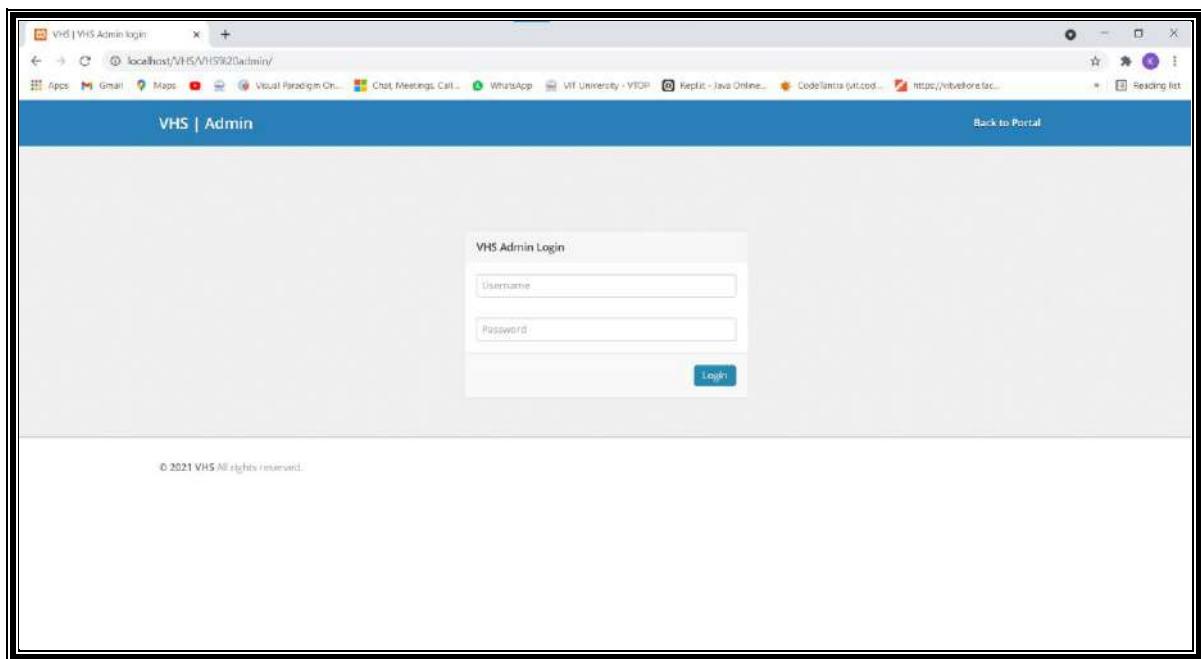
3.5.6.3 Output(s):



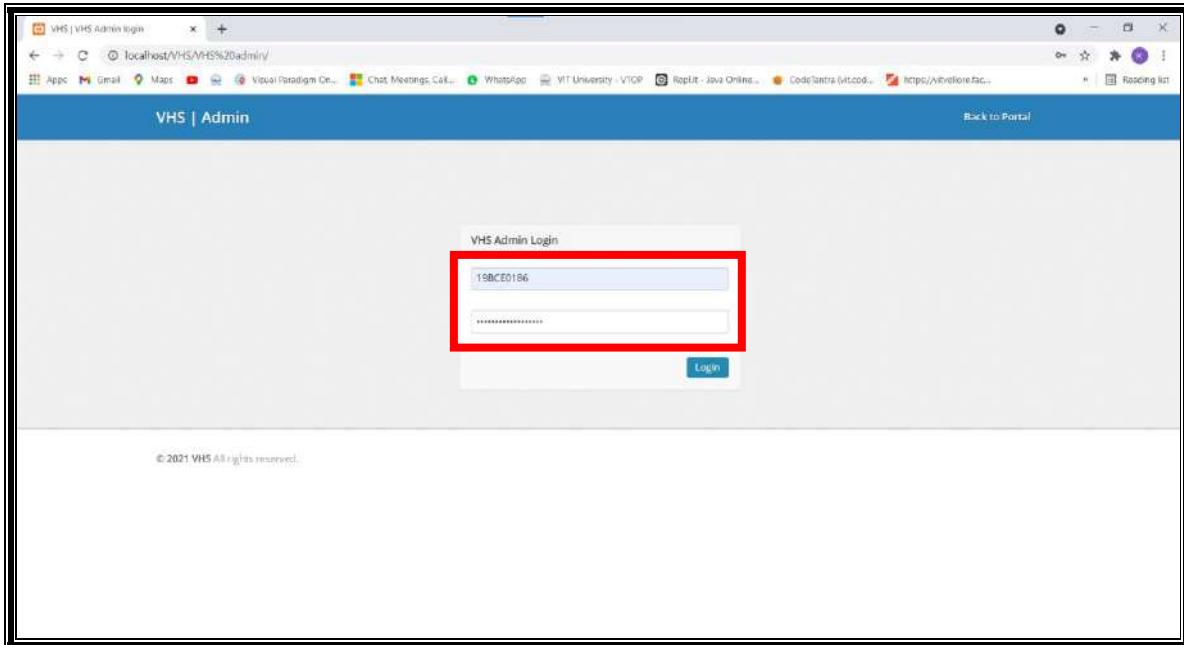
As the Expected Output is same as the Output we got, The Negative Test Case-6 (Hostel Admin Invalid Student Search Test) is **Passed!**

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.7.	VHS Admin Invalid Login Test	VHS Admin 'Login' Page	VHS Admin should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"

