

Testing Concepts – V2.0

Lab Book

Document Revision History

Date	Revision No.	Author	Summary of Changes
12/8/09	1	Priya Rane	Revamp
06/09/2011	2	Hema G	Revamp
19/06/2013	3	Selvalakshmi P	Revamp
15/04/2015	4	Dayanand Patil	Revamp
16/06/2016	5	Neelima Padmawar, Leena Pangarkar	Post integration material revamp

Table of Contents

<i>Document Revision History</i>	<i>2</i>
<i>Table of Contents</i>	<i>3</i>
Lab 1. Software Testing Basics – White Box Testing.....	5
1.1 Create Condition Coverage Matrix.....	5
1.2 Consider the below code to solve the following subsections	5
1.2.1 Create condition coverage matrix	6
1.2.2 Validate the coding standards.....	6
1.2.3 Write test cases.....	7
1.3 Draw Flow Graph & Determine CC	7
Lab 2. Software Testing Basics – Black box Testing.....	8
2.1 Validate Date field	8
2.2 Validate Command Line utility.....	8
2.3 Validate Phone Number field.....	8
2.4 Validate Password Field	8
2.5 Determine ECP & BVA.....	8
Lab 3. Creating Test Scenario – Post an Ad on EXCHANGE on WEB.....	10
3.1: Test Scenario Case Study. ‘Posting an Ad on EXCHANGE on WEB (EoW)’	10
3.2: Steps to follow to post an Ad.....	10
3.3 Rules:.....	13
Lab 4. Creating Test Cases – Customer Complaint Form	14
4.1 Case Study : Customer Complaint Form.....	14
4.2 Instructions	14
4.3 Rules.....	15
Lab 5. Creating Test Cases – Conference Room Booking	16
5.1: Case Study. ‘ONLINE CONFERENCE ROOM BOOKING’ on Intranet.....	16
Booking Instructions	16
Making a new booking:.....	16
Viewing / Cancellation of Bookings:	17
Invoke https://intranet.igate.com	17
Intranet home →Employee Corner →Conference Room Booking.....	18
Conference Room Booking → New Booking	18

<i>HOME → Conference Room Booking → New Booking</i>	<i>19</i>
<i>If booking is successful, the following screen is displayed.....</i>	<i>19</i>
<i>HOME → Conference Room Booking → New Booking.....</i>	<i>19</i>
<i>The booking status is also shown under My Bookings as shown below:-</i>	<i>20</i>
<i>HOME → Conference Room Booking → Booking Status</i>	<i>20</i>
Lab 6: Creating Test Cases – Cyber Shopee.....	21
6.1 Case Study: CyberShopee.....	21
6.2 Process Work Flow:	22
6.2.1 Visit CyberShopee Website	22
6.2.2 Register.....	22
6.2.3 Admin Module	24
6.2.4 Customer Module.....	26
6.2.5 Dealer Module.....	30

Lab 1. Software Testing Basics – White Box Testing

Goals	<ul style="list-style-type: none"> Learn to prepare Condition Coverage Matrix Learn to determine Cyclomatic Complexity
Time	180 Minutes

1.1 Create Condition Coverage Matrix

Table: Template of Condition Coverage Matrix with an Example:

Test Condition	Description	Expected Output
cond1 = true cond2 = notEval	Raining and Wind is true. Therefore, else condition is not evaluated	Stay Inside
cond1 = true cond2 = notEval	Evening is true. Therefore, else condition is not evaluated	Stay Inside
cond3=true	Sunshines is true	Go to beach

See the below specification:

```

IF          (it rains AND there is wind) OR it is evening
THEN       stay inside
ELSE       go outside
END IF

IF          the sun shines
THEN       go to the beach
END IF
  
```

How many test situations result from applying the coverage type of decision points with multiple condition coverage and how many test situations have “go to the beach” as the result?

1.2 Consider the below code to solve the following subsections

```

#include<stdio.h>

void main() {

    A, B, C ;

    Printf ("Enter three numbers : ");
    scanf ("%d %d %d", &A, &B, &C);

    if ((A>B) && (A>C))
    {
        printf ("%d is greater", A);
    }
  
```

```

}
elseif (B>C)
{
    printf ("%d is greater", B)
}
else
{
    printf ("%d is greater", C)
}
  
```

1.2.1 Create condition coverage matrix

cond1 = true cond2 = not eval cond3 = false
 cond1 = ? cond2 = ? cond3 = ?
 cond1 = ? cond2 = ? cond3 = ?

Table: Template of Condition Coverage Matrix with an Example:

Test Condition	Description	Expected Output
cond1 = true cond2 = notEval cond3 = false	A>B and A>C both are true. Therefore, elseif and else conditions are not evaluated	A is greater

1.2.2 Validate the coding standards

Note: You can make use of Code Review Check list explained in Lesson 02. You can also make use of sample template given below

Table: Template of Code Review Checklist

Sr. No.	Question	Remark (Yes / No)
Syntactical Errors		
1	Does every statement has a delimiter?	
2	Are the in-built functions spelled properly?	
Data Declaration Errors		
3	Have all variables been explicitly declared?	
4	Are variables properly initialized in declaration sections?	
Comparison Errors		
5	Are there any comparisons between variables having inconsistent data types?	
Control Flow Errors		
6	Does every cause has an effect?	
Input / Output Errors		
7	All Input statements handled correctly?	
8	All Output statements handled correctly?	

1.2.3 Write test cases

Consider the following scenarios to write the test cases for the above code:

- As you see in the above code, the data type of the variables is not specified. Write test case to validate whether the values stored in the variable A, B & C are integer data type
- Write test cases to validate the Comparison code

1.3 Draw Flow Graph & Determine CC

Draw corresponding flow graph and find the cyclomatic complexity (CC) for the following specifications:

Specification 1	Specification 2
<pre> IF A AND B THEN C=50 ELSE IF C AND D THEN Error message ENDIF ENDIF </pre>	<pre> IF customer no. > 200 AND article group = 330 THEN discount = 5% ENDIF IF region code = 4 OR 8 THEN invoice type = A ELSE invoice type = B ENDIF </pre>

Lab 2. Software Testing Basics – Black box Testing

Goals	<ul style="list-style-type: none">• Learn to apply basic techniques for writing test cases.• Learn to prepare finite and best suitable test cases
Time	180 Minutes

2.1 Validate Date field

Format of Date field is : dd/mm/yyyy

2.2 Validate Command Line utility

Validate Command Line utility - 'MAX'.

