Requirements Validation and Functional Decomposition

Lab Book

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Document Revision History

Date	Revision No.	Author	Summary of Changes
12/8/09	1	Priya Rane	Revamp
21/6/2011	1.1	Selvalakshmi	Material Revamp
18/6/15	2.0	Alphy Thomson & Shilpa Bhosle	Material Revamp

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Problem Statement/ Case Study (If applicable)

Equipment Tracking System

About Application

Background

1. System - Equipments tracking system.
2. Most of the functionality available on Fat client and some on Web.
3. Module under test – Manage Equipments
4. Flow of the system.
   Purchase equipment → Manage Equipment → Track financials→Retire equipment
5. Manage equipment means – Install, Update and Move equipment.
6. There are different access rights for different users – (Browse and Edit.)

Note – The actual field names on the GUI screen can be different than the listed in the requirement.

Assumptions

1. Equipment entry is already in the system as Purchase phase is over.
2. Equipment 'Use status' can be 'In Use' if it is installed and assigned to some user/Department or it can be 'In stock' if it is not put in Use.

Requirements

1. Authorized users and systems must have the ability to record updates to equipment records
   1.1. The system must enforce requirements of the equipment Type properties while updation.
   1.2. Only valid Locations can be assigned to an equipment record when completing an update transaction. End Date has not expired
   1.3. Only valid Users can be assigned to an equipment record when completing an update transaction. End Date has not expired

2. The system must provide the ability to restrict which users may update equipment records.
   2.1. The authorized users are: Inventory personnel, equipment auditors, service personnel, maintenance personal and Equipment Tracking personnel

3. The system must provide the user with the capability to query for equipment records based on a predefined list of available data elements.
   3.1. Users must have the ability to query for an equipment by "Equipment Tag"
   3.2. The system must manipulate the barcode Equipment Tag for query and storage consistency
      3.2.1. Equipment Tag must be 10 characters
      3.2.2. Equipment Tag must be all numeric
      3.2.3. Equipment Tag will remove any blanks or dashes
      3.2.4. The text 'AD' will be removed from Equipment Tag if found in position 1 and 2 of

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the character string
3.2.5. Equipment Tag will be padded with leading zeros if length is less than 10 characters
3.3. Users must have the ability to query for equipments by "Seq Number"
3.3.1. The system must manipulate the Seq number input for query and storage consistency
3.3.2. The system must use the most recent rules contained within the authorized document:
3.4. Users must have the ability to query for an equipment by "Machine Id"
3.5. Users must have the ability to query for equipments by "User Id"
3.6. Users must have the ability to query for equipments by "Location"
3.6.1. Users must select a valid Location from a list.

4. System should return a list of equipments matching the query criterion
4.1. The system must provide the ability to view the Equipment Tag for each equipment record returned in the list.
4.2. The system must provide the ability to view the Quantity for each equipment record returned in the list..
4.3. The system must provide the ability to view the Seq. Number for each equipment record returned in the list.
4.4. The system must provide the ability to view the User Id for each equipment record returned in the list.
4.5. The system must provide the ability to view the Location for each equipment record returned in the list.
4.6. The system must provide the ability to view the Equipment type for each equipment record returned in the list.

5. The system must provide the user with the ability to manually update specified data for a single equipment record.
5.1. Users are restricted to modifying equipment records only in within their state
5.2. Only comments can be updated for retired equipments
5.3. Any Unassociated equipments identified as "Spare Part" must be 'In Stock'

6. The system must provide the user with the ability to manually update specified data for multiple equipment records simultaneously.

7. Following is the list of updatable fields depending on the use transactions and equipment status
7.1. Purchase Method - Required
7.2. Seq Number - Required based on the equipment type.
7.3. User ID - If allocated to user
7.4. Department ID - If allocated to department
7.5. Use Status – Required. If stock equipment then default to In-Stock
7.6. Cost Center –Required. If Use status is In-Stock default with Stock Location's cost center ID
7.7. Install Date Required if Use Status is 'In Use'
Default to actual Receipt Date if receiving done through automatic interface.
Default to Current Date if equipment is added into system manually.
7.8. Location- Required

