



**ELITTE INSTITUTE
OF
ENGINEERING & MANAGEMENT**

**PROJECT ON
WEB BASED
MAINTENANCE MANNAGMENT SYSTEM**

by

COMPUTER SCIENCE & TECHNOLOGY

DEPARTMENT

WEB BASED MAINTENANCE MANAGEMENT SYSTEM

A PROJECT REPORT

Submitted by

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In partial fulfillment for the award of the diploma
Elite institute of EnginEering and ManagEMent

*[ISO Certified 9001 : 2008, Affiliated to W.B.S.C.T.E, Approved by A.I.C.T.E]
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DEPARTMENT OF COMPUTER SCIENCE & TECHNOLOGY

CERTIFICATE

This is to recognize and certify that **Subham Khan** (Registration No- **D131490133**), **Animesh Dutta Chowdhury** (Registration No- **D121359613**), **Sourav Mitra**(Registration No- **D121359602**), **Md. Sohel Rana**(Registration No- **D131490124**), **Somnath Rakshit**(Registration No- **D131490132**), **Swasti Sundar Chanda**(Registration No- **D131490127**), **Pratyush Bir** (Registration No- **D121359564**), **Dilip Majhi**(Registration No- **D121359599**), **Subhankar Gayen** (Registration No- **D121359571**), **Somnath Banik**(Registration No- **D121359612**), **Shilpi Debnath** (Registration No- **D121359578**), **Pampa Sarkar** (Registration No- **D121359586**) Students of Diploma in Computer Science and Technology of PART III SEM II of Elite Institute of Engineering and Management, Session 2012-2015, have successfully completed their dissertation “**WEB BASED MAINTENANCE MANAGEMENT SYSTEM**”, under the guidance and supervision of the undersigned, which is submitted for the partial fulfillment of the degree of Diploma in Computer Science and Technology

The project, that has span through out their final year, has got the expected involvement from their and I personally believe that the kind of devotion, sincerity and regularity they have shown, will add value to their merit.

I wish them all the success in future.

Ms. Srabanti Chakraborty
(Project Guide)
Lecturer in C.S.T Department
Elite Institute of Engineering and Management

Mr. Sumit Samanta
Assistant Professor &
Head of the Department of
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Elite Institute of Engineering and Management

Prof. Md. Ismail
Mentor Principal
Elite Institute of Engineering and Management

Prof. Anjan Kar
Principal
Elite Institute of Engineering and Management

SCOPE OF PROJECT

- ✓ Less work outages
- ✓ Better accountability
- ✓ Less overtime
- ✓ Keep the Lab materials information

ACKNOWLEDGEMENT

I deem it pleasure to acknowledge my deep sense of gratitude to a number of people contributed to this effort of mine. I will try my best to mention all them here appropriately.

First of all I'd like to thank our Hon'ble principal sir Prof. Anjan Kar, Mentor Principal sir Prof. Md. Ismail, Hon'ble Director sir Mr. Bazlul Haque, Hon'ble secretary sir Mr. Sajal Ghosh and Hon'ble sir Mr. Sankar Roy for their kind cooperation and giving this opportunity to complete the project with proper infra structure..

I gratefully acknowledge the resourceful guidance, active supervision and constant encouragement of our project guide Ms. Srabanti Chkraborty, Lecturer of Computer Science and Technology Department, Elitte Institute of Engineering and Management, who despite of her other commitments could make time to help me in preparing this project . I do convey my sincere thanks and gratitude to our project guide.

I also take the opportunity to express my grateful thanks to our respected sir Mr. Durga Sankar Das, Web Manager EIEM for his sincere and active cooperation to complete this project

I am also greatly indebted to our respected sir Mr. Biswajit Dutta, Manager Logistic and Maintenance Dept for giving his valuable suggestions to complete this project in time.

I also wish to reciprocate in full measure the kindness shown by all my respective departmental faculties and our respected H.O.D.

I would like to thank all my project team members for their cooperation, participation and suggestion throughout the project.

I would also like to thank all the GROUP D and HOUSE KEEPING staffs of Lab1 and Lab2 for their cooperation and support throughout the project.

Finally I want to pay my heartiest regard and thank to all my family members and co-friends, who have encouraged and inspired us in successfully completing this project.

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ABSTRACT

The need for a concrete system, whether manual or automated, is very important for the systematic approach to handle the various information and record of materials.

The project Web Based Maintenance Management System is an automation system of the materials concerned with locating, maintaining, updating management of materials of laboratory of an organization.

The Web Based Maintenance Management System may be used to automate lab equipment maintenance. Such a system contains the details of materials, there location, list of fault orders and then prompts vendors to pick the necessary items and provides them after repairing.

The project coverage area is the locating and monitoring all the materials of laboratory then sending them for repairing if necessary. This system also can generate reports.

The Software and Hardware requirements of the project:

- ❖ Intel Pentium III 833MHz
- ❖ 128 SD-RAM.
- ❖ Mozilla Firefox / Opera / Google Chrome / IE 9.0 or Above
- ❖ MY SQL

Main objectives of the Web Based Maintenance Management System are:

Department in-charge side:

- ❖ Department in charge can register all materials location wise.
- ❖ Department in charge can register the fault from any location they will get a fault ticket number.
- ❖ Department in charge can use the fault ticket and check the current status of the fault
- ❖ Department in charge can generate the time based maintenance report.
- ❖ Department in charge can check the current status of material at any time.

Maintenance Manager side:

- ❖ Maintenance Manager can be informed about the fault of any material of any department very easily.
- ❖ Maintenance Manager can monitor all the fault status.
- ❖ Maintenance Manager can generate monthly or weekly report for all departments.
- ❖ Maintenance Manager can generate the list of materials under the repair or breakdown.
- ❖ Maintenance Manager can check the current status of material department wise at any time.

INTRODUCTION

Web Based Maintenance Management System is a process for managing, locating repairing, updating the materials of a laboratory. In common usage, the term may also refer to just [the software components](#).

The **Web Based Maintenance Management System** may be used to automate lab equipment maintenance.. Such a system contains a list of fault orders and then prompts vendors to pick the necessary items and provides them after repairing.

REQUIREMENT SPECIFICATIONS **OF PROJECT REPORT**

Hardware Requirement:

- ☐ Processor: - Intel Pentium III 833MHz
- ☐ RAM: - 128 SD-RAM.
- ☐ Hard Disk: -20 GB or above.
- ☐ Monitor: - 14" VGA.
 - Mouse.
 - Printer: - For print report or Bill.

Software Requirement:

- Operating system: - Windows 98/2002/NT.
- Front End: - PHP. (Professional Edition.)
- Back end: - MY SQL