The utility displays the maximum of the 2 specified Integers. Please note down any assumptions that you make.

E.g. MAX 2 3

Steps to run Max command line utility

1. create a folder demo on E drive
2. Copy max.exe file in to demo folder
3. Click on start > run. Type **cmd**
4. Type "**E:**"
5. Type "**cd demo**"

Use following command to run max utility

```
E:\demo> max 25 34
E:\demo> max 25 b
E:\demo> max a 34
E:\demo> max 25.45 34.67
```

2.3 Validate Phone Number field.

Format of the number is :

Country Code (10 to 999) City Code (10 to 99999) Phone Number (1000000 to 999999999)

2.4 Validate Password Field

Write the test case for password field. Password should be the combination of Alphabets, numeric values and special characters. It should contain one upper case letter, at least one digit and at least one special character. The length of the password should be of minimum 8 characters.

2.5 Determine ECP & BVA

1. Consider a scenario where a 'Driver on Hire' agency provides most reliable and affordable drivers on hire. The monthly salary structure configured for the drivers of this

- agency is : drivers up to 25 years old get a pay of Rs. 15000/- ; drivers of age 65 and older get a pay of 5% more and drivers of age 40 and older get a pay of 10% more than that of the drivers up to 25 years get. How many equivalence classes are distinguished in the above? Also, which values are chosen for making test cases when the normal variant of the boundary values analysis is used?
2. Consider a scenario where a 'Winter Sale' provides heavy discounts. A person he/she of age less than 8 years old (<8), or a person aged between 35 and 45 years (>35 and <45) or older than 60 years (>60) is eligible for the discounts in Winter Sale. How many equivalence classes can be distinguished in this example?

Lab 3. Creating Test Scenario – Post an Ad on EXCHANGE on WEB

Goals	<ul style="list-style-type: none">• Read 'INSTRUCTIONS' before starting the assignment.• Understand the application and develop Test Scenarios
Time	60 minutes

3.1: Test Scenario Case Study. 'Posting an Ad on EXCHANGE on WEB (EoW)'

www.eow.com is the most preferred online web application in India for exchanging/selling of old products. In this case study, customer posts and advertisement of his product on the EoW portal.

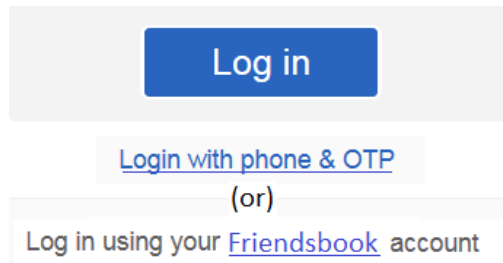
Participants need to write Test Scenarios for testing Buttons, Hyper Links, and Form fields.

Note: Trainer will discuss the Test Scenario template and will share the same with participants

3.2: Steps to follow to post an Ad

1. The customer visit <https://www.eow.com> site. To login, click on '**Login with phone & OTP**'. Login using Friendsbook account is out of scope.
2. The customer enters 10 digit mobile no and clicks on '**Get OTP**'. The application sends an OTP (One Time Password) on his phone no.
3. The portal asks for the OTP confirmation code. User can enter the code and '**CONFIRM**' to continue or **CANCEL** it. If the user has timed out (at max. 60 sec) in typing the OTP code, he can click **Resend code** for receiving another OTP code.
4. The portal displays the home page. Customer clicks on '**Submit a Free Ad**' to post a new add. Searching for products is out of scope.
5. Form of '**Submit a Free Classified Ad**' is displayed. Fill all the details in the form and click '**Submit**' button
6. The portal asks for the OTP sent on phone no. that is given while submitting the free classified Ad. User can enter the code and '**CONFIRM**' to continue or **CANCEL** it. If the user has timed out (at max. 60 sec) in typing the OTP code, he can click **Resend code** for receiving another OTP code.
 - On entering correct OTP, it displays the message '**Ad is successfully posted**' else it displays the message '**Wrong Verification code! Ad is not posted**'

Note: Refer the figures corresponding to the steps.



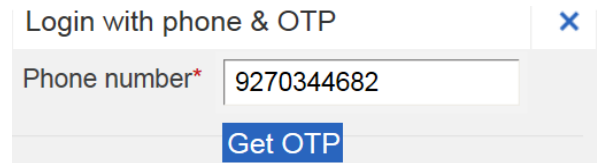
Log in

[Login with phone & OTP](#)

(or)

Log in using your [Friendsbook](#) account

Figure 1



Login with phone & OTP

Phone number* 9270344682

Get OTP

Figure 2



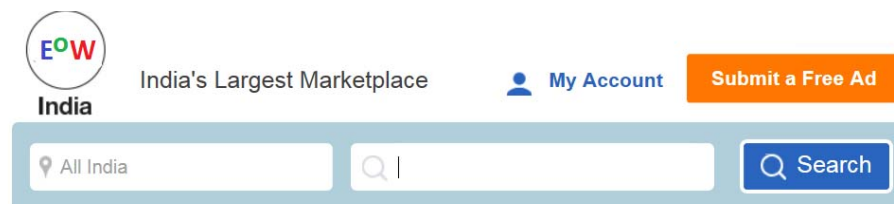
Confirm Your Mobile Number


Enter the confirmation code that was texted to your phone

7070 Resend code

Confirm CANCEL

Figure 3



 India's Largest Marketplace [My Account](#) [Submit a Free Ad](#)

All India | Search

Figure 4

Submit a Free Classified Ad

Ad Title*

Touch pad Samsung Mobile

Category*

Mobiles » Mobile Phones » Samsung

Price*


₹ 2000


Ad Description*


Samsung - Model 16802
Year of purchase 2012
Touch Pad, touch Stick
gorilla glass
13 px front camera
6 px rear camera
1 GB internal memory


Upload Photos

main photo









Name*

Anita Tiwari

Phone number*

+919270896678

Enter a city*

Pune, Maharashtra

↓

locality (nearby)

Swargate

↓

Submit

Figure 5

Confirm Your Mobile Number

please enter the verification code sent to
9270896678 to post your Ad

4567

Resend code

Confirm

CANCEL

Figure 6

3.3 Rules:

1. The phone number should accept only 10-digit number
2. The OTP should accept only 4-digit number
3. The fields marked as * are mandatory fields on the form
4. Ad Title should accept maximum 70 characters and minimum 15 characters
5. The Category should accept only values given in following table

Category	Sub Category	Sub Category
Mobiles	Mobile phones	Iphone, Karbon, Lava, LG, Samsung, Micromax
	Tablets	Asus, Samsung, Appel I Pad
Cars	Cars	Toyota, Chevrolet, Zen, Swift
	Spare parts	Car glass, amplifier, Stereo system
	Beds	Single bed, double bed
	Wardrobes	Single door, two door, sliding door

6. Price accepts only digits in Rupees format
7. Ad Description should accept maximum 70 characters and minimum 15 characters
8. Upload Photos should allow browsing the pictures from your local machine. Minimum one photo should be uploaded.
9. Name should accept only characters
10. Select the City from the drop down box. This will automatically populate the Locality based on the selected City. Refer the below given table for sample valid values of Cities and Localities combination.