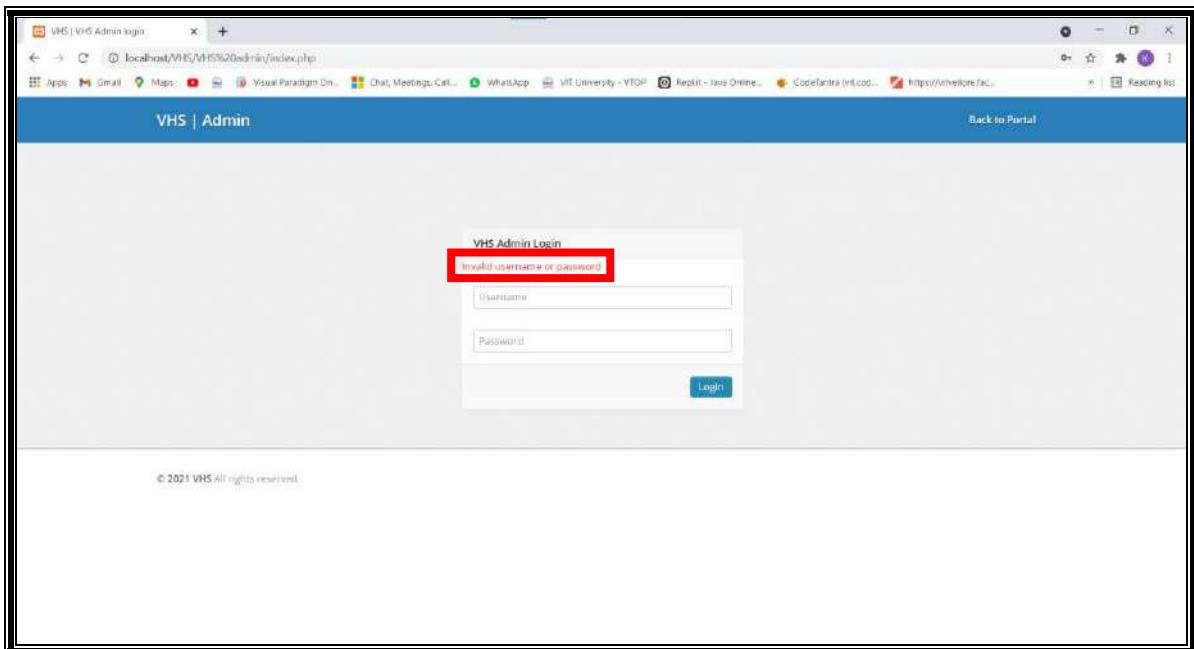
3.5.7.1 Present state of the System:



3.5.7.2 Test Input(s):



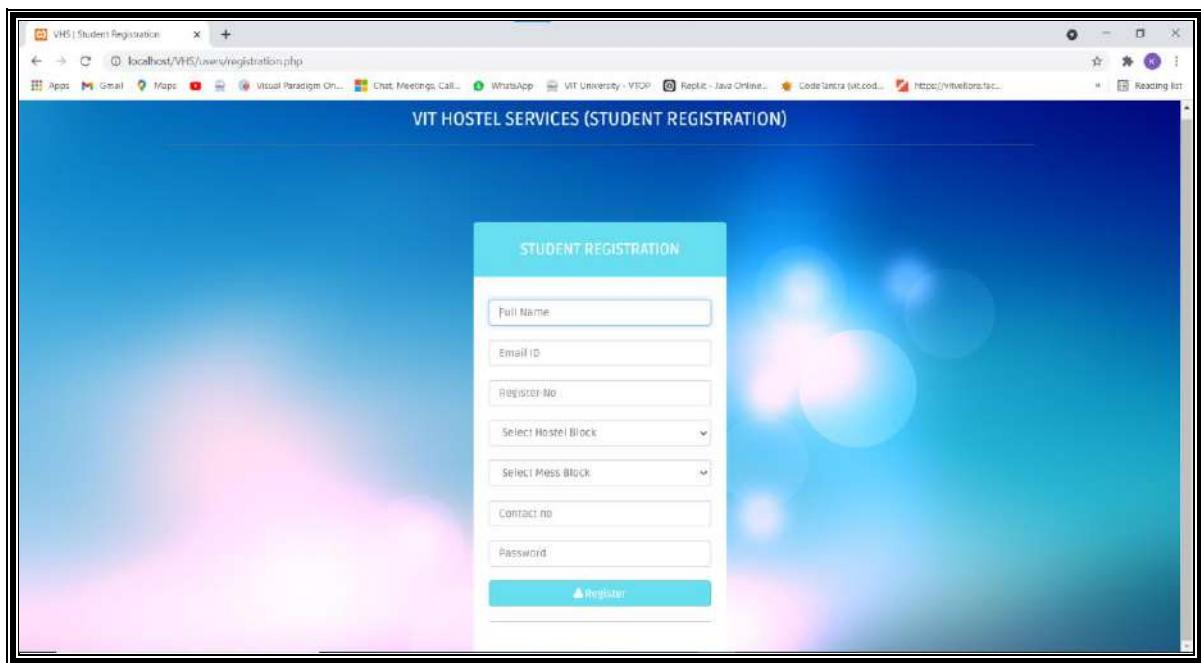
3.5.7.3 Output(s):



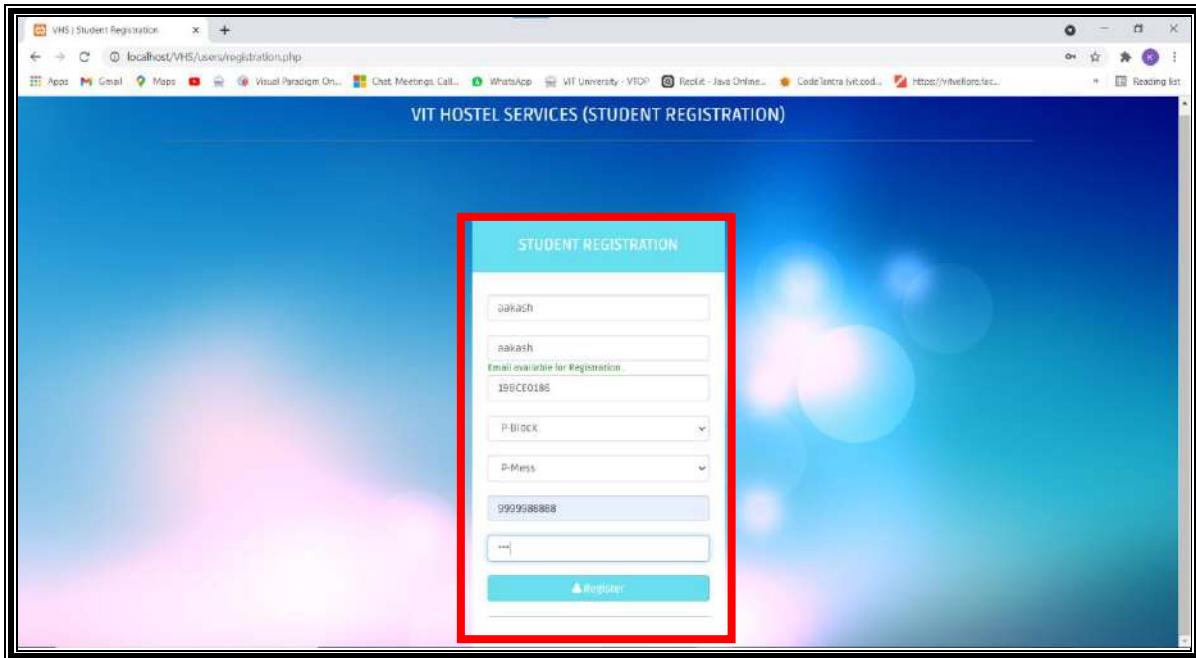
As the Expected Output is same as the Output we got, The Negative Test Case-7 (VHS Admin Invalid Login Test) is **Passed!**