OBJECTIVE

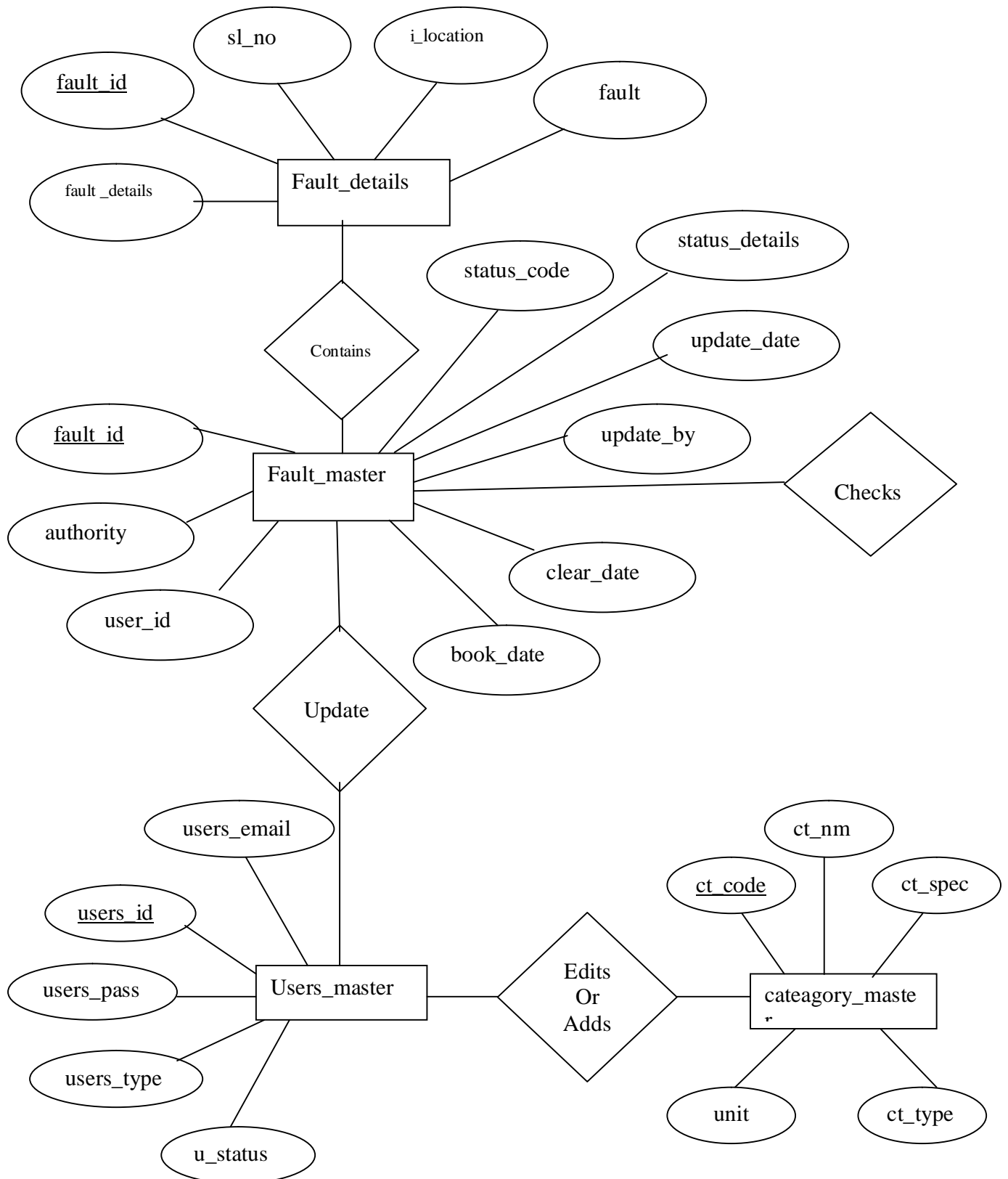
Department in-charge side

- ❖ Department in charge can register all materials location wise.
- ❖ Department in charge can register the fault from any location they will get a fault ticket number.
- ❖ Department in charge can use the fault ticket and check the current status of the fault
- ❖ Department in charge can generate the time based maintenance report.
- ❖ Department in charge can check the current status of material at any time.

Maintenance Manager side:

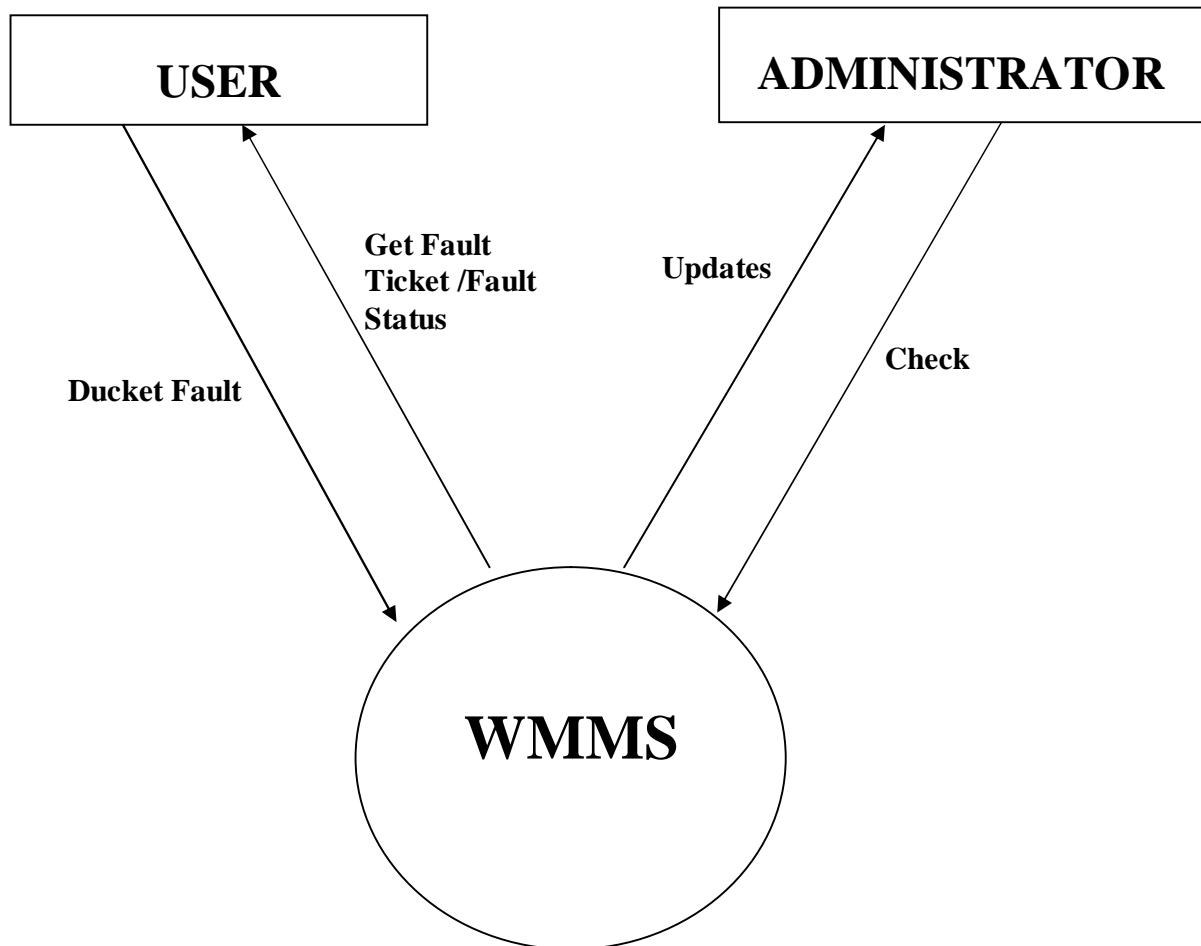
- ❖ Maintenance Manager can be informed about the fault of any material of any department very easily.
- ❖ Maintenance Manager can monitor all the fault status.
- ❖ Maintenance Manager can generate monthly or weekly report for all departments.
- ❖ Maintenance Manager can generate the list of materials under the repair or breakdown.
- ❖ Maintenance Manager can check the current status of material department wise at any time.