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7.9. Audit Indicator (Yes/No)
7.10. Audit Date - Default the Audit Date to the Receipt Date
7.11. comments
7.12. Stock Location - Required if use status is In-Stock

8. The system must provide the ability to update specified data in an equipment record from external systems.

9. System should allow printing the equipment's basic information using 'Print Label' functionality.
   9.1. Label should include
      9.1.1. Equipment code
      9.1.2. User ID
      9.1.3. Location ID
   9.2. System should receive automatic updates from the 'CompTrak' system for all the computer related fields on a regular basis.('CompTrak' is the network-based system that tracks all the computers in the network and collects data physically for all the computers. So this system is the Primary data holder for the computer specific fields)
      9.2.1. Computer Name
      9.2.2. Disk Capacity
      9.2.3. Total installed memory
      9.2.4. Network Card number
      9.2.5. Network Card Manufacturer
      9.2.6. Free space on 'C' Drive
      9.2.7. Operating system
      9.2.8. OS version

   9.3. Updations are done only if the last scan date for a stored in the 'Equipment tracking system' is lesser than the 'Last Scan date' stored in the 'CompTrak' system
   9.4. Errors would be generated if
      9.4.1. The equipment tag is not found in 'Equipment tracking system
      9.4.2. Last scan date for a stored in the 'Equipment tracking system' is greater than the 'Last Scan date' stored in the 'CompTrak' system

10. System should supply the detailed information in the comma separated flat file format to the statistical department
   10.1. This should be automatic process run on last day every month
   10.2. It should include those equipments that are received in current month
   10.3. It should exclude any 'Retired' equipment even if they are purchased this month.
   10.4. Following fields should be present
      10.4.1. Use status
      10.4.2. Type of equipment
      10.4.3. Location
      10.4.4. Total quantity
      10.4.5. Purchase Date
   10.5. Apart from flat file, an excel file should also be created which will contain the same data (except purchase date) but grouped by Use status.
      10.5.1. Sorting should be by Use status, Type and Location(All Ascending)

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10.5.2. Quantity Subtotals should be available for each change in Use status and Type of equipment.
10.5.3. The detailed format for this Excel report is available in the <Some logical information>(Assume that this information is available)

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Lab 1. Requirements Validation and Functional Decomposition

Goals	• Understand the process of requirements itemization. • Learn to apply basic techniques of requirement itemization to understand the requirements better. • Learn to prepare requirement itemization document.
Time	180 minutes

FUNCTIONAL REQUIREMENTS SPECIFICATION
FOR
Banking Exam Portal
Project Code: UI026

Version 2.0

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1.1: System Overall Description

The web site of Banking Exam Portal should be accessible to anyone who can log onto the World Wide Web using a standard browser that is version 8.0 or higher. The inventory of this banking exam portal should be maintained in a relational database, such as Oracle. A combination of standard HTML and a scripting language for web application, such as Cold Fusion of MS Server Pages, should be considered in developing the web page interfaces.

The application uses Oracle 9i as the backend database.

All internal and external exceptions occurring in the system are handled through a custom exception handling mechanism using an application specific exception class. All error messages are conveyed to the users through the standard exception handling mechanism provided. The exceptions are sent to web pages and mapped to friendly messages on the web pages. Fatal error messages are also logged to an application specific log file with the appropriate details.

The following table provides details of the environment for end-user

Software Specification
• Windows Vista, Windows 7, Windows 8, Windows 8.1 • Internet Explorer or any standard browser 8.0 and above • Oracle 9i