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.8.	VHS Admin Invalid Student Registration Test 1	VHS Admin 'Student Registration' Page	VHS Admin should be already logged in.	VHS Admin input Invalid Mail-ID.	The System should display a msg- "Invalid Mail-ID".

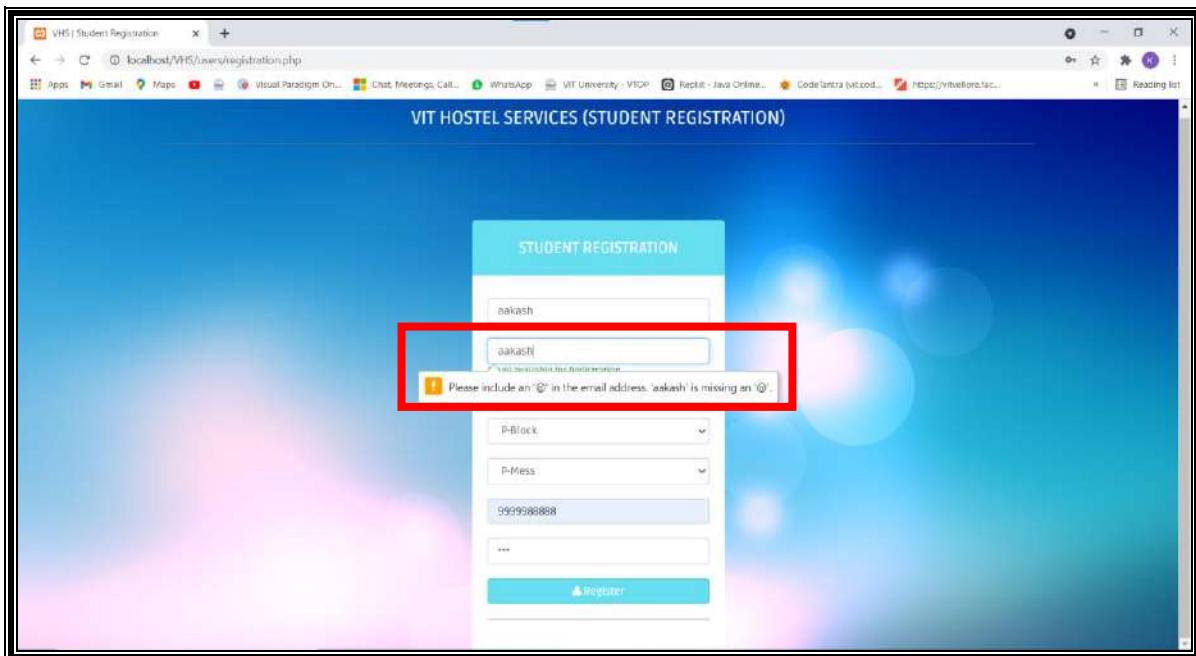
3.5.8.1 Present state of the System:



3.5.8.2 Test Input(s):



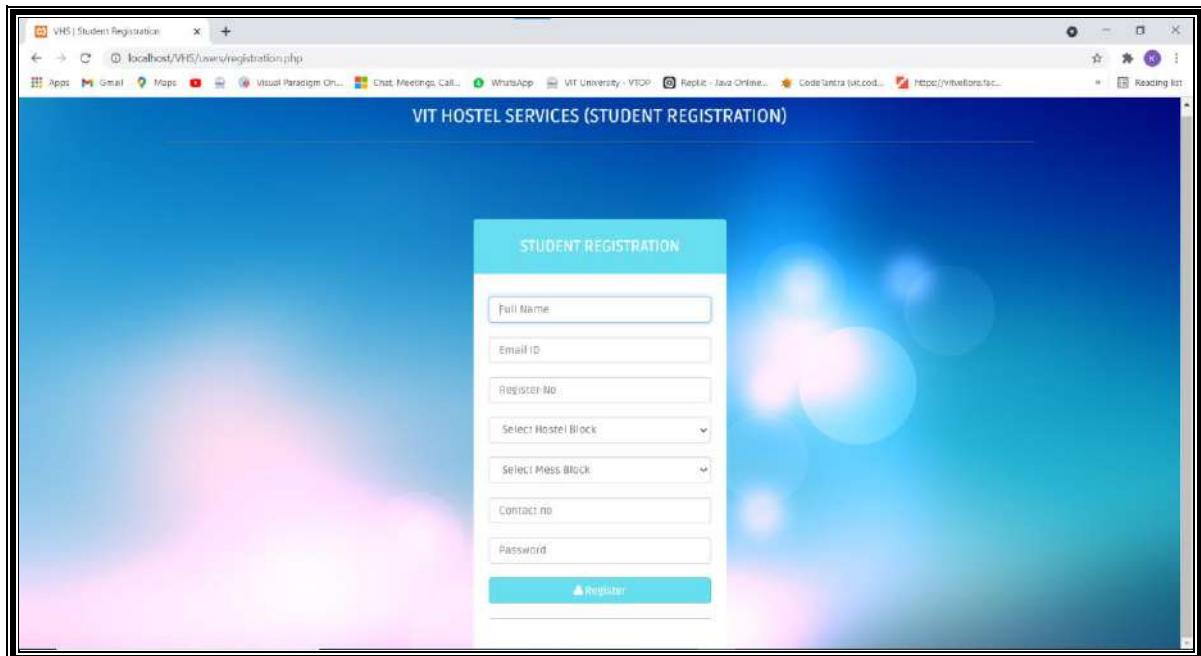
3.5.8.3 Output(s):