City	Locality
Pune, Maharashtra	Swargate
	Hinjewadi
	Shaniwarwada
Banglore, Karnataka	Whitefield
	Mathalli
	Bujgiri
Mumbai, Maharashtra	MG Road
	Dadar
	Nalasopara

Lab 4.Creating Test Cases – Customer Complaint Form

Goals	<ul style="list-style-type: none"> • Read “Customer Complaint Form Instructions” before starting the assignment. • Understand the application and develop creative test cases.
Time	60 minutes

4.1 Case Study : Customer Complaint Form

This is a customer complaint form for the bank customers, those who want to raise the bank related complaints.

4.2 Instructions

Write the test case for this Customer Complaint form, based on the requirements given below.

While the customer clicking on the submit button, if all are correct, the details should be registered in the database and generated complaint number should be displayed on the screen



The screenshot shows a web application titled "CUSTOMER COMPLAINT FORM". At the top right, there is a small video feed of a smiling woman. Below the title bar, a blue banner contains the text: "You will receive a response shortly by SMS or E-mail To know the status of your request call on our Toll Free number 1800112211 or 18004".

The main form area has a light orange background. It contains several input fields and dropdown menus, all with blue borders and labels. The fields are:

- Customer Type ***: A dropdown menu with "Existing SBI customer" selected.
- Account Number ***: A text input field.
- Name Of Complainant ***: A text input field.
- Branch Code(If other than Home Branch)**: A text input field with a "Branch Locator" link to its right.
- Mobile number ***: A text input field.
- Telephone No.**: A text input field.
- E-mail ***: A text input field.
- Category Of Complaints**: A dropdown menu with "--Select--" selected.
- Products & Services**: A dropdown menu with "--Select--" selected, and a "Data Received from Server!!!" message to its right.
- Nature Of complaint**: A dropdown menu with "--Select--" selected.
- Please Give brief details of your complaint(Max 200 Chars) ***: A text area.
- Please enter the String Shown in Image ***: A text input field next to a CAPTCHA image showing the letters "MVEW" in a colorful, distorted font.

At the bottom of the form, there are two buttons: "Submit" and "Reset".

4.3 Rules

- **Customer Type** : Existing SBI customer
- **Account Number** : Should be 11 digits
- **Branch Code** : should be 4 digits
- **Nature of Complaint** will be displayed based on the selection of Products & Services and Products & services will be displayed based on the selection of Category of Complaints. Refer the below table.

Category of Complaints	Products & Services	Nature of Complaint
General Banking	Branch Related	<ul style="list-style-type: none"> • No Response to queries • Single Windows not doing all transactions
	Pass Book Related	<ul style="list-style-type: none"> • Error in passbook entries • Passbook not issued/Delayed
Deposits	Opening of Accounts	<ul style="list-style-type: none"> • Nominee Updation Not done • Delay in opening Accounts
	Transfer of accounts	<ul style="list-style-type: none"> • Delay in transfer of fixed Deposits • Others
Internet Banking	Pre Login Complaints	<ul style="list-style-type: none"> • Username/Password provided by branch not functional • Transaction rights not given
	Online Bill Payment	<ul style="list-style-type: none"> • Unable to view Bills • Unable to view payment History

- Details of complaint: Should be of 200 characters max.

Lab 5.Creating Test Cases – Conference Room Booking

Goals	<ul style="list-style-type: none">• Read 'BOOKING INSTRUCTIONS' before starting the assignment.• Understand the application and develop creative test cases.
Time	90 minutes

5.1: Case Study. 'ONLINE CONFERENCE ROOM BOOKING' on Intranet

Note : Please do not try using the system available on intranet. This is just a case study.

Booking Instructions

1. Invoke intranet by typing the URL <https://intranet.igate.com>
2. Login using id and password
3. Intranet home page is displayed
4. Select Employee Corner and Click on Conference Room Booking option
5. 'My Bookings' option on the Conference Menu Page displays the View / Cancel Booking Page.
6. 'New Booking' option on the Conference Menu Page displays the Conference Booking Page.

Making a new booking:

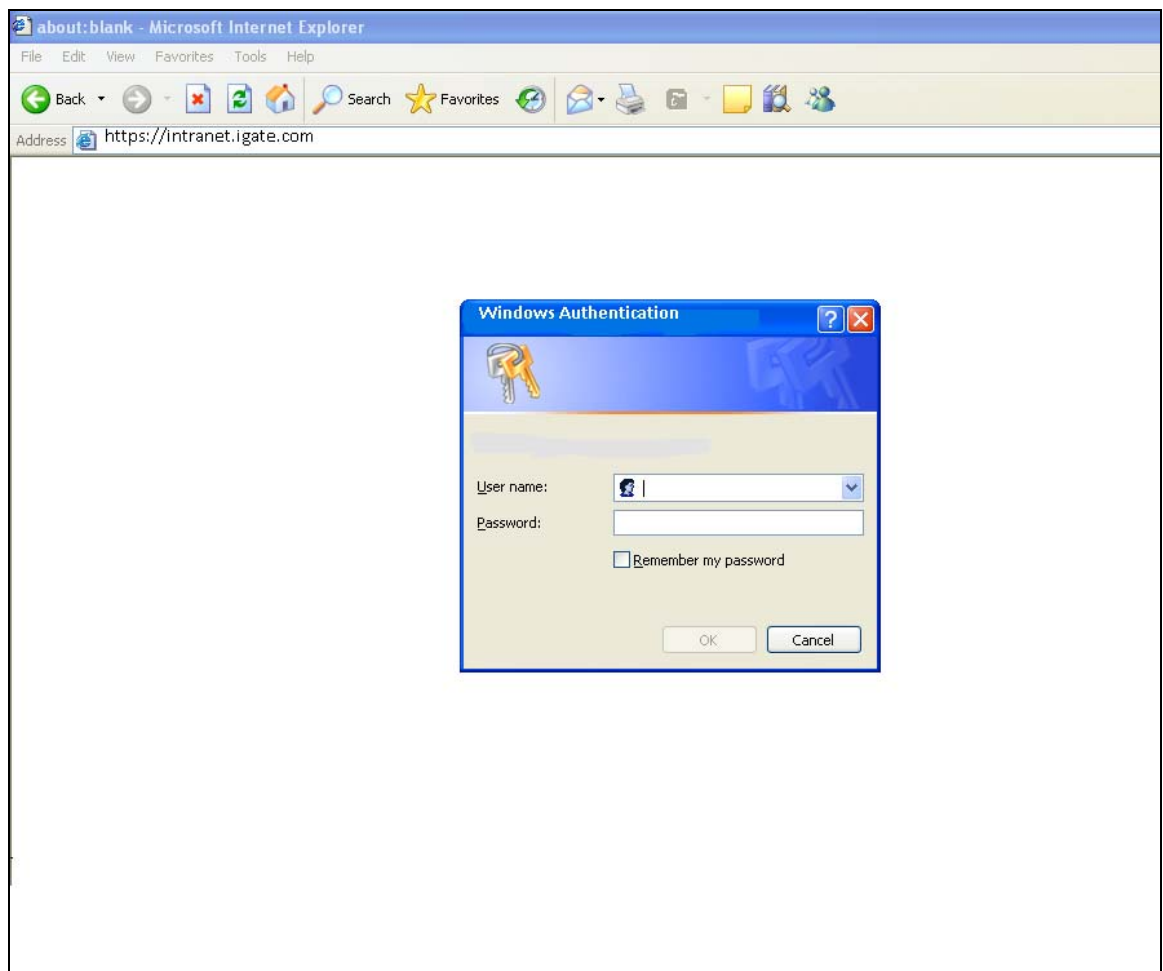
1. If you belong to a Non-GE Business Unit, you can book conference rooms only in Non-GE areas. However if you belong to a GE Business unit, you can book conference rooms at any location.
2. The employee Email id field is automatically filled with the email id of the person logged in.
3. Select the location from the location drop down box. This will automatically populate the sub-locations under the selected location in a new drop down box.
4. Select the sub-location from the sub-location drop down box. This will automatically populate the date drop down boxes.
5. Select the month from the month drop down box. Booking of conference rooms can be done only one month in advance. The date drop down boxes will be appropriately populated for this.
6. Select the date from the date drop down box.
7. Select the year from the year drop down box.
8. Upon selecting a valid location, sub location and date the complete Conference Room booking form is displayed
9. The rooms and devices available at the selected sub-location will be displayed in tabular format.
10. Enter your extension number and email id if it is not displayed correctly.
11. Select the room from the room drop down box.
12. Select the time span for which you want to book the conference room.

13. Select the communication and visual device if required.
14. Clicking 'Submit' button would validate whether the room and devices requested are available in the time span specified.
15. If either the room or devices requested are not available in the time span selected, an appropriate error message will be displayed else the booking will be registered. An Email will be sent to you as a confirmation for the same.


Viewing / Cancellation of Bookings:

1. All the booking made by you will be displayed. Bookings of current and future dates will only be displayed.
2. Select the bookings you wish to delete
3. Click the 'Delete' button to delete the selected bookings.

Invoke <https://intranet.igate.com>



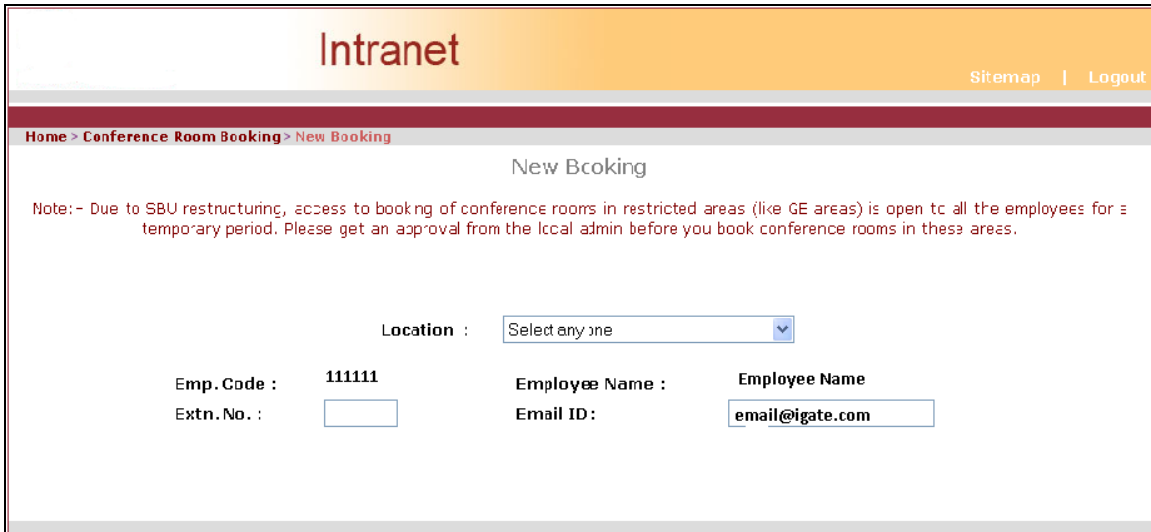
Intranet home → Employee Corner → Conference Room Booking



The screenshot shows the 'Intranet' header with 'Sitemap' and 'Logout' links. Below the header, the breadcrumb trail is 'Home > Employee Self Service'. A 'Menu' table lists various services:

Menu	
◆ US Payroll - Electronic pay slip	Help
◆ Conference Room Booking	
◆ Global HelpDesk	
◆ EPFO-NSSA Allotment	
◆ Library	
◆ Manage your Account	
◆ Parents Medical Insurance	
◆ Compensation Letter	
◆ List of Hospitals Across India	
◆ Confidante- Register for Employee Counseling Services	

Conference Room Booking → New Booking



The screenshot shows the 'Intranet' header with 'Sitemap' and 'Logout' links. Below the header, the breadcrumb trail is 'Home > Conference Room Booking > New Booking'. The page title is 'New Booking'. A note states: 'Note:- Due to SBU restructuring, access to booking of conference rooms in restricted areas (like GE areas) is open to all the employees for a temporary period. Please get an approval from the local admin before you book conference rooms in these areas.'