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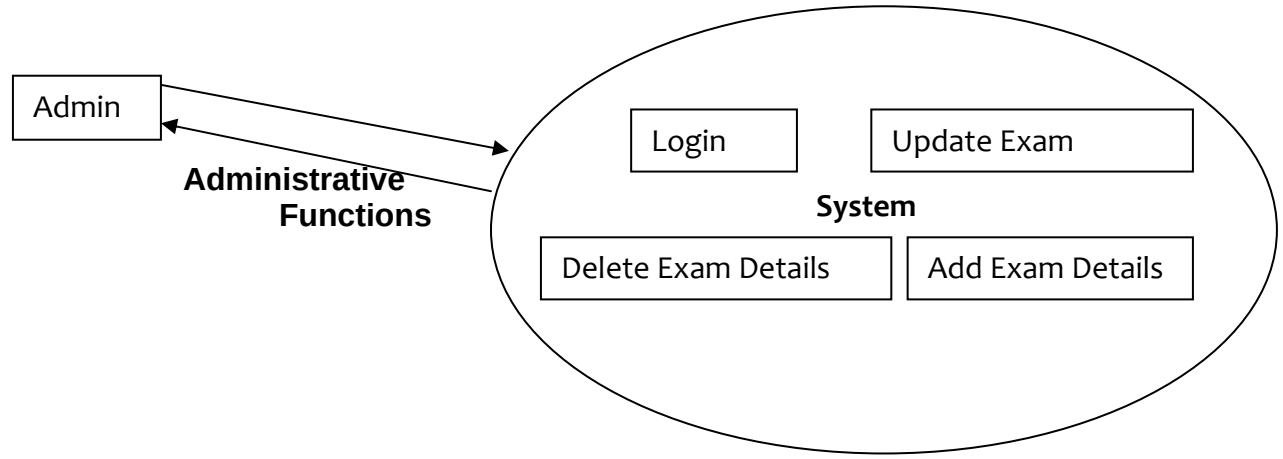
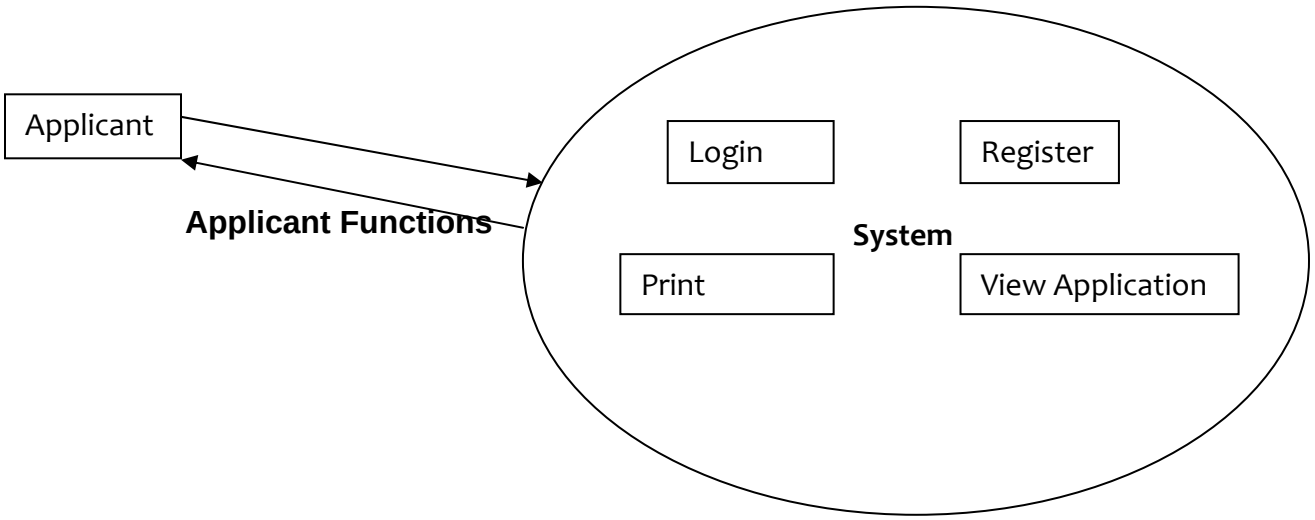
1.2: System Description

This exam portal can be accessed by two different users: Admin and Applicant. The operations performed by both of them are shown in the Data Flow Diagrams below. The portal can be accessed by entering the name of the website (www.bankersjob.com/exam) in the browser. The admin can directly login to the application using the credentials given to him. The applicant can login only after applying for an exam. To apply for an exam the applicant needs to register.