As the Expected Output is same as the Output we got, The Negative Test Case-8 (VHS Admin Invalid Student Registration Test 1) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.9.	VHS Admin Invalid Student Registration Test 2	VHS Admin 'Student Registration' Page	VHS Admin should be already logged in.	VHS Admin input already registered Mail-ID.	The System should display a msg- "Mail-ID Not Available".

3.5.9.1 Present state of the System:



3.5.9.2 Test Input(s):

A screenshot of a web browser displaying the "VIT HOSTEL SERVICES (STUDENT REGISTRATION)" page. The URL in the address bar is "localhost/VHS/user/registration.php". The page features a "STUDENT REGISTRATION" form with the following fields filled in:

- Name: aakash
- Email ID: kothamasu.karthik2019@vitstudent.ac.in
- Mobile Number: 19BCE0186
- Block: P-Block
- Mess: P-Mess
- Phone Number: 9999988888
- Address: ***

The entire registration form is highlighted with a red border.

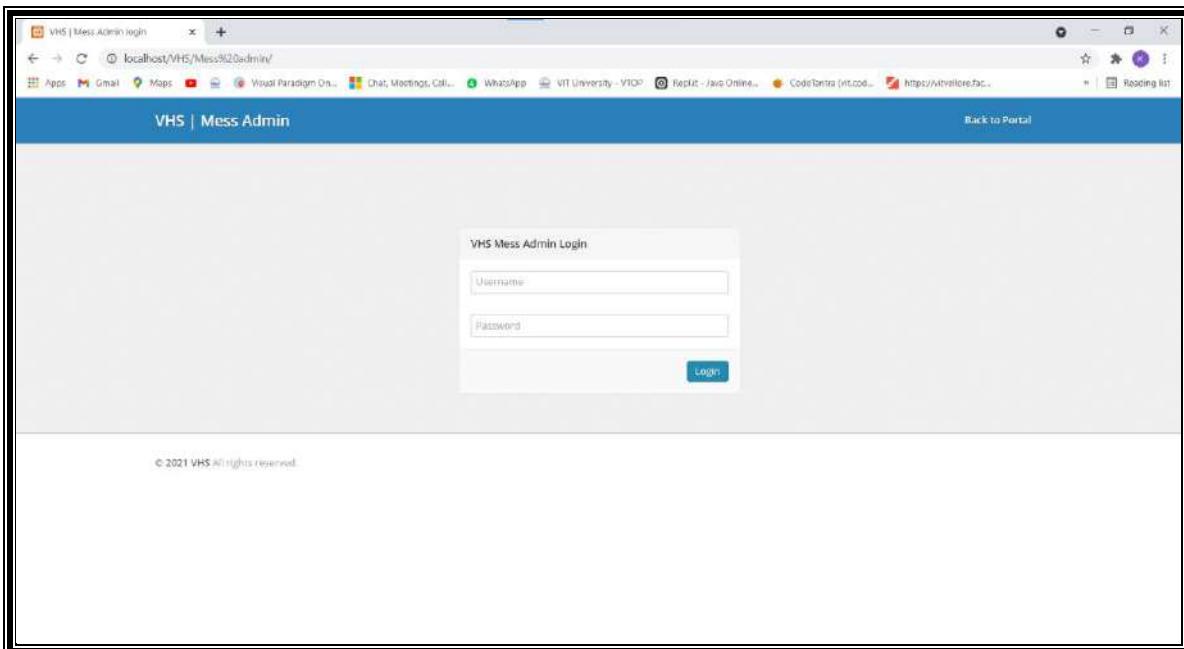
3.5.9.3 Output(s):

A screenshot of a web browser displaying the "VIT HOSTEL SERVICES (STUDENT REGISTRATION)" page. The URL in the address bar is "localhost/VHS/user/registration.php". The page shows the same "STUDENT REGISTRATION" form as the previous screenshot, but with an additional red box highlighting the "Mobile Number" field. The mobile number "19BCE0186" is displayed in this field. A red error message "Email already exists" is visible above the mobile number field, indicating a validation error.