The form contains the following fields:

- Location :** A dropdown menu with the text 'Select any one'.
- Emp. Code :** A text field containing the value '11111'.
- Extn.No. :** An empty text field.
- Employee Name :** A text field containing the value 'Employee Name'.
- Email ID :** A text field containing the value 'email@igate.com'.

HOME → Conference Room Booking → New Booking

Intranet
Sitemap | Logout

[Home](#) > [Conference Room Booking](#) > [New Booking](#)

New Booking

Note:- Due to SBU restructuring, access to booking of conference rooms in restricted areas (like GE areas) is open to all the employees for a temporary period. Please get an approval from the local admin before you book conference rooms in these areas.

Location :

Date (mm/dd/yyyy) : / /

Sub Location :

AVAILABLE ROOMS

Time From	Time To	Description
00:00:01	23:59:59	Main conference room

AVAILABLE DEVICES

Time From	Time To	Spider	Speaker	OHP	LCD/Video Projector
00:00:01	23:59:59	1	1	1	1

Emp. Code :

Extn. No. :

Employee Name :

Email ID :

Select Room :

Description of the meeting :

Time From (hh:mm): : Time To (hh:mm): :

Communication Device :

Spider Phone ☐

Speaker Phone ☐

None ☒

Visual Device :

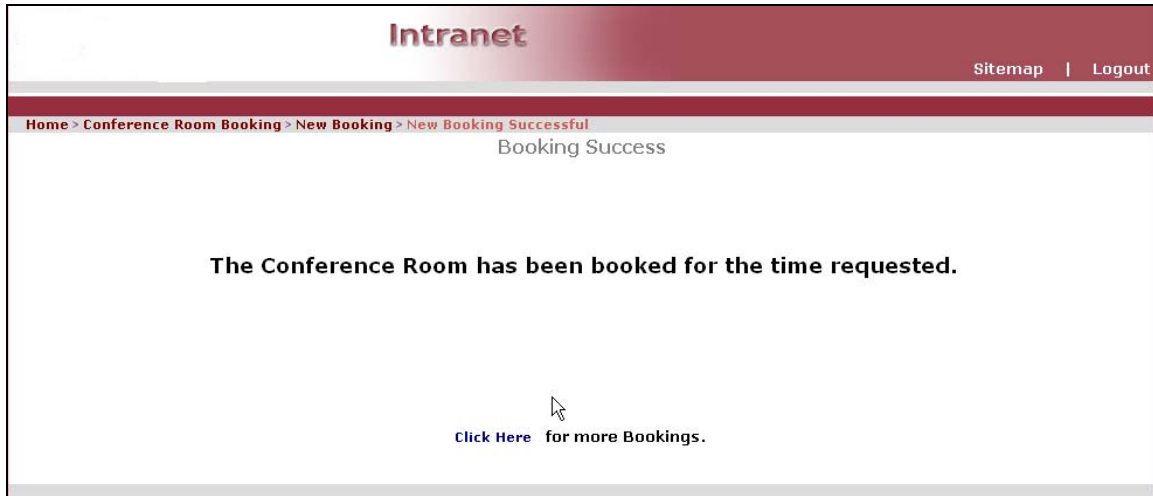
OHP ☐

LCD/Video Projector ☐

None ☒

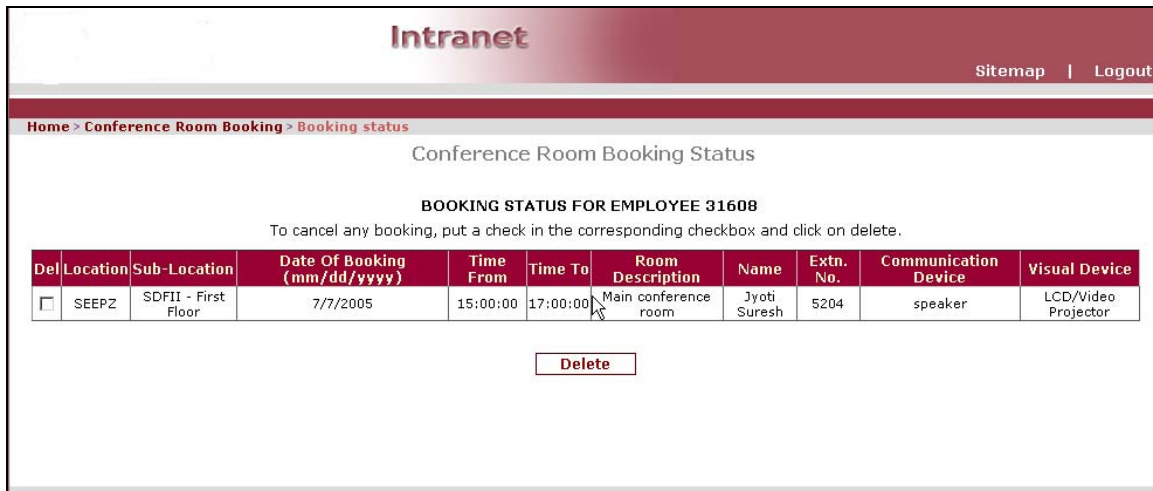
If booking is successful, the following screen is displayed

HOME → Conference Room Booking → New Booking



The booking status is also shown under My Bookings as shown below:-

HOME → Conference Room Booking → Booking Status



Lab 6: Creating Test Cases – Cyber Shopee

Goals	<ul style="list-style-type: none">• Read the “CyberShopee” System documentation before starting the assignment.• Develop creative test cases for the CyberShopee Online Shopping website.
Time	180 minutes

You need to go through the given case study carefully and write the appropriate test cases using different testing techniques learnt so far.

6.1 Case Study: CyberShopee

“**CyberShopee**” is a web based application and can be accessed over the internet. Using this application a user can shop online for different products.

This online shopping website facilitates user to shop various products such as TV, Camera etc. belonging to different categories.

Following is the complete list of functionalities of the system. You can make appropriate assumptions wherever necessary and proceed.

There are four categories of users who would access the system viz. **Admin**, **Customer**, **Dealer** and **Delivery**. Each one of these users would have some exclusive privileges to be exercised on this website.

Note: Delivery user is out of scope.

Following are the functionalities to be performed by the **Admin** user.

1. Register on the website
2. Login
3. Approve Dealer
4. Approve Agency
5. Add Category
6. Add Sub Category

Following are the functionalities to be performed by the **Customer**.

1. Register on the website
2. Login
3. View Product Details
4. Purchase Products
5. Place the Order
6. view Account

7. Change Password

Following are the functionalities to be performed by the **Dealer**.