ENTITY RELETIONSHIP DIAGRAM

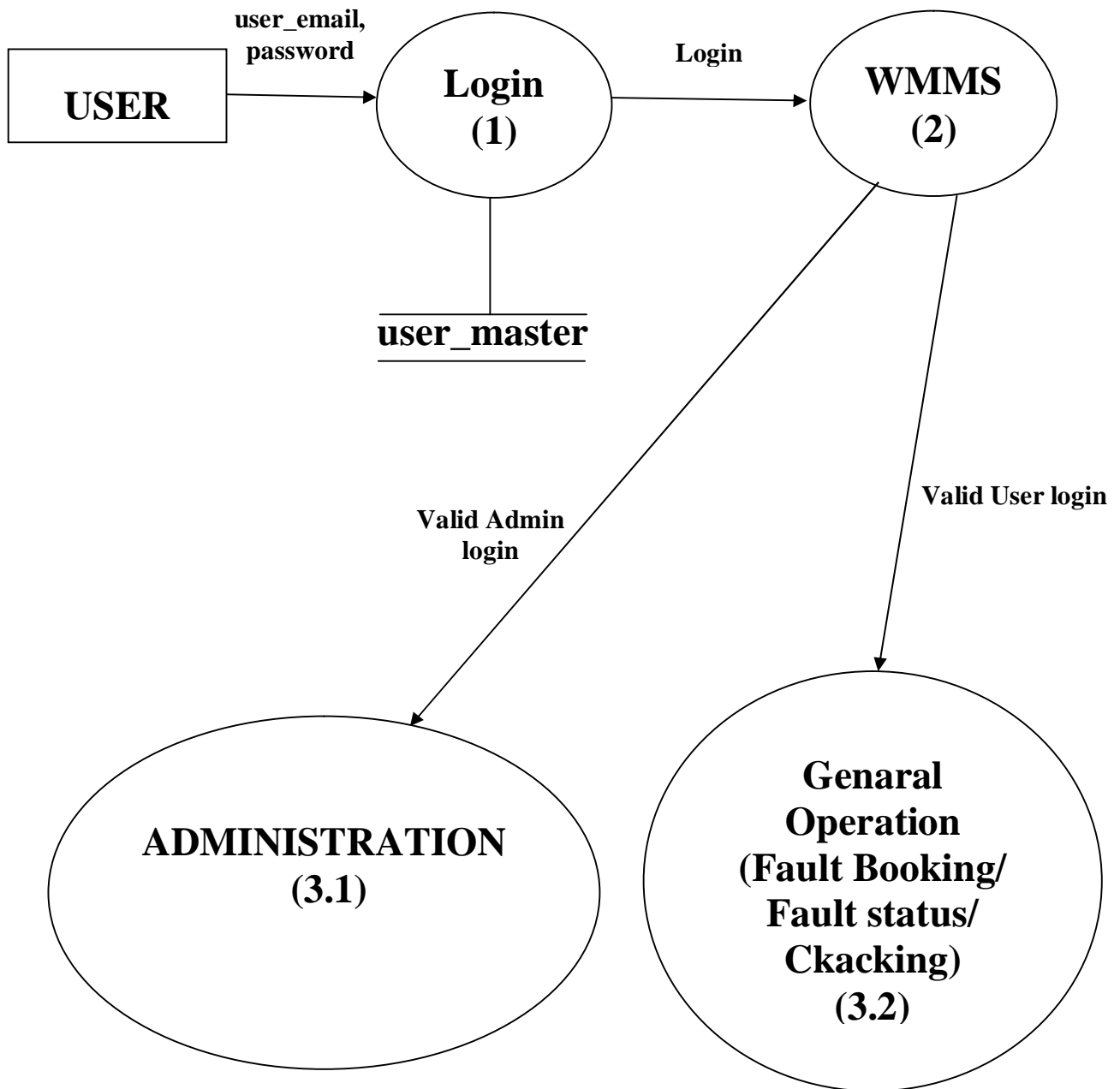


DATA FLOW DIAGRAM

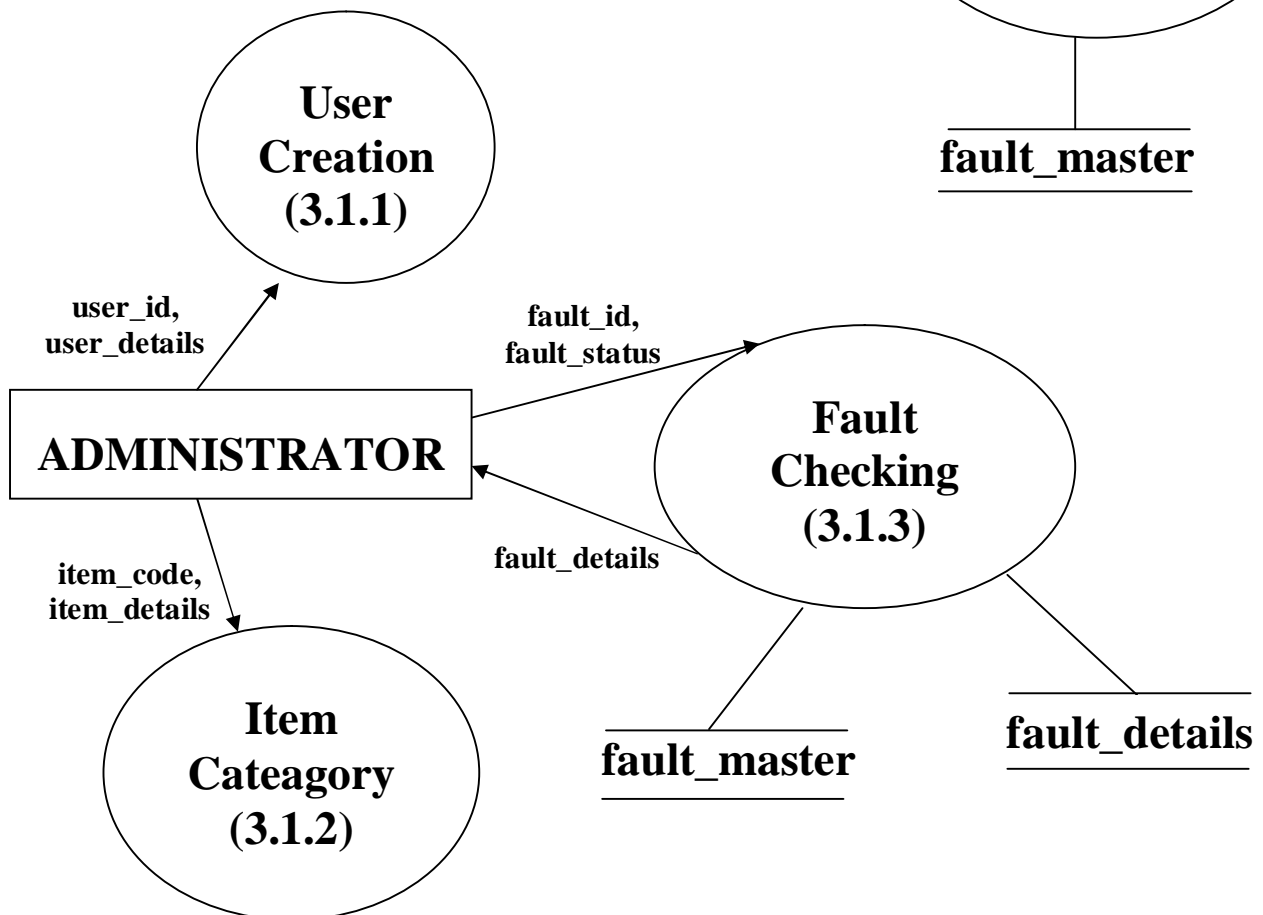
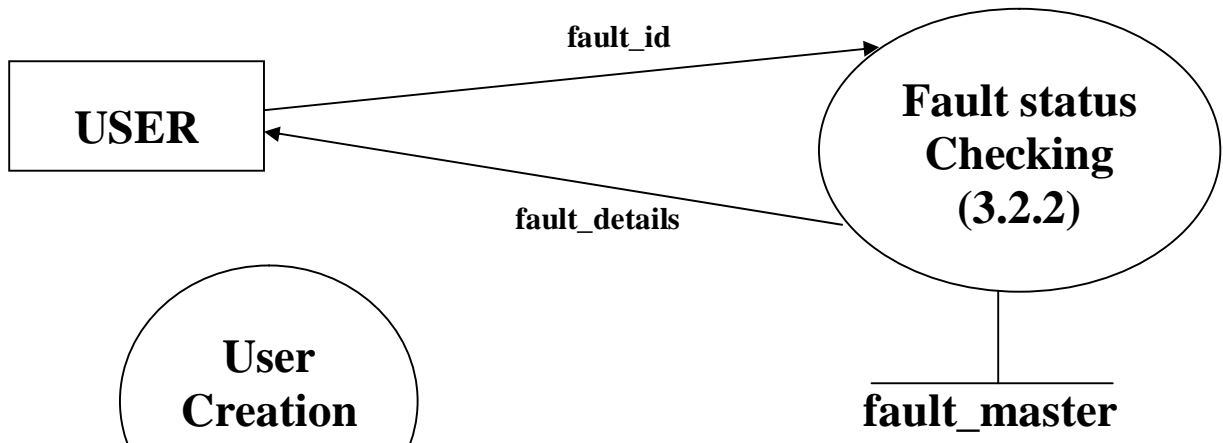
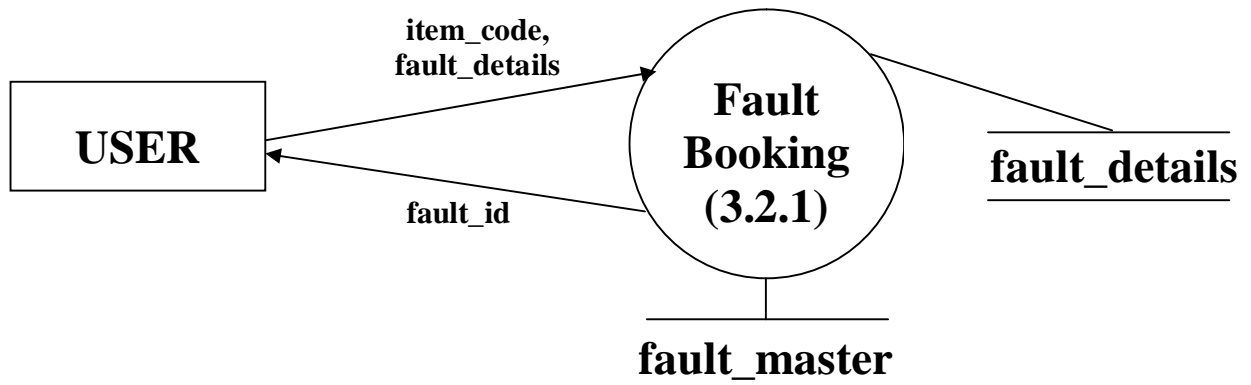
CONTEXT FREE DIAGRAM (0 Level DFD)



1st Level DFD



2nd Level DFD



DATA DICTIONARY

DATA DICTIONARY

1. Store details about "users_master"

Field Name	Field Type	Constraint	Remarks
users_id	int(11)	Primary Key	Stores id of user
users_email	VARCHAR(255)		Stores email of user
users_password	VARCHAR(255)		Stores password of user
users_type	VARCHAR(255)		Stores type of user
u_status	tinyint(1)		Stores status of user

2. Store details about "register_user_master"

Field Name	Field Type	Constraint	Remarks
users_id	int(11)	Primary Key	Stores id of users
first_name	VARCHAR(255)		Stores first name of register user
last_name	VARCHAR(255)		Stores last name of register user
u_dept	VARCHAR(255)		Stores department name of register user
last_log_in	VARCHAR(255)		Stores last login time of register user
address	VARCHAR(255)		Stores address of register user
sex	VARCHAR(255)		Stores sex of register user
date_of_birth	date		Stores date of birth of register user
phon_no	int(10)		Stores phone no of register user
profile_pic	VARCHAR(255)		Stores profile image location of register user

3. Store details about "cateagory_master"

Field Name	Field Type	Constraint	Remarks
ct_code	VARCHAR(255)	Primary Key	Stores code of Category
ct_nm	VARCHAR(255)		Stores name of Category
ct_specification	VARCHAR(255)		Stores specification of Category
ct_type	VARCHAR(255)		Stores type of Category
unit	VARCHAR(255)		Stores unit of Category