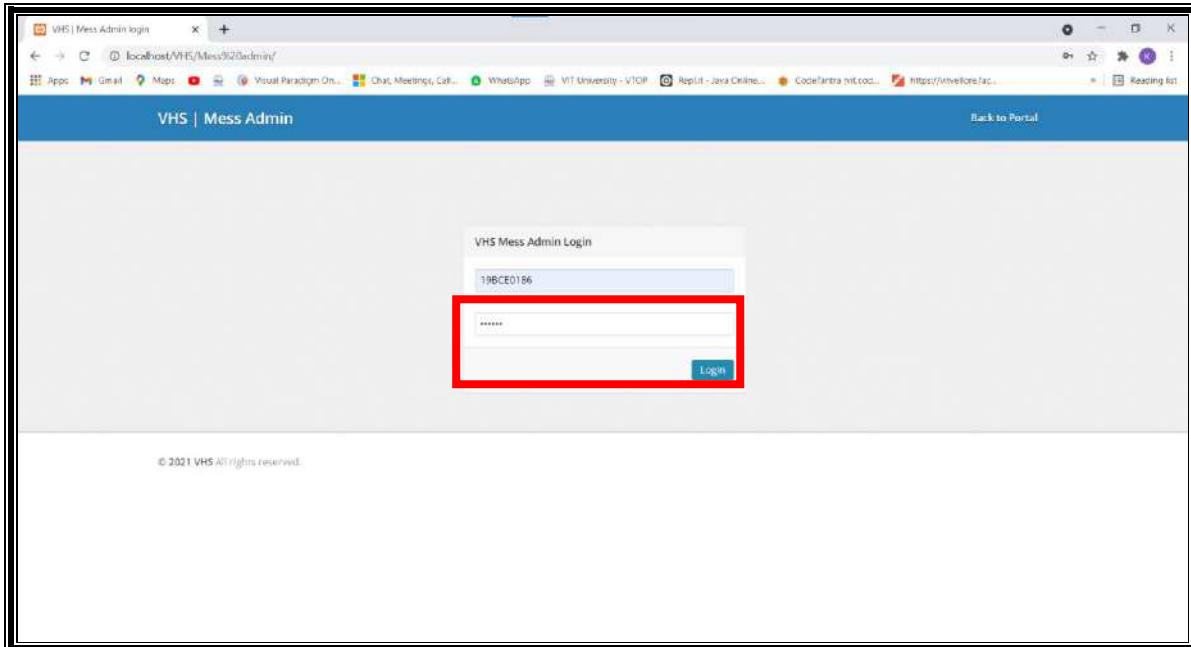
As the Expected Output is same as the Output we got, The Negative Test Case-9 (VHS Admin Invalid Student Registration Test 2) is Passed!

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.10.	Mess admin Invalid Login Test	Mess admin 'Login' Page	Mess admin should already have a registered account.	Enter an Invalid set of Student Registration number and Password, then click on 'Login' Button.	The System should display a msg- "Incorrect Username or Password"

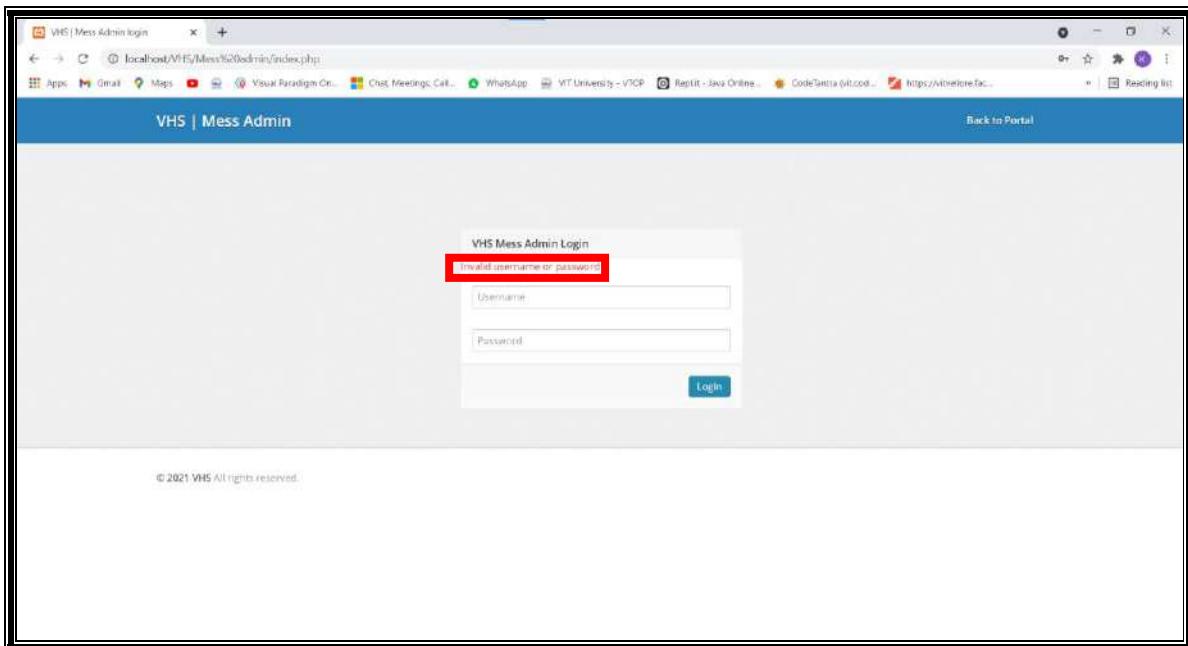
3.5.10.1 Present state of the System:



3.5.10.2 Test Input(s):



3.5.10.3 Output(s):



As the Expected Output is same as the Output we got, The Negative Test Case-10 (Mess admin Invalid Login Test) is **Passed!**

S. No	Test Case Title	Present state of the System	Test Prerequisite	Test Inputs	Expected Output
3.5.11.	Mess Admin Invalid Student Search Test	Mess Admin 'Manage Students' Page	Mess Admin should be already logged in.	Mess Admin input some invalid word in search box.	The System should display a msg- "No Results Found".

3.5.11.1 Present state of the System:

The screenshot shows the 'Manage Students' page of the VHS Mess Admin system. The page has a blue header bar with the title 'VHS | Mess Admin'. On the left, there is a sidebar with several options: 'Manage Complaint' (radio button selected), 'Manage Students' (button highlighted in blue), 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Manage Students' and shows a table with the following data:

#	Name	Reg.No	Hostel Block	Mess Block	Contact no	Reg. Date	Action
1	Kotha VVS Akash	19BCE0186	P-Block	P-Mess	9869758575	2021-05-08 17:14:52	<button>View Details</button>
2	Kothamasi Karthik	19BCD0141	M-Block	P-Mess	0	2021-05-14 22:13:49	<button>View Details</button>
3	Mahanoli Sai Sharath Chandra	19BCE0316	M-Block	M-Mess	8798798975	2021-05-14 22:17:46	<button>View Details</button>
4	A Madhuganeswari	19BCE0314	N-Block	N-Mess	9876789954	2021-05-14 22:20:04	<button>View Details</button>

At the bottom of the table, it says 'Showing 1 to 4 of 4 entries.' The footer of the page contains the text '© 2021 VHS All rights reserved.'