1. Register on the website
2. Login
3. Add Agency
4. Perform Dealer Operations

Note: Other than First Time registration, the other operations are allowed only for the registered users.

Once the Order is confirmed, Cyber Shopee will deliver the ordered products to the customer on his address specified during the registration. The Payment mode will be Cash on Delivery, Debit Card, Credit Card, NetBanking etc.

6.2 Process Work Flow:

6.2.1 Visit CyberShopee Website

Visit <https://cyberShopeesystem.com> link through internet. This will take the user to the Home page of the website as given below. Refer to **Figure 1.1**.

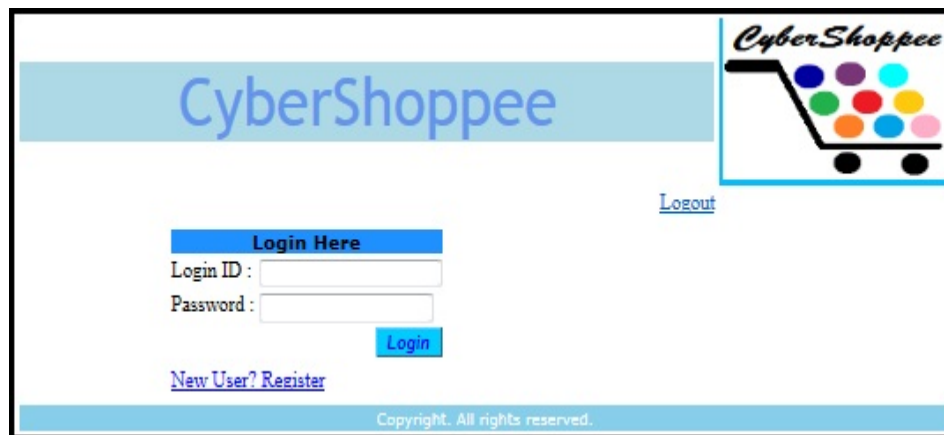


Figure 1.1 CyberShopee Home Page

6.2.2 Register

Purpose	To register with CyberShopee website
----------------	--------------------------------------

Functionality	<ul style="list-style-type: none"> User can register on the website.
----------------------	---

As mentioned earlier, the user need to register on the website to avail different facilities provided. The user needs to fill in the registration form to do so. Refer to the **Figure 1.2**. Once the user has been successfully registered on the website, he can login to the website with the registered username & password and proceed.



The screenshot shows the CyberShoppee registration page. At the top, there is a header with the 'CyberShoppee' logo on the left and a shopping cart icon on the right. Below the header, there is a 'Logout' link. The main form area contains the following fields: 'User Id:', 'Full Name:', 'Address:', 'E-Mail:', 'Password:', 'Confirm Password:', 'Contact Number:', and 'Role'. Each field has a corresponding text input box. The 'Role' field is a dropdown menu with 'Admin' selected. A blue 'Submit' button is located below the 'Role' field. At the bottom of the form, there is a copyright notice: 'Copyright. All rights reserved.'

Figure 1.2 Register

Requirements:

1. All fields are mandatory.
2. User Id should contain only 6 characters.
3. Full Name should contain up to 30 characters and begin with uppercase letter.
4. Address should contain 200 alphanumeric characters.
5. Email should accept only valid email address e.g. someone@gmail.com
6. Password should contain at least one uppercase character and one special character.
7. Contact Number should contain only 10 digits and begin with 7/ 8/ 9.
8. Role should be populated with these options (Admin, Customer, Dealer and Delivery).

6.2.3 Admin Module

Note: Dealer approval and Agency Approval not in scope.