Data Flow Diagrams of Banking Exam Portal





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1.3: Product Functions

Function No.	Function Name	Sub-Function No.	Sub-Function(s)
1.0	Administrative Functions	1.0.1	Login
		1.0.2	Add Exam Details
		1.0.3	Update Exam Details
		1.0.4	Delete Exam
2.0	Applicant Functions	2.0.1	Register
		2.0.2	Login
		2.0.3	Make Payment
		2.0.4	View Application
		2.0.5	Print Receipt
3.0	Security Functions	3.0.1	Accessibility of each page
4.0	Exception Handling Functions	4.0.1	

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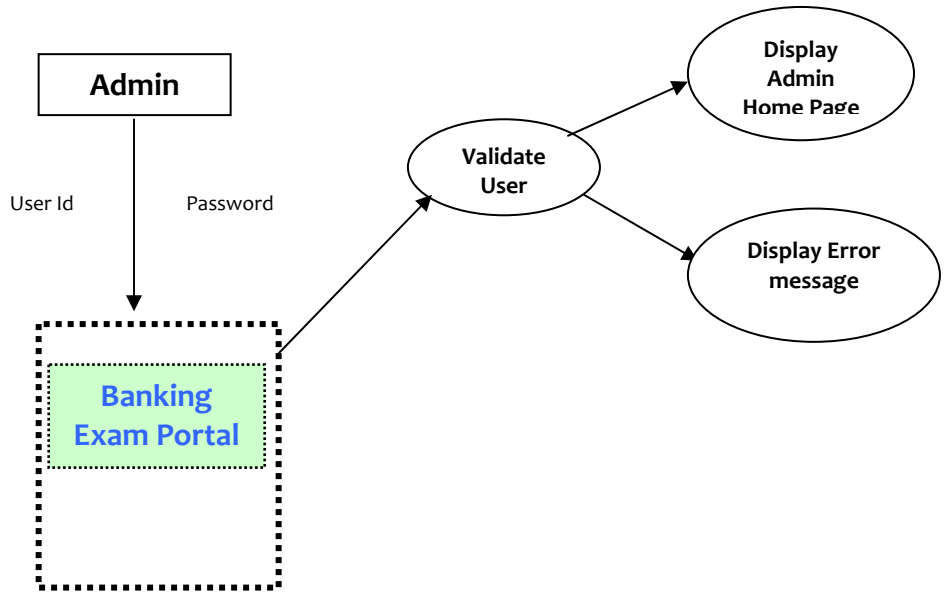
1. Administrative Functions

a. Login function

Function No.	Function Name	Description
1.0.1	**Login**	▪ The admin enters his/her user-id and password and clicks the login button ▪ The system validates the user-id and password combination with the database. ▪ If the authentication is unsuccessful, a login failure message is displayed. ▪ On successful login, the admin home page is displayed. ▪ On Successful login, the user-id and role fields are stored in the HTTP session for future use during that session. The user session expires after a default inactivity interval of 20 minutes.



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b. Add Exam Details function

Function No.	Function Name	Description
1.0.2	**Add Exam Details**	▪ When the Bank announces a particular exam, the admin adds the exam details to the list of exams. ▪ The exam added should have a unique name. Once submitted the exam name cannot be changed. ▪ The commencement of online registration date should be mentioned and the closure date for registration would be 30 days from the commencement date. ▪ The date of the exam should be at least 60 days ahead of the commencement date. ▪ The examination fees needs to be mentioned along with the exam details. ▪ On clicking of the submit button all the details should be validated. ▪ If any of the fields are not entered appropriate error messages needs to be shown ▪ Also if any of the fields are incorrectly entered suitable messages should get displayed ▪ Once the exam is added, the same should be displayed in the home page and the Applicant can apply for the exam.