3.5.11.2 Test Input(s):

The screenshot shows a web browser window titled 'Mess Admin| Manage Students'. The URL is 'localhost/VHS/Mess92/admin/manage-users.php'. The page has a blue header bar with the title 'VHS | Mess Admin' and a user profile icon. On the left, there's a sidebar with options: 'Manage Complaint', 'Manage Students' (which is highlighted in blue), 'Add Category', 'Update Mess Timetable', 'Spotlight', and 'Logout'. The main content area is titled 'Manage Students' and includes a search bar with 'Search: abcd'. Below it is a table with columns: #, Name, Reg.No., Hostel Block, Mess Block, Contact no, Reg. Date, and Action. A red box highlights the 'Action' column. Below the table, a message says 'No matching records found'.

3.5.11.3 Output(s):

This screenshot is identical to the one above, showing the 'Manage Students' page with a search term 'abcd' and a resulting message 'No matching records found'.

As the Expected Output is same as the Output we got, The Negative Test Case-11 (Mess Admin Invalid Student Search Test) is Passed!

4. Evaluate the performance of the system in terms of load, stress, security, deployment, usability and regression testing.

4.1 Performance of the system in terms of Load Testing:

4.1.1 Load Testing Goals:

- To expose the defects of our website related to the buffer overflow, memory leak and mis-management of memory. The issues that would eventually come out as a result of load testing may include load balancing problems, bandwidth issues & the capacity of the existing system that we have designed.
- To determine the upper limit of our server like: hardware, database, network, etc. So that, our website can manage the anticipated load in future.
- To set the Service Level application (SLA) for our website.

4.1.2 Implementation of Load Testing to Our Website:

In order to check the student login issues by the Hostel/Mess Admin of an application, that could be flooded with 500 users at a time. Now, 500 users can register the requests (read, send, delete, forward, reply) in various ways.

For Example, if we take one request per user per hour, then it would be 500 requests per hour. By simulating 8 requests/users, we could load test the Hostel/Mess servers by occupying it with nearly 4000 requests/hour.

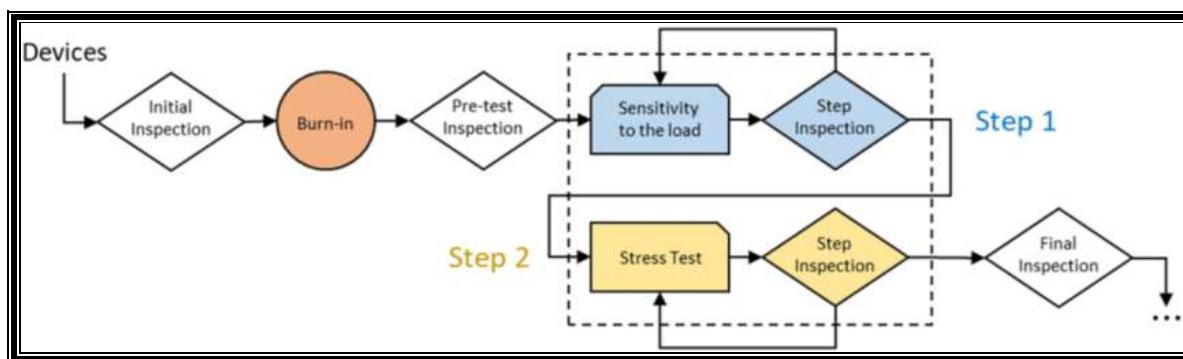
4.2 Performance of the system in terms of Stress Testing:

4.2.1 Stress Testing Goals:

- To determine the breaking points or safe usage limits
- To confirm the mathematical model which is accurate enough in predicting the breaking points (or) safe usage limits
- To confirm whether all the specifications are being met.
- To determine all the modes of failures in our website.
- To Test the stable operation of the website outside standard usage.

4.2.2 Implementation of Stress testing to our website:

- **Initial Inspection:** Here, we gather the student's data, analyse the data, define the stress test goals.
- **Pre-test inspection:** In this phase, we create the Stress testing automation scripts, generate the test data of all the requests sent to Hostel/Mess authorities by students for the stress scenarios.
- **Sensitivity to the load:** In this phase, we run the Stress testing automation scripts and store all the results for the requests sent to the Hostel/Mess authorities.
- **Stress test:** In this phase, we analyse the Stress Test results and identify the loopholes from the previous stages by Hostel/Mess authorities and rectify it accordingly.
- **Final inspection:** In this phase, Hostel/Mess authorities fine-tune the system, change configurations, and then optimize the code with goal such that the system meets the desired benchmark and resolve the issues faced by the students.