Figure 1.3 Admin Home Page

a. Add Category

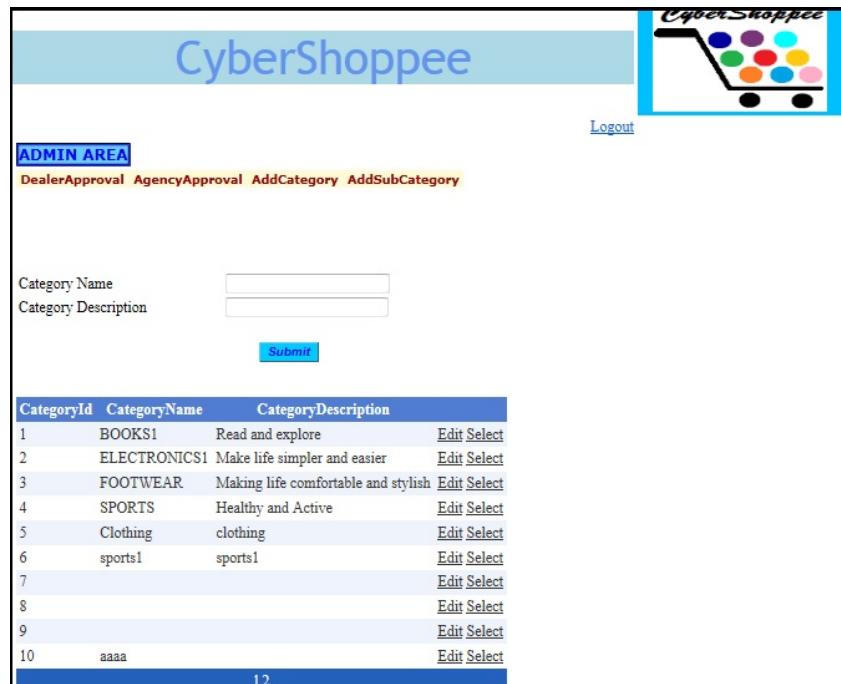


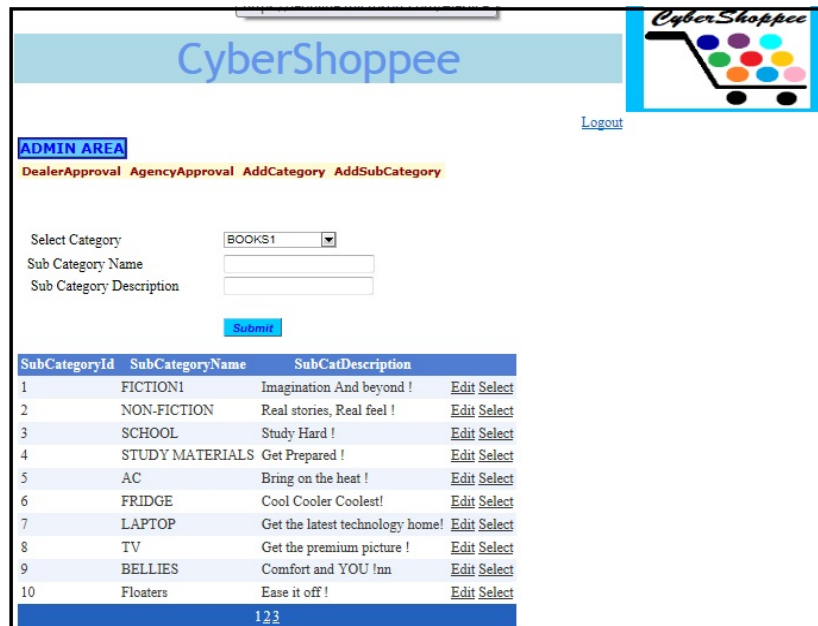
Figure 1.4 Add Category Page

Purpose	To add product categories
----------------	---------------------------

Functionality	<ul style="list-style-type: none"> • Admin can add product category • Admin can edit product category • Admin can update product category
----------------------	--

Requirements:

1. Category Name and Category Description cannot be blank.
2. Admin can edit any information of existing category & it should be successfully updated.

b. Add Sub Category


The screenshot shows the 'Add Sub Category' page in the CyberShoppee admin interface. At the top, there's a header with the 'CyberShoppee' logo and a 'Logout' link. Below the header, there's an 'ADMIN AREA' section with navigation links: 'DealerApproval', 'AgencyApproval', 'AddCategory', and 'AddSubCategory'. The main form area includes a 'Select Category' dropdown menu (currently showing 'BOOKS1'), a 'Sub Category Name' text input field, and a 'Sub Category Description' text input field. A 'Submit' button is located below the description field. At the bottom, there's a table listing existing subcategories with columns for 'SubCategoryId', 'SubCategoryName', 'SubCatDescription', and an 'Edit Select' link for each row.

SubCategoryId	SubCategoryName	SubCatDescription	Edit Select
1	FICTION1	Imagination And beyond !	Edit Select
2	NON-FICTION	Real stories, Real feel !	Edit Select
3	SCHOOL	Study Hard !	Edit Select
4	STUDY MATERIALS	Get Prepared !	Edit Select
5	AC	Bring on the heat !	Edit Select
6	FRIDGE	Cool Cooler Coolest!	Edit Select
7	LAPTOP	Get the latest technology home!	Edit Select
8	TV	Get the premium picture !	Edit Select
9	BELLIES	Comfort and YOU !nn	Edit Select
10	Floater	Ease it off !	Edit Select

Figure 1.5 Add Sub Category Page

Purpose	To add product sub category
Functionality	<ul style="list-style-type: none"> • Admin can add product sub category • Admin can update product sub category

Requirements:

1. The select category dropdown box should auto populate with the existing category ids.
2. User need to select category id
3. User need to fill in the subcategory name and subcategory description & both fields cannot be left blank.

4. Admin can edit any information of a product subcategory using same page.
5. User need to click on the “Edit” link to update the details of existing subcategory.
6. Once user has edited the details, he can confirm the same by clicking on the Update link.

6.2.4 Customer Module

a. Search Products



The screenshot shows the 'CyberShopper' web application interface. At the top, there's a header with the 'CyberShopper' logo and a shopping cart icon. Below the header, there's a 'CUSTOMER AREA' section with links for 'Search Products', 'My Orders', 'My Cart', 'Change Password', and 'My Account'. The 'Search Products' link is highlighted. Below these links, there are two dropdown menus: 'Select Category' with 'BOOKS1' selected, and 'Select Subcategory' with 'FICTION1' selected. A 'Search' button is located below the subcategory dropdown. The search results are displayed in a table with the following columns: ProductId, SubCategoryId, ProductName, ModelNo, UnitCost, ProductType, TargetCustomer, ProductDescription, DealerId, and ImageUrl. The table contains one row of data for 'Wings of Fire' (FC0001, 300, Fiction, All, A.P.J.Abdul Kalam, shbl94). Below the table, there is a 'ViewProduct' link. The footer of the page states 'Copyright. All rights reserved.'

ProductId	SubCategoryId	ProductName	ModelNo	UnitCost	ProductType	TargetCustomer	ProductDescription	DealerId	ImageUrl
Select 1	1	Wings of Fire	FC0001	300	Fiction	All	A.P.J.Abdul Kalam	shbl94	

Figure 1.6 Search Product Page



CyberShoppee

[Logout](#)

CUSTOMER AREA

[Search Products](#) [My Orders](#) [My Cart](#) [Change Password](#) [My Account](#)

Name: Wings of Fire

Model Number: FC0001

Unit Cost: 300

Type: Fiction

For: All

Description: A.P.J. Abdul Kalam

Dealer: shbk94

Select Size: 248

Select Quantity:

[Add To Cart](#) [Cancel](#)

Copyright. All rights reserved.

Figure 1.7 Add To Cart Page

Purpose	To search product
Functionality	<ul style="list-style-type: none"> Customer can search for a product Customer can then add the searched product in the shopping cart

Requirements:

1. Customer need to select the category.
2. Based on category selected the subcategory will be populated.
3. Customer need to click on the Search button to initiate the search of the product.
4. If the matching product exists, the details will be displayed in the table below.
5. Customer can click on View Product link to view the selected product and at the same time he can also add this product to the cart by clicking on the Add To Cart button.
6. When user clicks on "Add To Cart" button the product should get added in to the cart.
7. Select Quantity field cannot be null.