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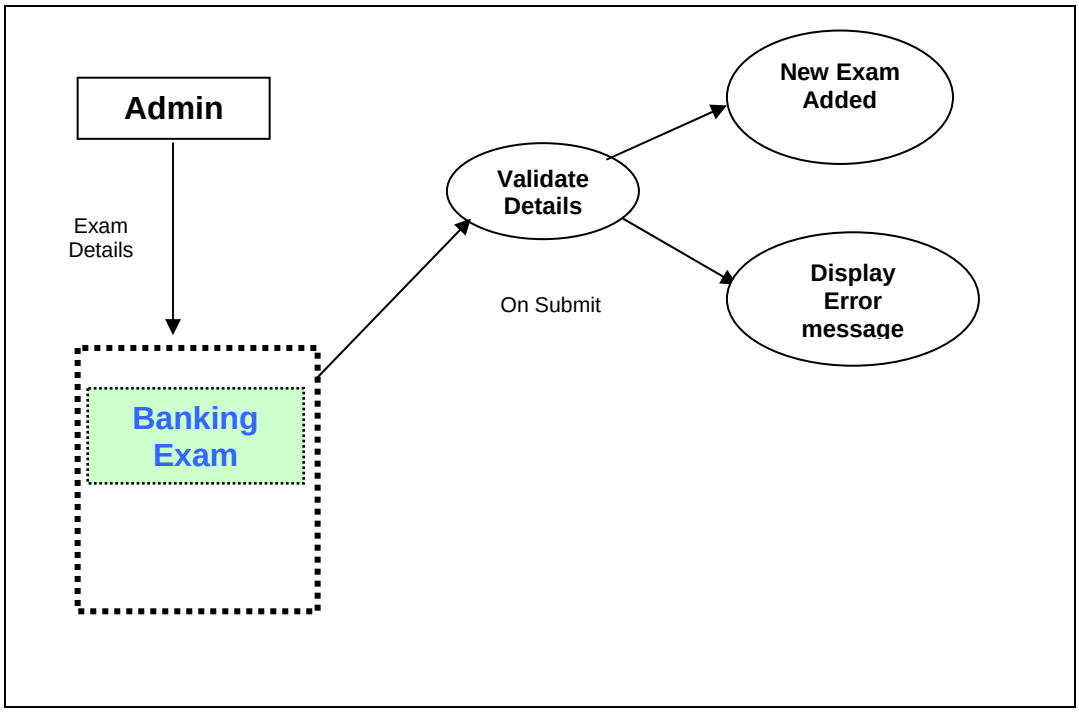

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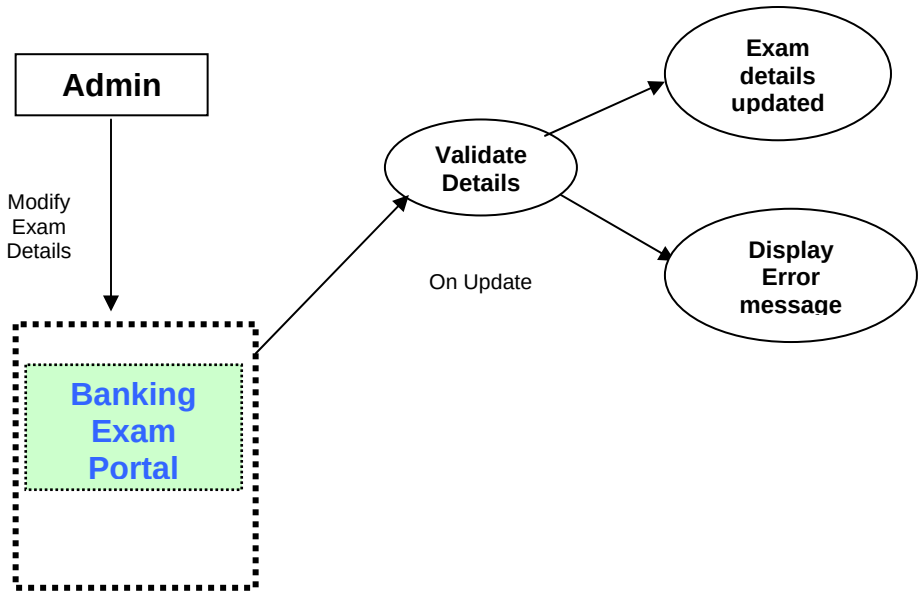
c. Update Exam Details function

Function No.	Function Name	Description
1.0.3	**Update Exam Details**	▪ When some existing exam details needs to be updated ,the admin does so through the update exam details functionality ▪ Everything except the exam name can be changed for a particular exam ▪ The admin selects the particular exam to be updated and clicks on the update button ▪ On the following page the exam details appear as editable fields. ▪ Once the modification is done the updated exam details are populated in the home page ▪ If any of the fields are not entered appropriate error messages needs to be shown ▪ Also if any of the fields are incorrectly entered suitable messages should get displayed