4.3 Performance of the system in terms of Security Testing:

4.3.1 Security Testing Goals:

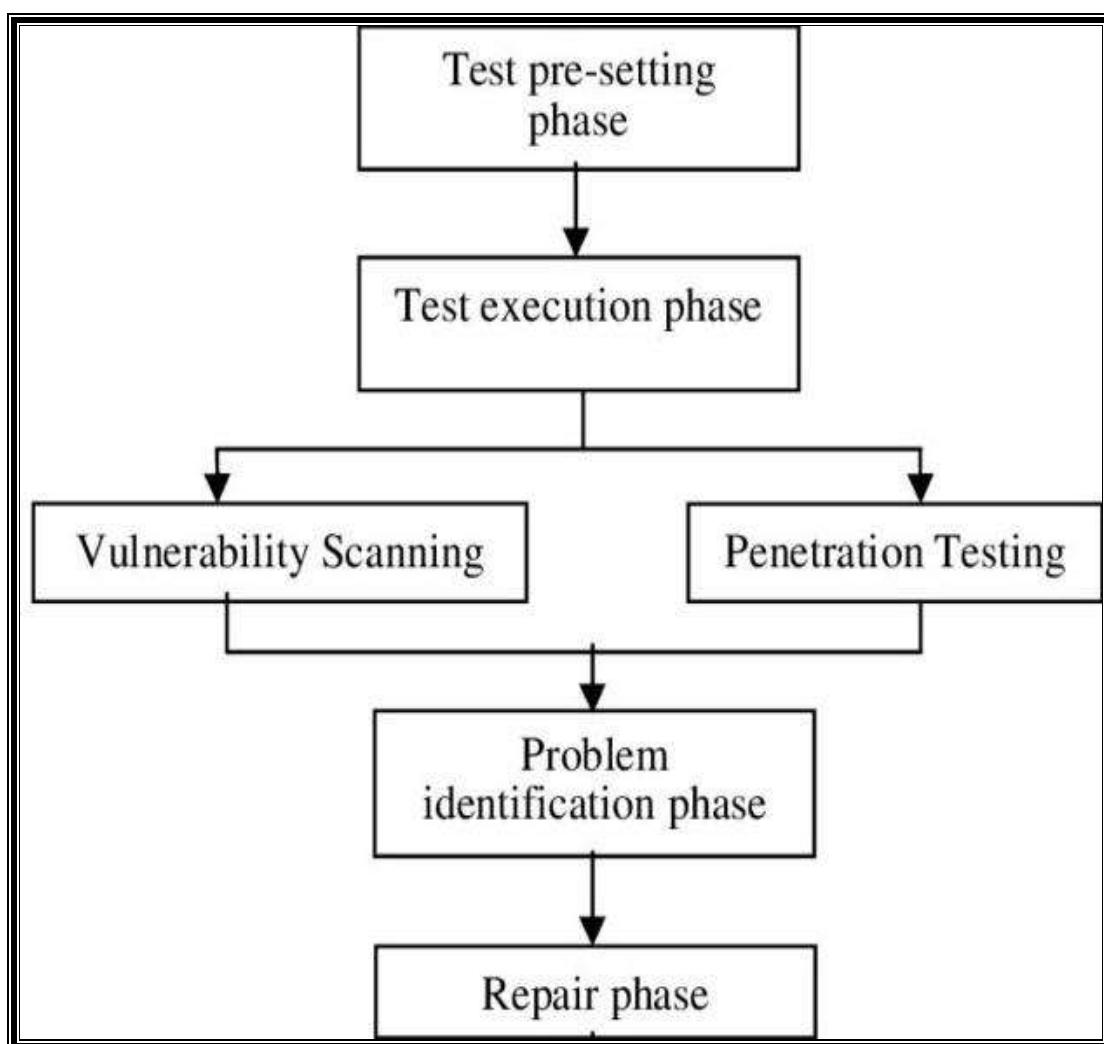
- To identify the threats in our system.
- To measure the potential vulnerabilities of our system.
- To help in detecting every possible security risk in our system.
- To help in fixing the security problems through coding to the website we have designed.

4.3.2 Implementation of Security testing to our website:

- **Understand Requirement:** The first step of performing Security testing is to understand the website and its desired security goals. Doing so helps us to consider all the security needs of the Students, Hostel/Mess Admin and avoid major vulnerabilities within the application. At the same time, we must recheck for any security need that the website failed to mention.
- **Gather Data and System Requirements:** To create the accurate tests for the application, we must gather information related to the website in the system. After that, we must note down requirements for developing the website, as well as specifications related to network operating system, the technology that is being used, as well as the hardware.
- **Create a Threat List and Prepare Test Plan Accordingly:** The next step of this process is to identify all the possible vulnerabilities & risks of our website and to write them down in a list. Using this list, we must prepare the threat profile to evaluate the critical nature of each the test. Following that, we must create a test plan that addresses all the vulnerabilities within our website.
- **Create a Traceability Matrix for Every Risk and Vulnerability:** A Traceability Matrix in our system is a software document that defines the relationship between student, Mess and Hostel logins and how each login affects others. To create an effective test plan, it is necessary to track each and every expected risk and vulnerability in our website. Creating a traceability matrix allows us to assess each and every risk in detail.
- **Decide Tools for Testing:** It's not always viable to use manual security testing in each and every case. This is why we need to incorporate automated testing to test

website efficiently and effectively. So, it's best to create a list of tools we will use in our testing.

- **Prepare for Security Tests Case Document:** This is the phase where we have to finalize the software security document. It's necessary to fill out this document accurately to address every risk or vulnerability within the system before we start executing the tests.
- **Execute Security Test Cases:** At this phase, we start executing all the test cases we have prepared before. The goal of this phase is to identify all the vulnerabilities we have planned to check, and then fix those tests.



4.4 Performance of the system in terms of Usability Testing:

4.4.1 Implementation of Usability testing to our website:

- **Planning:** During this phase, the goals of the usability test are determined, We need to determine the critical functionalities and objectives of our website, And then we need to assign tasks to the testers, who exercise these critical functionalities. During this phase, the usability testing method, number & test report formats are also determined.
- **Usability Testing:** During this phase, usability tests are executed actually.
- **Data Analysis:** During this phase, Data from the usability tests is thoroughly analysed to derive meaningful inferences and give the actionable recommendations to improve the overall usability of our website.
- **Reporting:** During this phase, Findings of the usability test are shared with concerned students and hostel, mess admins.



4.5 Performance of the system in terms of Regression Testing:

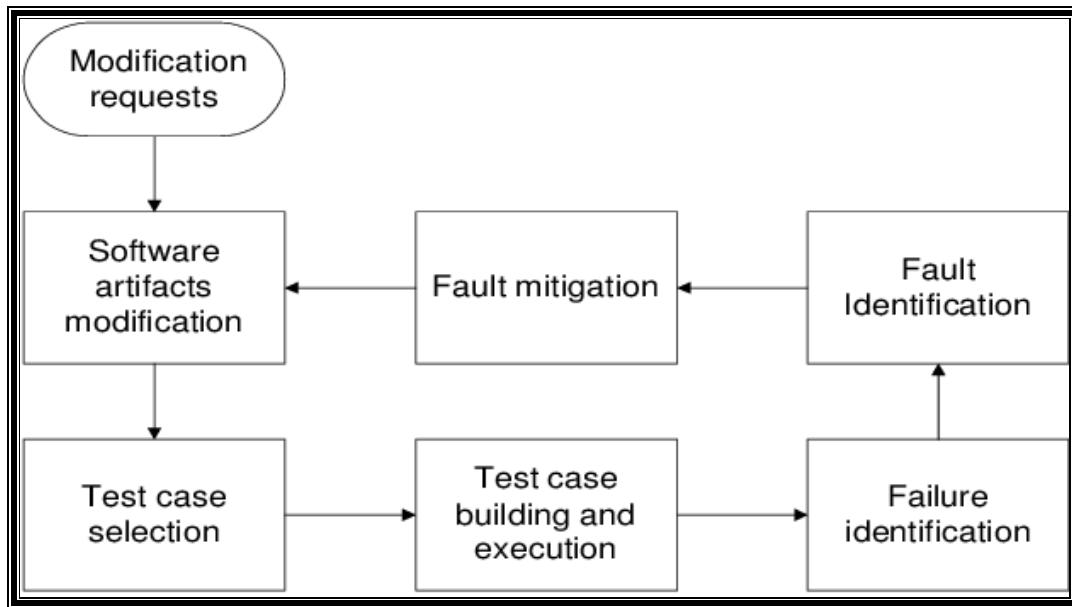
4.5.1 Regression Testing Goals:

- Regression Testing is a technique for software testing where we will re-execute the previous tests to find whether a previously affected functionality is still working as it should work. In this way, we can make sure that introducing new changes doesn't introduce any new bugs to the system.

4.5.2 Implementation of Regression testing to our website:

- Enabling testers to set up the test cases from day one itself.
- Enabling anyone to set up, maintain and to run tests.
- Providing with a good overview of our regression test suite.
- Allowing everyone to work together on the website,
- Enabling all the testers to set up and understand the test cases.

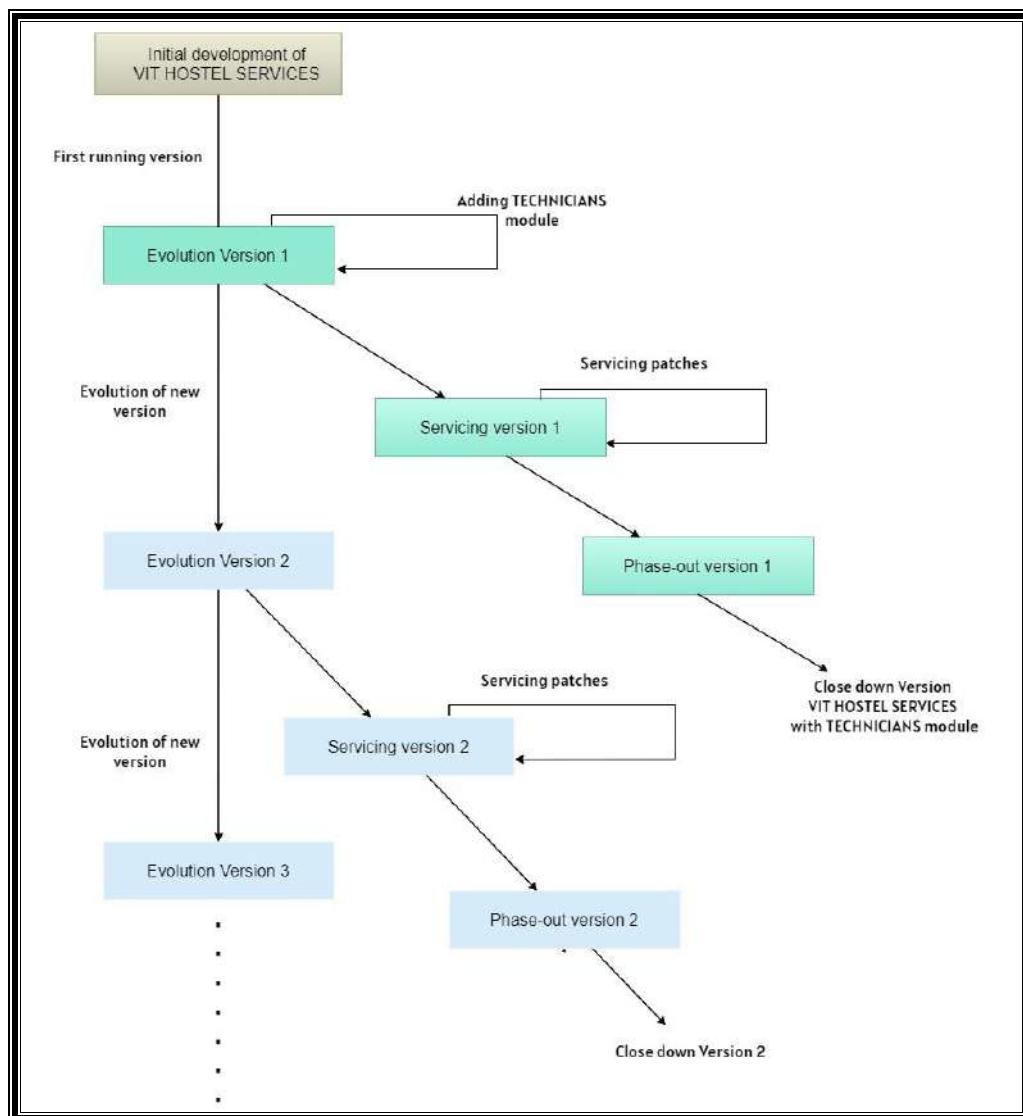
- Capturing why test cases may fail in the website.
- Keeping data and processes in our website safe and secure.



Conclusion:

Hence, we have made the website in very compatible and user-friendly way with an attractive interface. This project - “VIT HOSTEL SERVICES” is an application software which it is very helpful for the students who wants to access the services provided in the hostel without any manual process there by saving lot of time and effort. The project we have done can help to save time in many aspects and it will be much useful for students who are in a need to fix the problems at a faster rate. With this project, a less time-consuming way to register complaints in an organized and systematic manner has been made. We have successfully implemented all the 4 planned modules and all the functionalities has been successfully implemented in conformance to the SRS.

Future Scope:



In Future, Technician module can be added, by which a technician (electrician, plumber, etc.,) can log into the system and can solve the complaints raised by the students directly when they are redirected to him by the respective Hostel/Mess Admin.