8. When user clicks on “Cancel” button user should navigate to Search Product page.

b. My Orders



Figure 1.8 My Orders Page

Purpose	To view orders
Functionality	<ul style="list-style-type: none"> Customers can view orders placed by him

Requirements:

- Customer can click on My Orders tab to view his orders.
- If the cart is null, and user clicks on “Place Order” Button, the order should not get added into My Orders.

c. My Cart

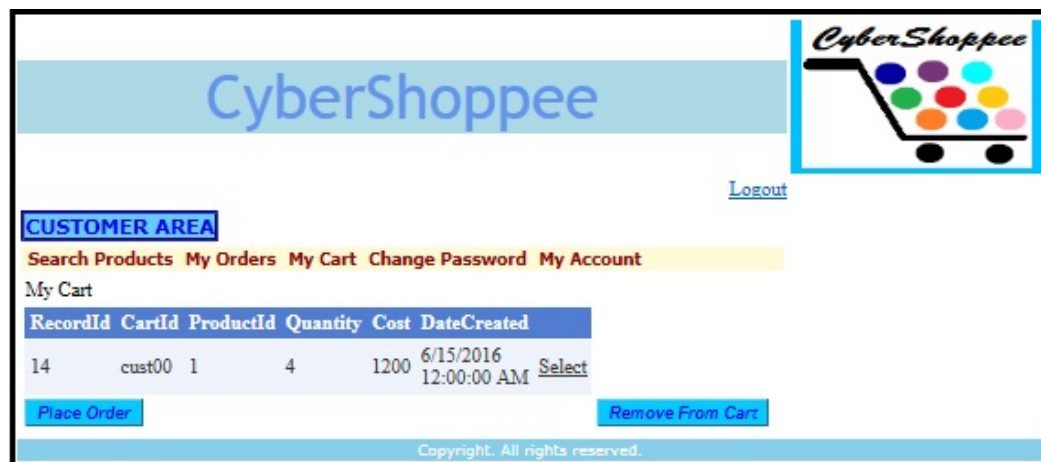


Figure 1.9 My Cart Page

Purpose	To view products in cart and place order
Functionality	<ul style="list-style-type: none"> Customer can add products in cart Customer can place order

Requirements:

1. Customer can place order for selected items form the cart.
2. Customer can remove selected items form the cart.

d. Change Password

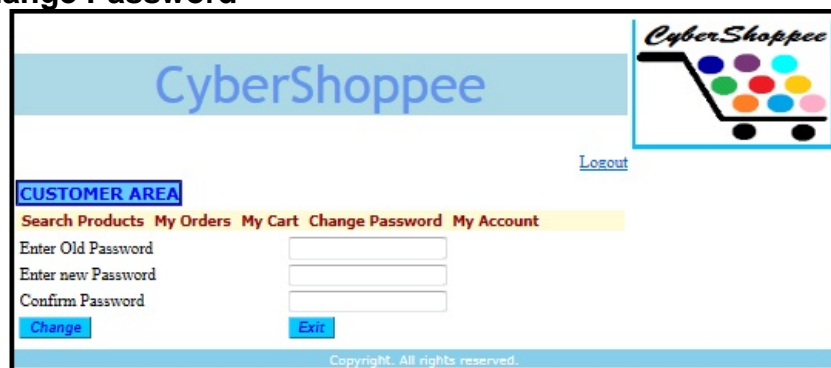


Figure 1.10 Change Password Page

Purpose	To change password
Functionality	<ul style="list-style-type: none"> Customer can change password

Requirements:

1. Customer can click on “Change” button and change the password.
2. Customer can click on “Exit” button to come out from current page and navigate to customer’s home page..
3. New password and Confirm password should match with each other.
4. If Old password is incorrect, system should alert customer with proper error message.

e. My Account

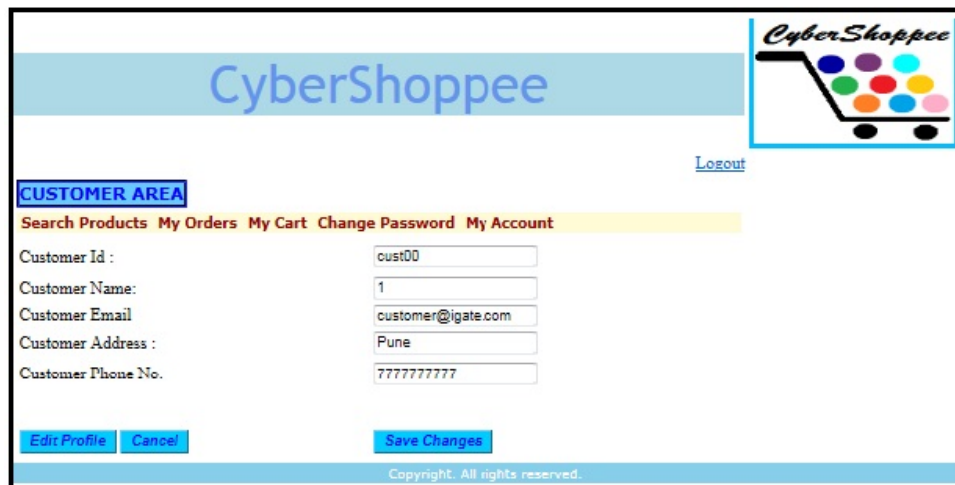


Figure 1.11 My Account Page

Purpose	To Edit account Details
Functionality	<ul style="list-style-type: none"> Customer can edit his account details.

Requirements:

1. Customers are restricted to edit "Customer Id".
2. Customer Name should contain only characters and begin with uppercase letter.
3. Email should be in someone@gmail.com format.
4. Contact Number should contain only 10 digits and begin with 7 or 8 or 9.
5. Customer can click on "Edit profile" to edit the profile.
6. Customer can click on "Save Changes" button to save edited profile.
7. Customer can click on "Cancel" button to cancel the changes and should navigate to Customer Home page.

6.2.5 Dealer Module

a. Dealer Operations

The screenshot shows the 'CyberShopper' web application interface. At the top, there's a header with the 'CyberShopper' logo and a shopping cart icon. Below the header, a 'DEALER AREA' is highlighted, with navigation links for 'DealerHome', 'AddAgency', and 'DealerOperations'. A 'Logout' link is also present. The main form area contains several input fields: 'Sub Category' (a dropdown menu), 'ProductName', 'ModelNo', 'Type', 'Unit Cost', 'For' (a dropdown menu with 'Men' selected), and 'Description'. There is an 'Upload image here' button with a 'Browse...' button next to it. At the bottom of the form, there are 'Add' and 'Update' buttons. A red error message 'DealerCategory Could Not be fetched' is displayed. A blue button 'Add Size Quantity' is at the bottom left. The footer contains the text 'Copyright. All rights reserved.'

Figure 1.12 Add Product Details

Purpose	To add product details
Functionality	<ul style="list-style-type: none"> Dealer can add product details. Dealer can update product details.

Requirements:

1. All fields are mandatory.
2. Sub category dropdown box should auto populate.
3. Product Name can be alphanumeric.
4. Model Number can be alphanumeric.
5. Unit cost should contain only digits.
6. Description should contain 100 characters.
7. Dealer can click on browse button and able to upload the image.
8. Dealer can click on "Add" button to add the products.
9. Dealer can click on "Update" button to update the products.
10. Dealer can click on "Add Size Quantity" button to add the product quantity.