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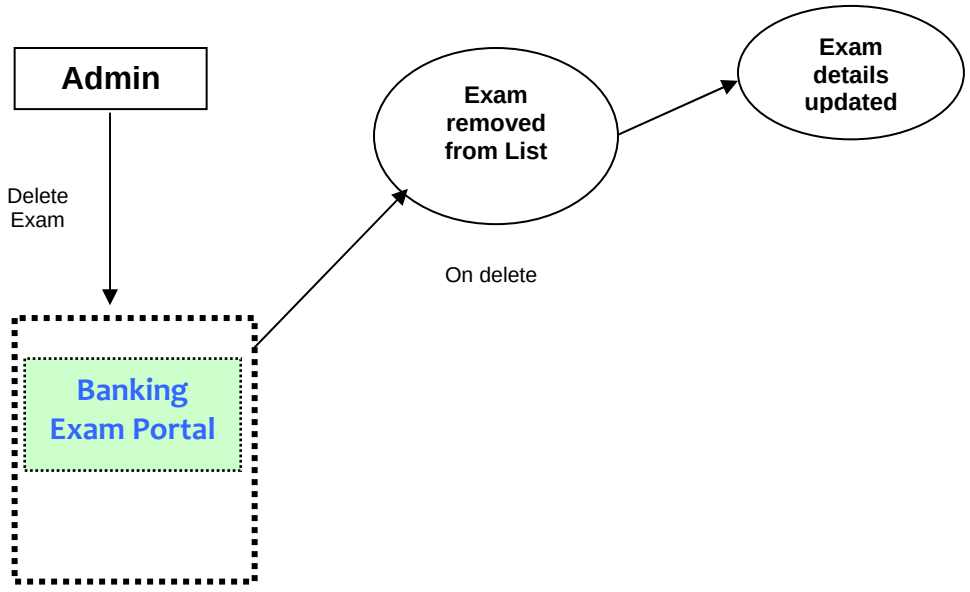
d. Delete Exam Details function

Function No.	Function Name	Description
1.0.4	**Delete Exam**	▪ When some existing exam details needs to be deleted ,the admin does so through the delete exam functionality ▪ The admin selects the particular exam to be deleted and clicks on the delete button ▪ Once it is deleted the exam name is removed from the list of the exams available



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2. Applicant's Functions:

a. Register Function

Function No.	Function Name	Description
2.0.1	**Register Function**	▪ When a new applicant visits the portal and wishes to apply for an exam, he is required to register with the site. ▪ In the registration section the full name gets populated from the first and last name entered. ▪ Other personal details like mobile number, email id, DOB, Gender, Marital Status are mentioned. ▪ Educational qualification details like degree, subject, year of passing, percentage of marks are to be collected. ▪ Photo and signature should be uploaded by the applicant as image files. ▪ On clicking on the Save & Submit button the data entered is validated. ▪ In case of any of the fields are not entered appropriate error messages needs to be shown ▪ Also if any of the fields are incorrectly entered suitable messages should get displayed ▪ If the values are validated then it should generate and display the registration id, password and the same are sent to the registered mobile no.