4. Store details about "fault_master"

Field Name	Field Type	Constraint	Remarks
fault_id	int(11)	Primary Key	Stores id of fault item
status_code	VARCHAR(255)		Stores status code of fault item
status_details	VARCHAR(255)		Stores status details of fault item
update_date	VARCHAR(20)		Stores update date of fault
authority	VARCHAR(255)		Stores authority name of fault
update_by	VARCHAR(255)		Stores updater name of fault
user_id	int(11)		Stores id of user
book_date	VARCHAR(20)		Stores book date of fault
clear_date	VARCHAR(20)		Stores clear date of fault

5. Store details about "fault_details"

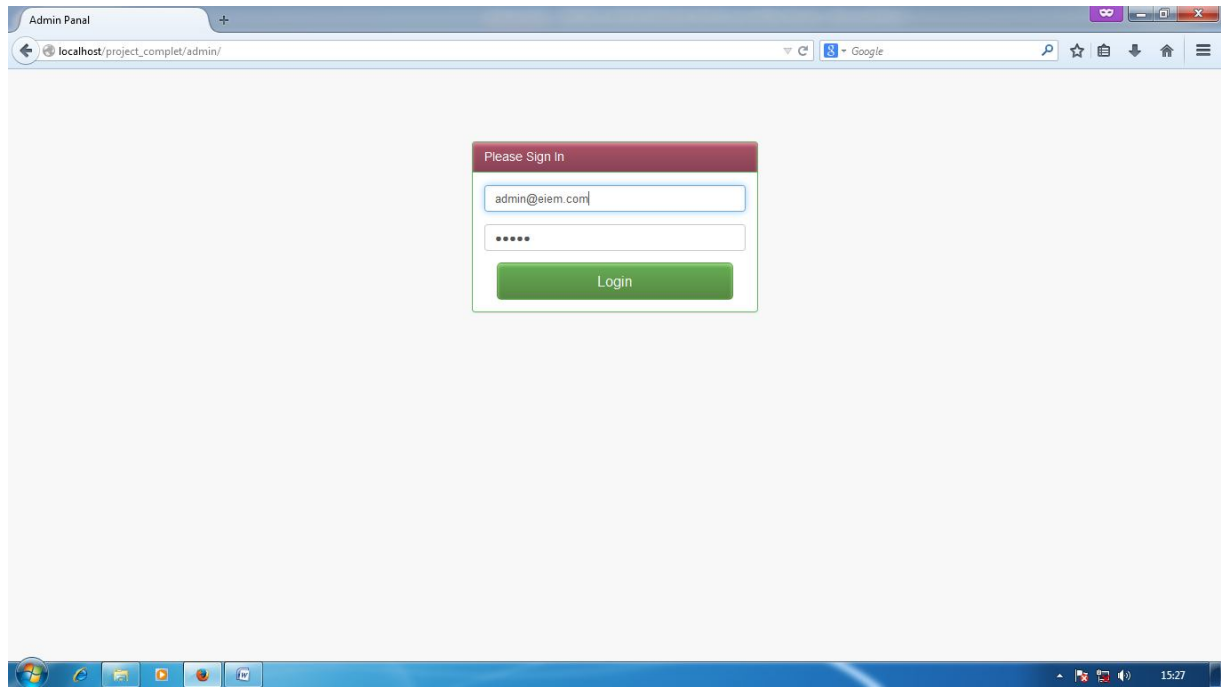
Field Name	Field Type	Constraint	Remarks
fault_id	int(11)	Primary Key	Stores id of fault item
sl_no	VARCHAR(255)		Stores serial number of fault item
i_location	VARCHAR(255)		Stores location of fault item
fault	VARCHAR(255)		Stores topic of fault item
fault_details	VARCHAR(255)		Stores details of fault item

6. Store details about "repair_master"

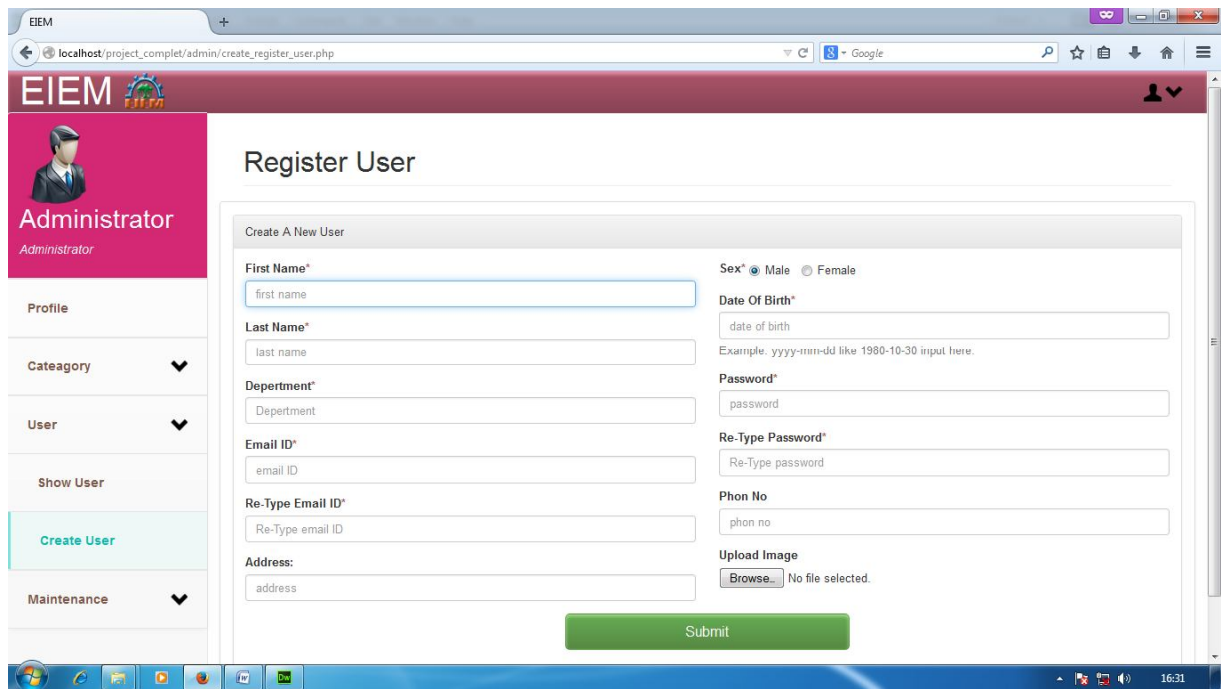
Field Name	Field Type	Constraint	Remarks
status_code	VARCHAR(255)		Stores status code of repair
status_de	VARCHAR(255)		Stores status details of repair

SCREEN SHOTS

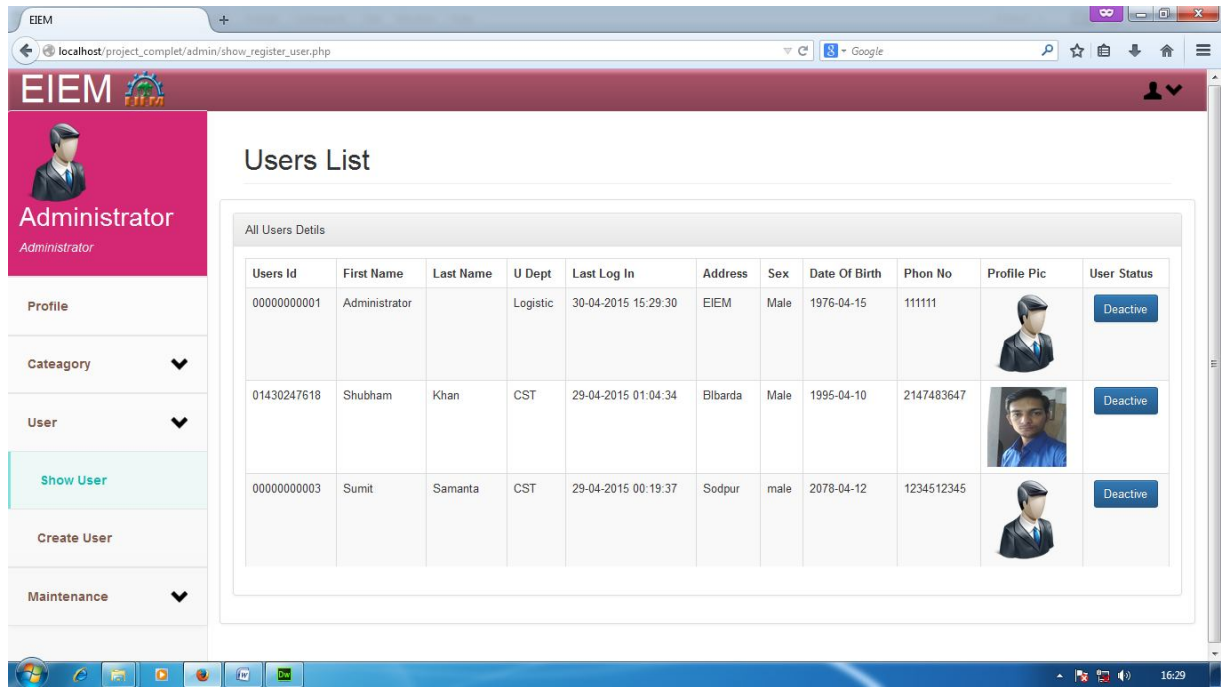
SCREEN SHOT OF LOGIN PAGE:






SCREEN SHOT OF CREATE A NEW USER:



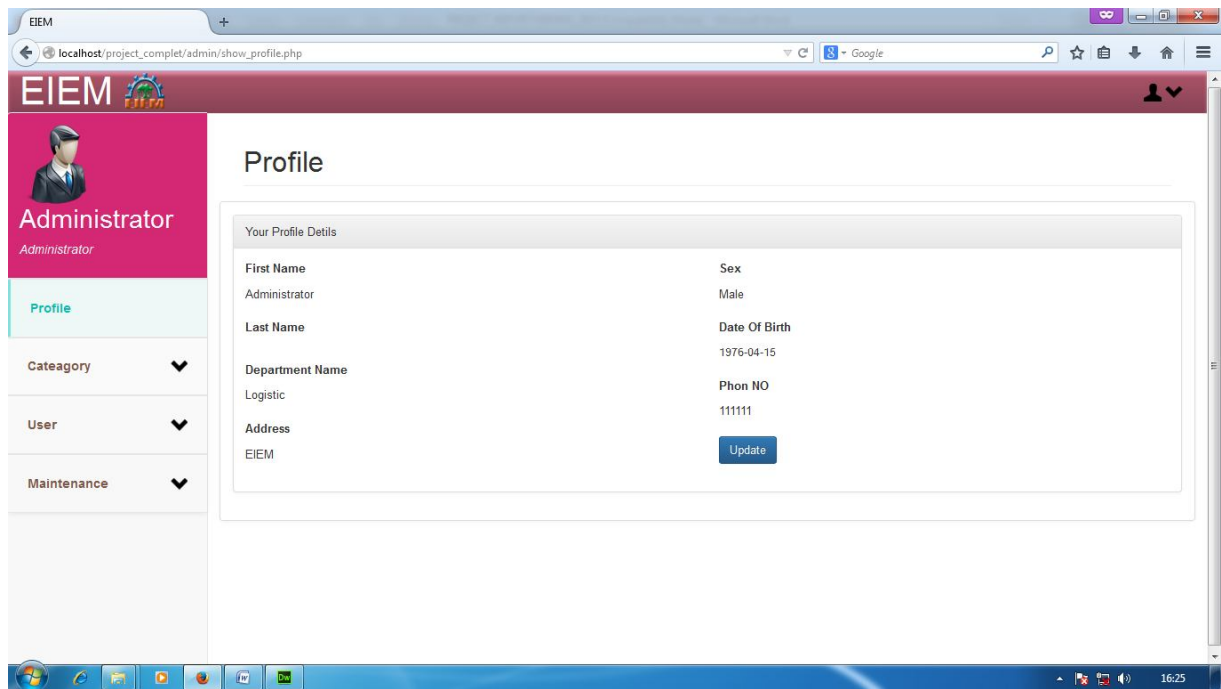
SCREEN SHOT OF USER LIST:



The screenshot displays the 'Users List' page in the EIAM application. The left sidebar shows the user is logged in as 'Administrator'. The main content area is titled 'Users List' and contains a table with the following data:

Users Id	First Name	Last Name	U Dept	Last Log In	Address	Sex	Date Of Birth	Phon No	Profile Pic	User Status
00000000001	Administrator		Logistic	30-04-2015 15:29:30	EIEM	Male	1976-04-15	111111		Deactive
01430247618	Shubham	Khan	CST	29-04-2015 01:04:34	Blbarda	Male	1995-04-10	2147483647		Deactive
00000000003	Sumit	Samanta	CST	29-04-2015 00:19:37	Sodpur	male	2078-04-12	1234512345		Deactive

SCREEN SHOT OF USER DEATILS:

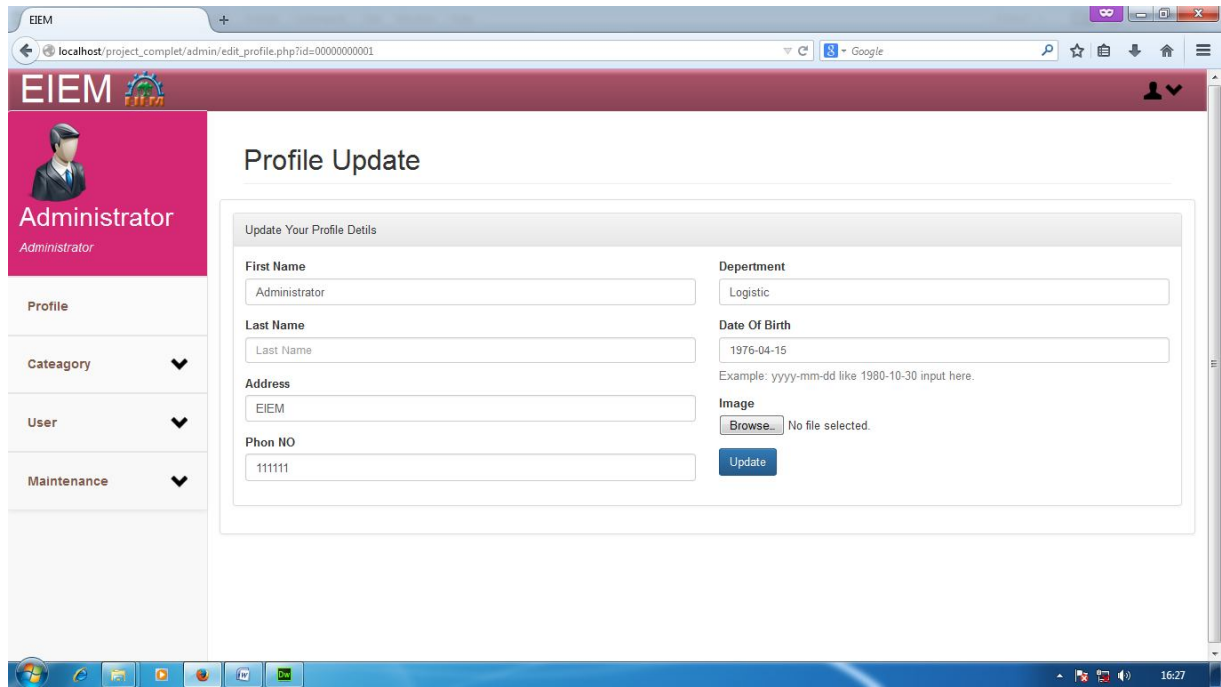


The screenshot displays the 'Profile' page in the EIAM application. The left sidebar shows the user is logged in as 'Administrator'. The main content area is titled 'Profile' and contains a form with the following details:

Your Profile Details	
First Name	Administrator
Last Name	
Department Name	Logistic
Address	EIEM
Sex	Male
Date Of Birth	1976-04-15
Phon NO	111111

[Update](#)

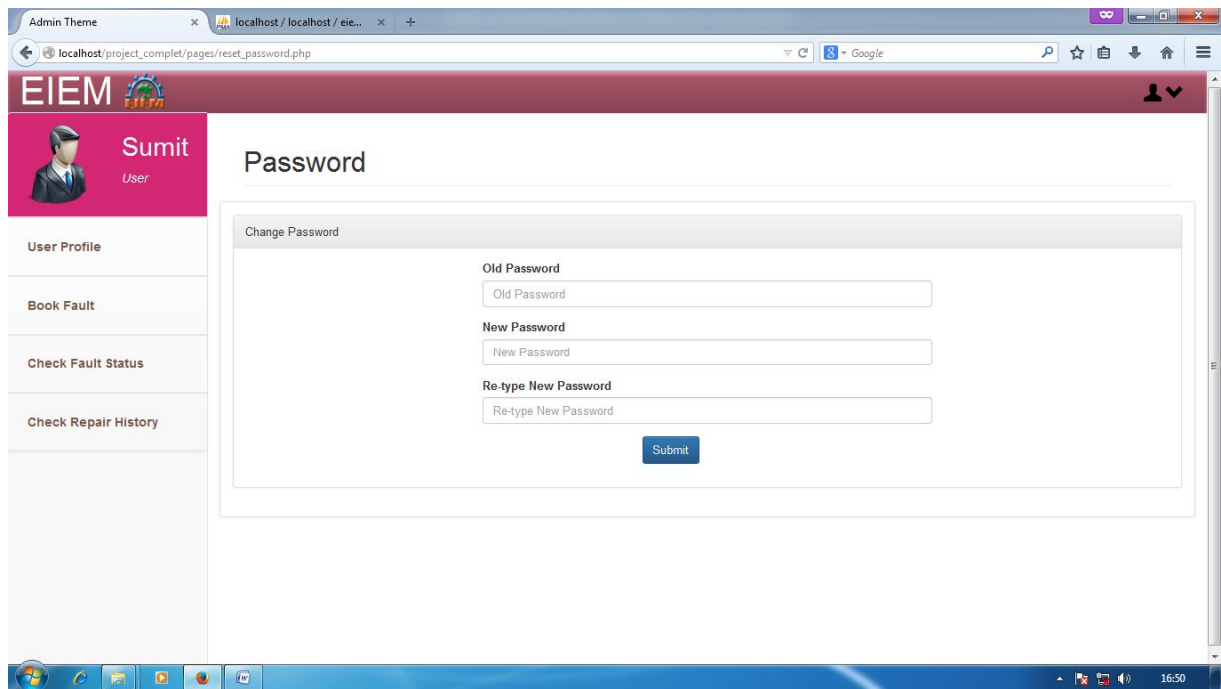
SCREEN SHOT OF USER DEATILS UPDATE:



The screenshot shows a web browser window with the URL `localhost/project_complet/admin/edit_profile.php?id=0000000001`. The page is titled "Profile Update" and features a sidebar on the left with a user profile for "Administrator" and a menu with options: Profile, Category, User, and Maintenance. The main content area is titled "Update Your Profile Details" and contains a form with the following fields:

Update Your Profile Details	
First Name <input type="text" value="Administrator"/>	Department <input type="text" value="Logistic"/>
Last Name <input type="text" value="Last Name"/>	Date Of Birth <input type="text" value="1976-04-15"/> <small>Example: yyyy-mm-dd like 1980-10-30 input here.</small>
Address <input type="text" value="EIEM"/>	Image <input type="button" value="Browse..."/> No file selected.
Phon NO <input type="text" value="111111"/>	<input type="button" value="Update"/>

SCREEN SHOT OF USER CHANGE PASSWORD:



The screenshot shows a web browser window with the URL `localhost/project_complet/pages/reset_password.php`. The page is titled "Password" and features a sidebar on the left with a user profile for "Sumit" and a menu with options: User Profile, Book Fault, Check Fault Status, and Check Repair History. The main content area is titled "Change Password" and contains a form with the following fields:

Change Password	
Old Password <input type="text" value="Old Password"/>	
New Password <input type="text" value="New Password"/>	
Re-type New Password <input type="text" value="Re-type New Password"/>	
<input type="button" value="Submit"/>	

SCREEN SHOT OF NEW CATEAGORY ENTRY:

The screenshot shows the 'New Category' form in the EIAM application. The left sidebar contains a user profile for 'Administrator' and a menu with options: Profile, Category (selected), Show Category, Create Category, User, and Maintenance. The main content area is titled 'New Category' and contains a form titled 'Add New Category Entry'. The form has four input fields: 'Category Code', 'Category Name', 'Category Specification', 'Category Type', and 'Unit'. A 'Submit' button is located at the bottom right of the form.

EIAM

Administrator
Administrator

New Category

Add New Category Entry

Category Code
Category Code

Category Name
Category Name

Category Specification
Category Specification

Category Type
Category Type

Unit
unit

Submit

SCREEN SHOT OF SHOW CATEAGORY LIST:

The screenshot shows the 'Show Category' list in the EIAM application. The left sidebar is the same as in the previous screenshot, but the 'Show Category' option is selected. The main content area is titled 'Show Category' and contains a table titled 'Show Category Details'. The table has seven columns: 'Category Code', 'Category Name', 'Category Specification', 'Category Type', 'Unit', 'Action', and 'Action'. There are two rows of data: one for 'cmp' (Computer) and one for 'pm' (Printer). Each row has 'Edit' and 'Delete' buttons in the 'Action' column.

EIAM

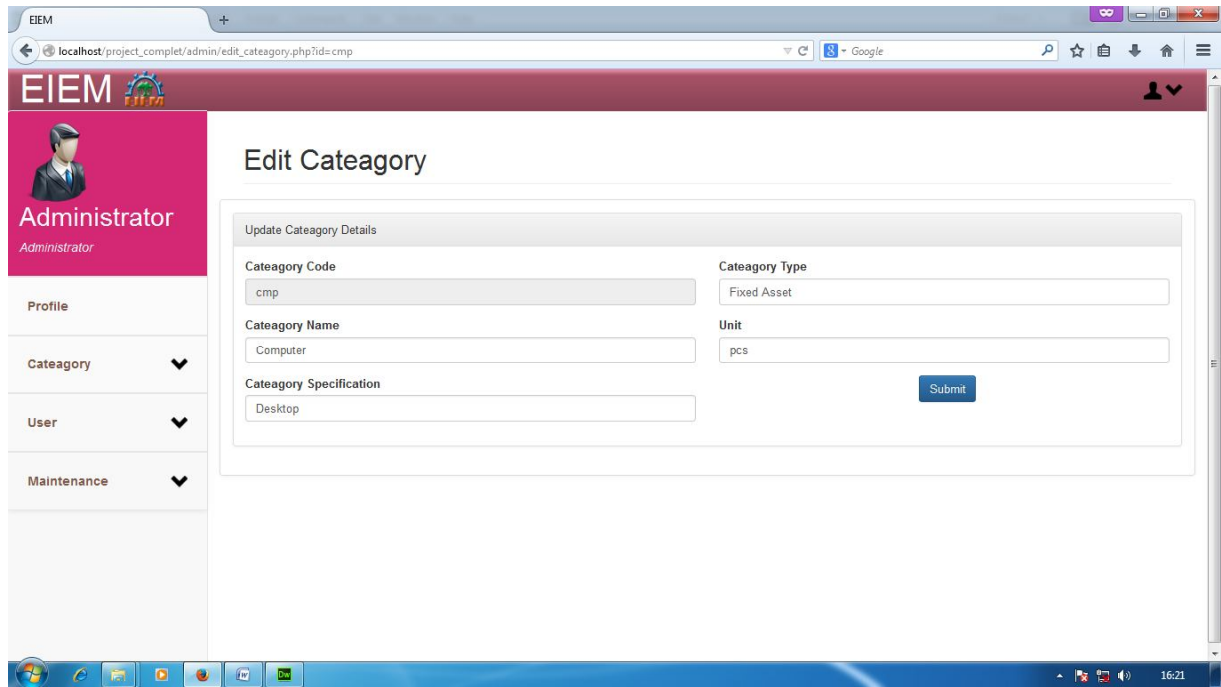
Administrator
Administrator

Show Category

Show Category Details

Category Code	Category Name	Category Specification	Category Type	Unit	Action	Action
cmp	Computer	Desktop	Fixed Asset	pcs	Edit	Delete
pm	Printer	Laser	Fixed Asset	pcs	Edit	Delete

SCREEN SHOT OF UPDATE CATEAGORY DETAILS:



EIEM

localhost/project_complet/admin/edit_category.php?id=cmp

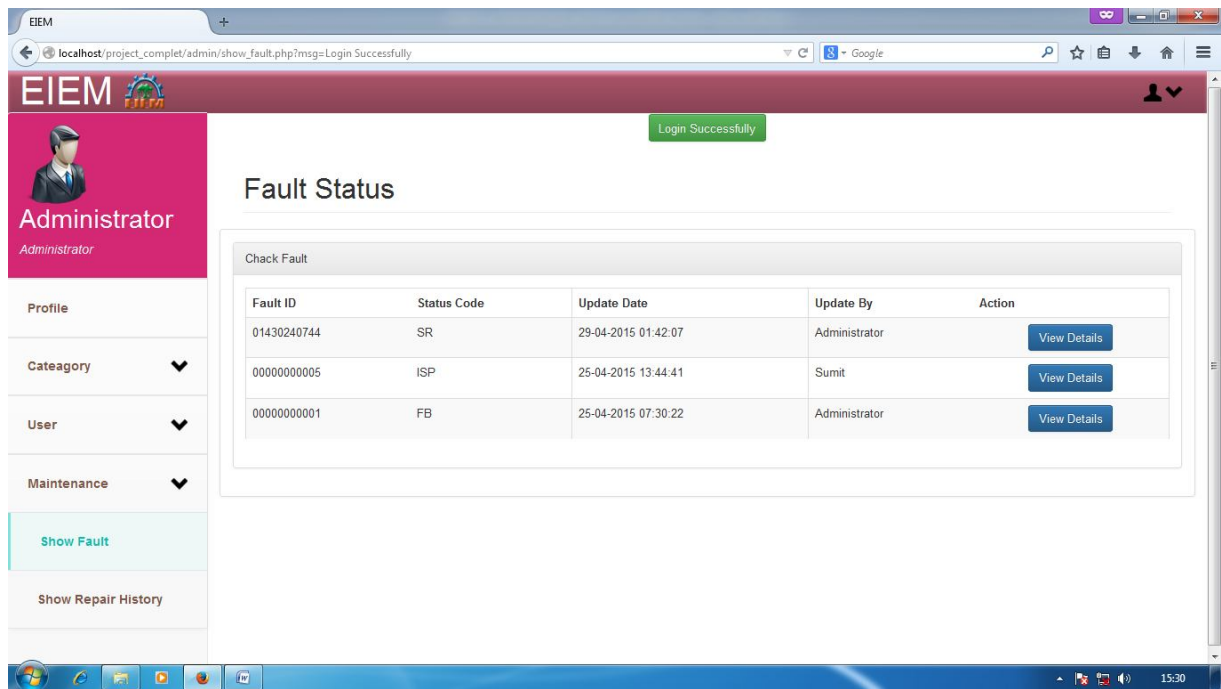
Edit Category

Update Category Details

Category Code	cmp	Category Type	Fixed Asset
Category Name	Computer	Unit	pcs
Category Specification	Desktop		