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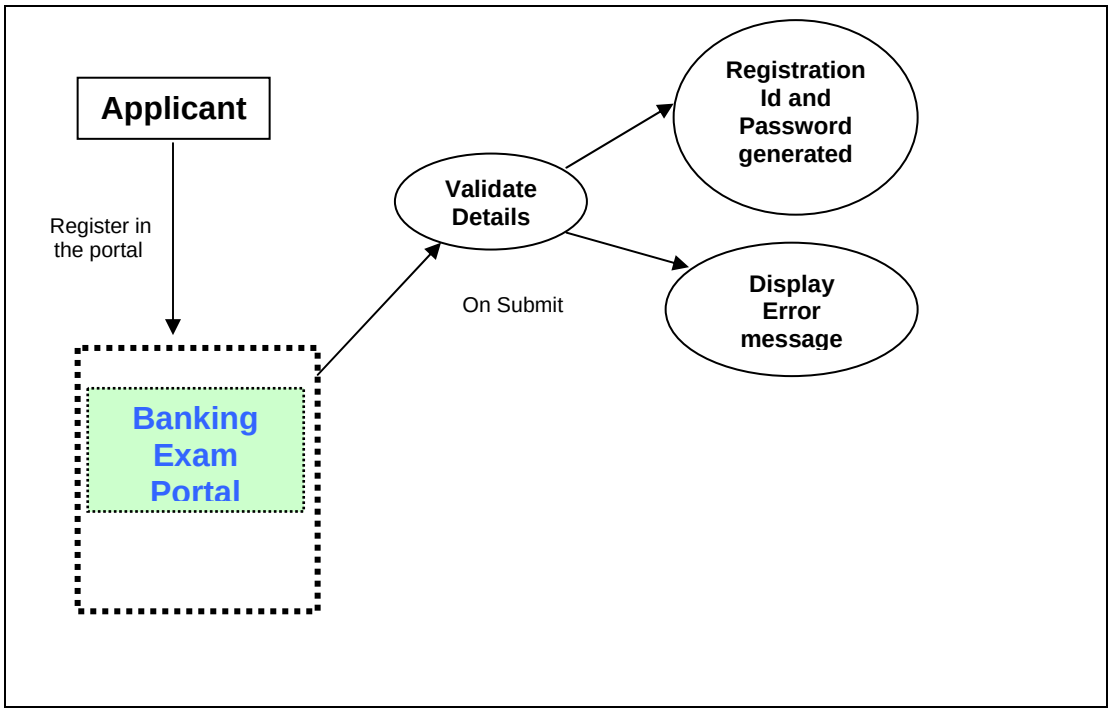

a. Login function

Function No.	Function Name	Description
2.0.3	**Login**	▪ The applicant can login into the portal with the registration id and password received after successful registration. ▪ This is done through the Login function available through the 'Existing Candidate Login' option ▪ The system validates the registration-id/password combination with the database. ▪ If the authentication is unsuccessful, a login failure message is displayed. ▪ On successful login, the Main page for Applicant is displayed. ▪ On Successful login, the registration-id and role fields are stored in the HTTP session for future use during that session. The applicant session expires after a default inactivity interval of 20 minutes. ▪ The Main page contains options of viewing the application, making payment and printing the receipt of the payment done.

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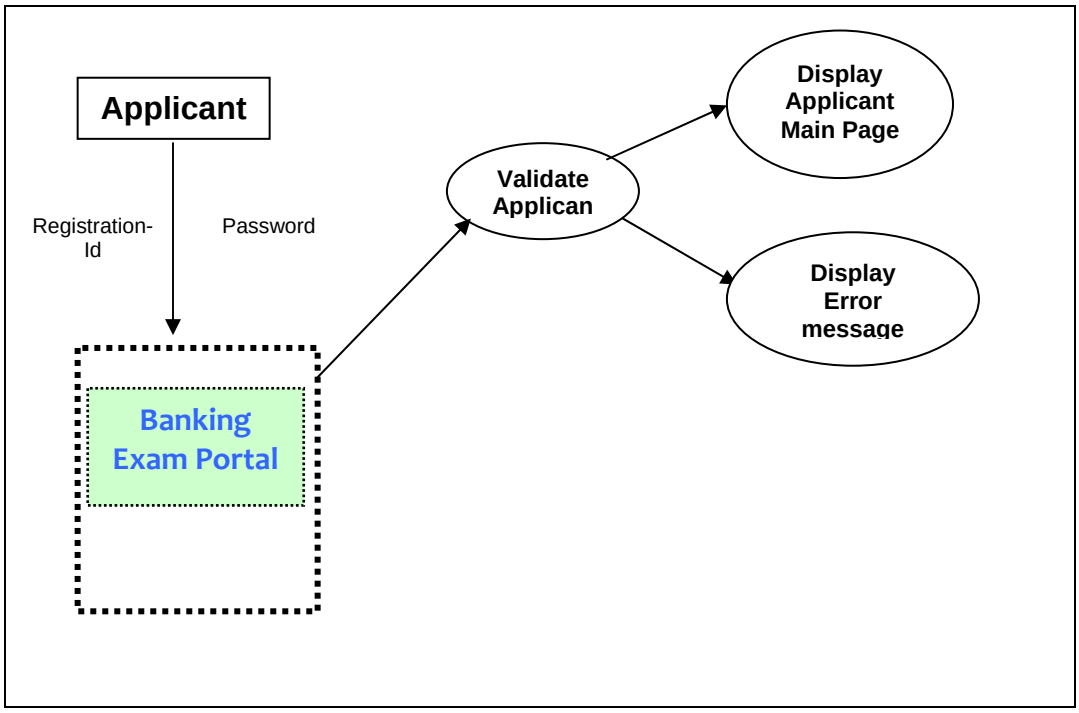