Submit

SCREEN SHOT OF SHOW FAULT LIST:



EIEM

localhost/project_complet/admin/show_fault.php?msg=Login Successfully

Login Successfully

Fault Status

Chack Fault

Fault ID	Status Code	Update Date	Update By	Action
01430240744	SR	29-04-2015 01:42:07	Administrator	View Details
00000000005	ISP	25-04-2015 13:44:41	Sumit	View Details
00000000001	FB	25-04-2015 07:30:22	Administrator	View Details

SCREEN SHOT OF SHOW FAULT DETAILS:

The screenshot shows a web browser window with the URL `localhost/project_complet/admin/check_fault_status_view.php?id=01430240744`. The page title is "Fault Status". On the left, there is a sidebar with a user profile for "Administrator" and a menu with "Profile", "Category", "User", and "Maintenance". The main content area displays the "View Fault Details" for Fault ID 01430240744. The details are as follows:

Field	Value
Fault ID	01430240744
Serial NO	I22250
Status Details	Send For Repair
Booking Date	28-04-2015 22:35:43
Clear Date	
Update Date	29-04-2015 01:42:07
Update By	Administrator
Authority	LM
Item Location	B_F_L1_M5
Fault	Mouse
Fault Details	Mouse is Damage

An "Update" button is located at the bottom right of the details section.

SCREEN SHOT OF UPDATE FAULT STATUS:

The screenshot shows a web browser window with the URL `localhost/project_complet/admin/edit_fault.php?id=01430240744`. The page title is "Edit Fault Status". The sidebar is identical to the previous screenshot. The main content area displays the "Update Fault Status" form. The form contains the following fields:

Field	Value
Status Code	SR
Authority	LM
Status Details	Send For Repair

An "Update" button is located to the right of the "Status Details" field.

SCREEN SHOT OF REPAIR LIST:

The screenshot shows the EIAM (Equipment Inspection and Maintenance) web application. The browser address bar displays 'localhost/project_complet/admin/show_repair_history.php'. The page features a sidebar on the left with a user profile for 'Administrator' and a menu with options: Profile, Category, User, Maintenance, Show Fault, and Show Repair History (highlighted in green). The main content area is titled 'Repair Status List' and contains a section 'Chack Repair History' (note the typo). Below this is a table with the following data:

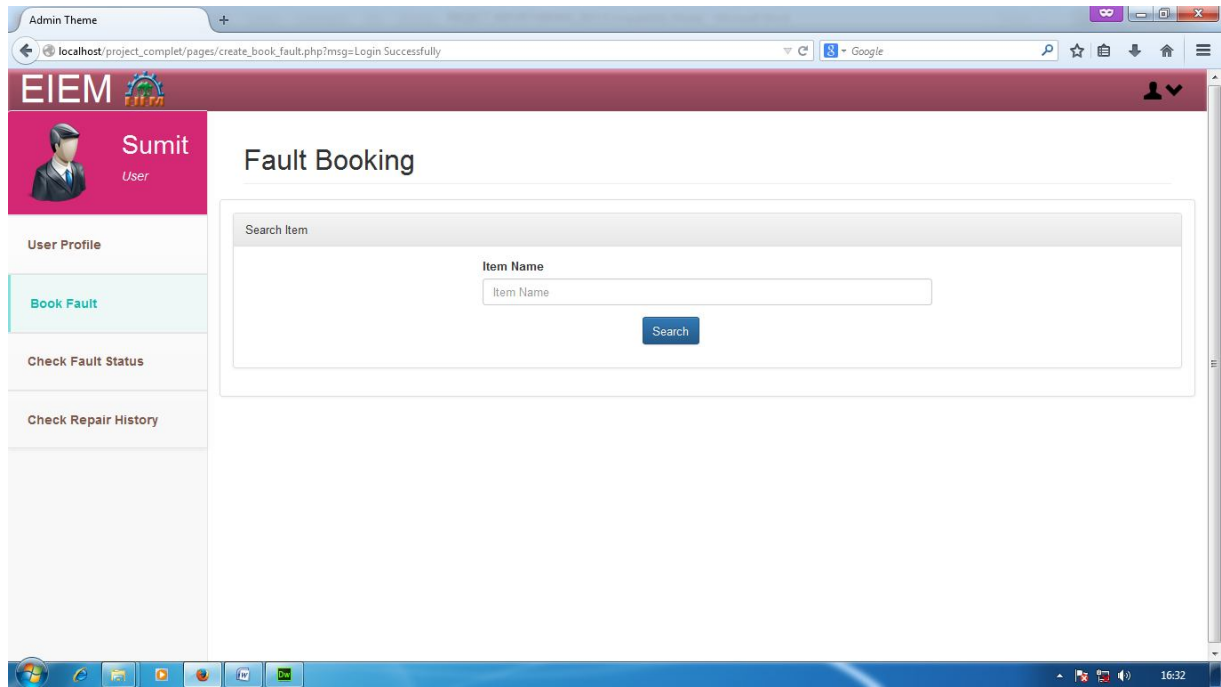
Fault ID	Status Code	Update Date	Update By	Action
01430249044	RP	29-04-2015 01:03:08	Administrator	View Details
01429987780	RP	28-04-2015 22:37:41	Administrator	View Details
01429986257	RP	26-04-2015 09:22:16	Administrator	View Details

SCREEN SHOT OF REPAIR DETAILS:

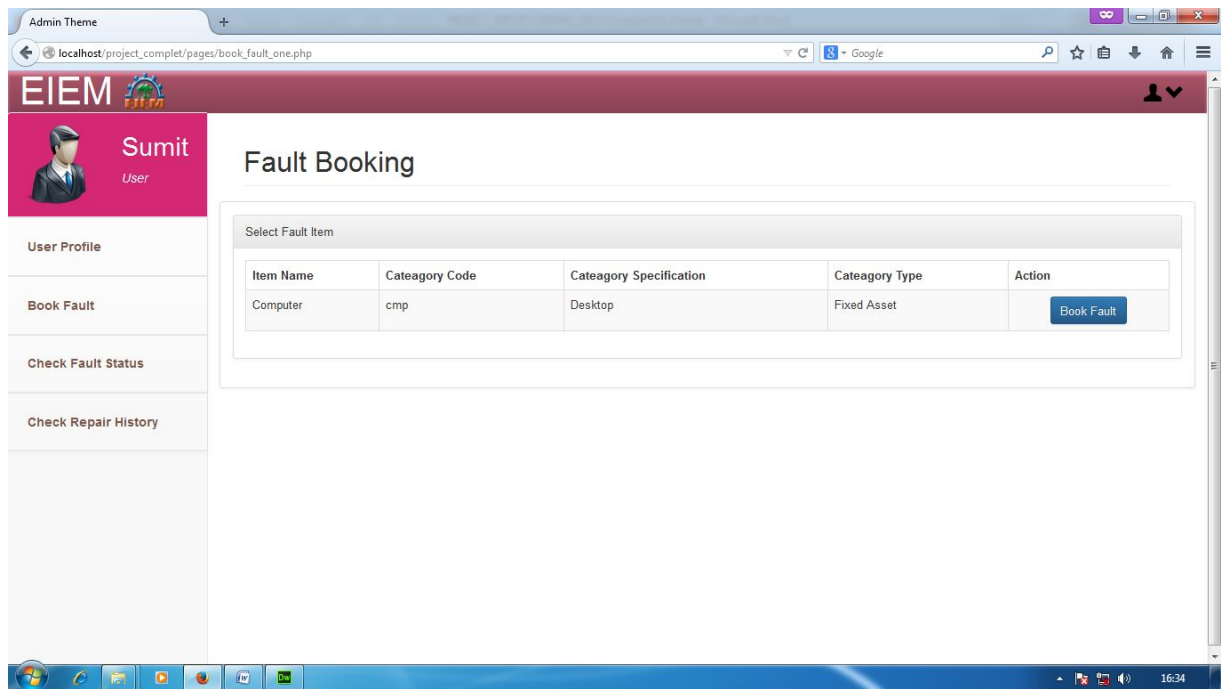
The screenshot shows the EIAM web application with the browser address bar displaying 'localhost/project_complet/admin/check_repair_status_view.php?id=01430249044'. The sidebar is identical to the previous screenshot. The main content area is titled 'Repair Status' and contains a section 'View Repair Details'. The details are organized into two columns:

Fault ID 01430249044	Update By Administrator
Serial NO 000101	Authority LM
Status Details Repir	Item Location E_F_L3_M10
Booking Date 29-04-2015 00:54:03	Fault UPS
Clear Date 29-04-2015 01:03:08	Fault Details Power Problem
Update Date 29-04-2015 01:03:08	

SCREEN SHOT OF FAULT BOOKING IN SEARCH ITEM:



SCREEN SHOT OF FAULT BOOKING IN SELECT FAULT ITEM:



SCREEN SHOT OF FAULT BOOKING IN FAULT ENTRY:

The screenshot shows a web browser window with the URL `localhost/project_complet/pages/book_fault_two.php?id=cmp`. The page is titled "Fault Booking" and features a sidebar with a user profile for "Sumit User" and navigation links: "User Profile", "Book Fault", "Check Fault Status", and "Check Repair History". The main content area contains a "Fault Entry" form with the following fields:

- Category Code:**
- Item Name:**
- Category Specification:**
- Serial No:**
- Location:**
- Fault:**
- Fault Details:**

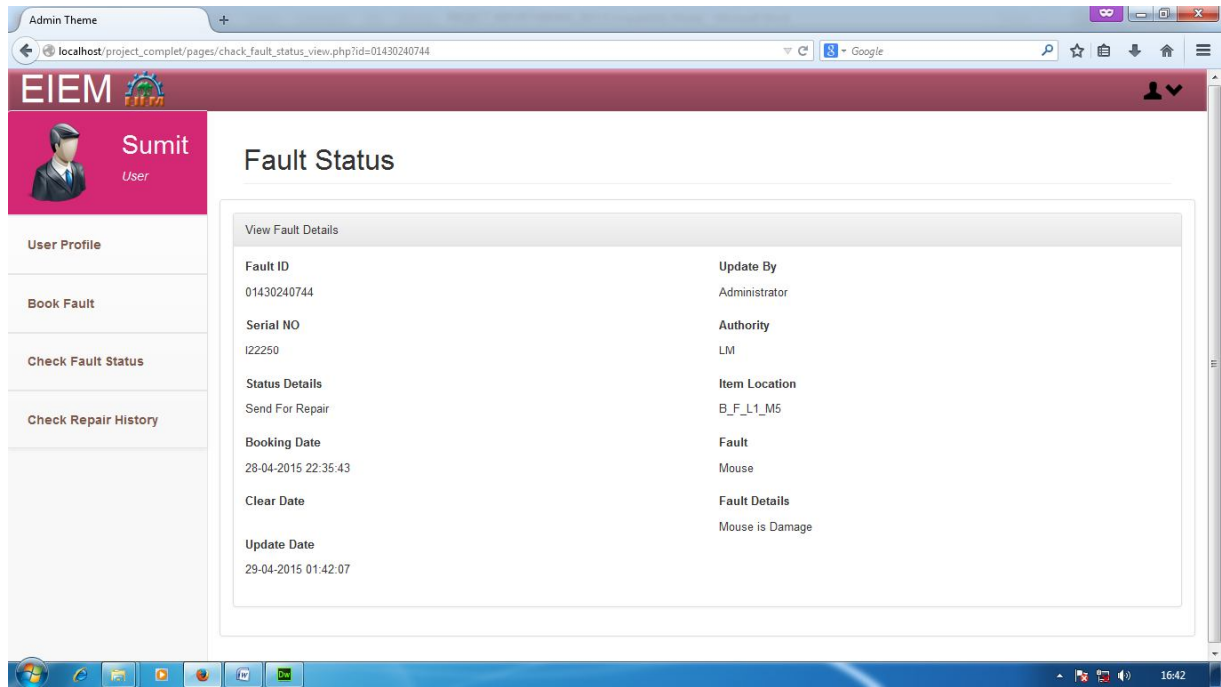
A "Save" button is located at the bottom right of the form.

SCREEN SHOT OF FAULT STATUS CHECKING LIST:

The screenshot shows a web browser window with the URL `localhost/project_complet/pages/check_fault_status.php`. The page is titled "Fault Status List" and features the same sidebar as the previous screenshot. The main content area contains a "Check Fault" table with the following data:

Fault ID	Status Code	Update Date	Update By	Action
01430240744	SR	29-04-2015 01:42:07	Administrator	View Details
00000000005	ISP	25-04-2015 13:44:41	Sumit	View Details
00000000001	FB	25-04-2015 07:30:22	Administrator	View Details

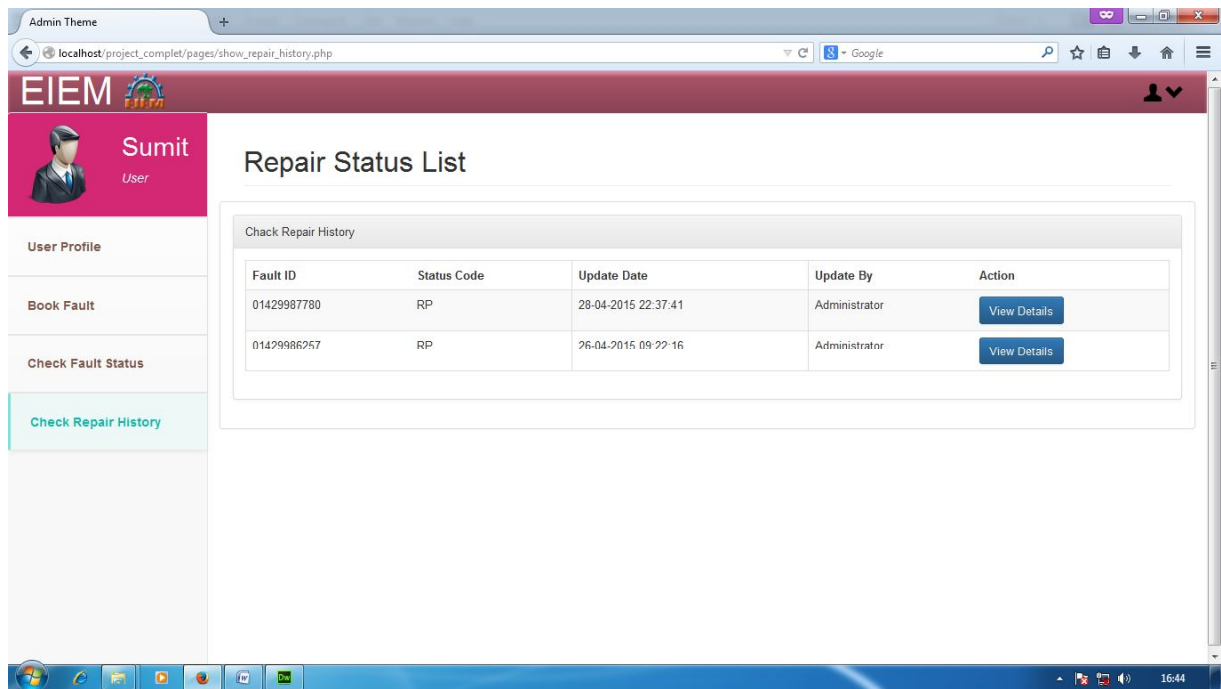
SCREEN SHOT OF FAULT STATUS DETAILS:



The screenshot displays the 'Fault Status' page in the EITEM application. The left sidebar shows the user profile 'Sumit User' and navigation links: 'User Profile', 'Book Fault', 'Check Fault Status', and 'Check Repair History'. The main content area is titled 'Fault Status' and contains a 'View Fault Details' section. The details are as follows:

Field	Value
Fault ID	01430240744
Serial NO	I22250
Status Details	Send For Repair
Booking Date	28-04-2015 22:35:43
Clear Date	
Update Date	29-04-2015 01:42:07
Update By	Administrator
Authority	LM
Item Location	B_F_L1_M5
Fault	Mouse
Fault Details	Mouse is Damage

SCREEN SHOT OF REPAIR STATUS CHECKING LIST:



The screenshot displays the 'Repair Status List' page in the EITEM application. The left sidebar shows the user profile 'Sumit User' and navigation links: 'User Profile', 'Book Fault', 'Check Fault Status', and 'Check Repair History'. The 'Check Repair History' link is highlighted. The main content area is titled 'Repair Status List' and contains a 'Check Repair History' section. The table shows the following data:

Fault ID	Status Code	Update Date	Update By	Action
01429987780	RP	28-04-2015 22:37:41	Administrator	View Details
01429986257	RP	26-04-2015 09:27:16	Administrator	View Details

SCREEN SHOT OF REPAIR STATUS DETAILS:

The screenshot displays a web application interface for 'EIEM'. The browser address bar shows the URL: `localhost/project_complet/pages/check_fault_status_view.php?id=01429987780`. The user profile on the left indicates the user is 'Sumit User'. The main content area is titled 'Repair Status' and contains a 'View Repair Details' section with the following information:

View Repair Details	
Fault ID	01429987780
Serial NO	sdfsdf
Status Details	Repaired
Booking Date	27-04-2015 22:35:43
Clear Date	28-04-2015 22:37:41
Update Date	28-04-2015 22:37:41
Update By	Administrator
Authority	Sumit
Item Location	dfgdf
Fault	dfgdf
Fault Details	fdgdfgdf

CONCLUSION

The project Web Based Maintenance System is an automation system of the materials concerned with locating, maintaining, updating management of materials of laboratory of an organization.

The project coverage area is the locating and monitoring all the materials of laboratory then sending them for repairing if necessary. This system also can generate reports.

As a conclusion part it is clear that the applications of the software can be a very user friendly approach and can be a remedy of a tedious manual file management system.

LIMITATION OF THE PROJECT

There are some limitations in the project. The following are the limitations of the project

- ❖ Location details are not maintained, floor wise or building wise.
- ❖ Printed form reports are not maintained.
- ❖ Details of vendors are not maintained.
- ❖ No details of repair history are not maintained.

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