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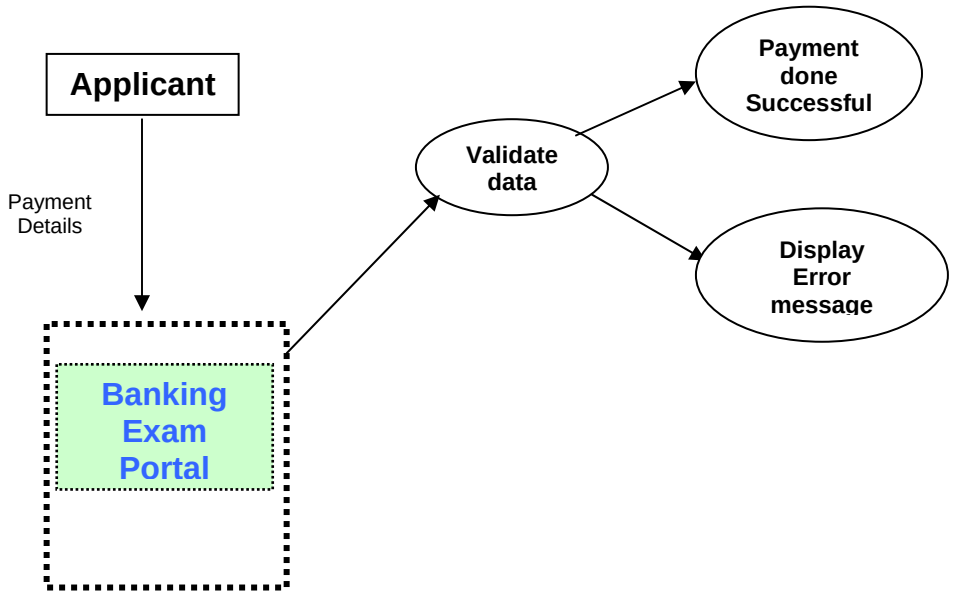
b. Make Payment function

Function No.	Function Name	Description
2.0.2	**Make Payment Function**	▪ Once the user has been successfully registered on the website he/she can login to the banking exam portal to make payment for the exam that he/she has registered for. ▪ The applicant makes use of the Make Payment Function to do this ▪ The portal supports only debit card payment option ▪ In the payment page the details of bank, debit card details like card no, validity date, card holder's name, PIN are asked for. ▪ On successfully entering these details and clicking on the Make Payment button the payment is done successfully followed by a message being displayed.



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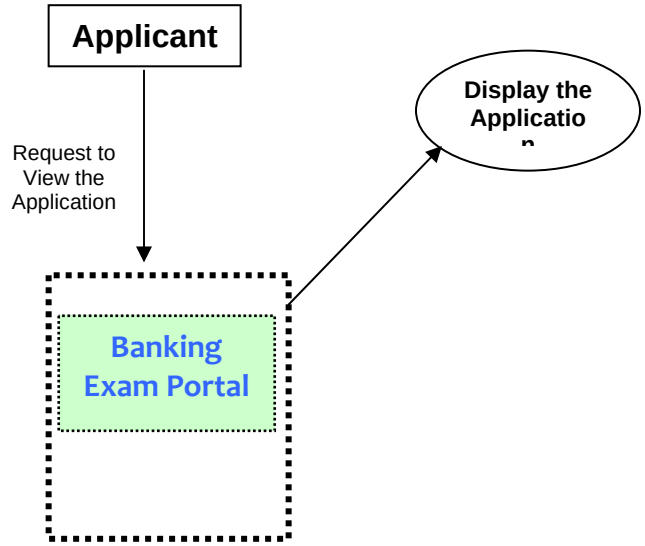
c. View Application function

Function No.	Function Name	Description
2.0.4	**View Application Function**	▪ The applicant can view the details of his application using the View Application function. ▪ On clicking the view application option the report containing the details of the application is displayed.



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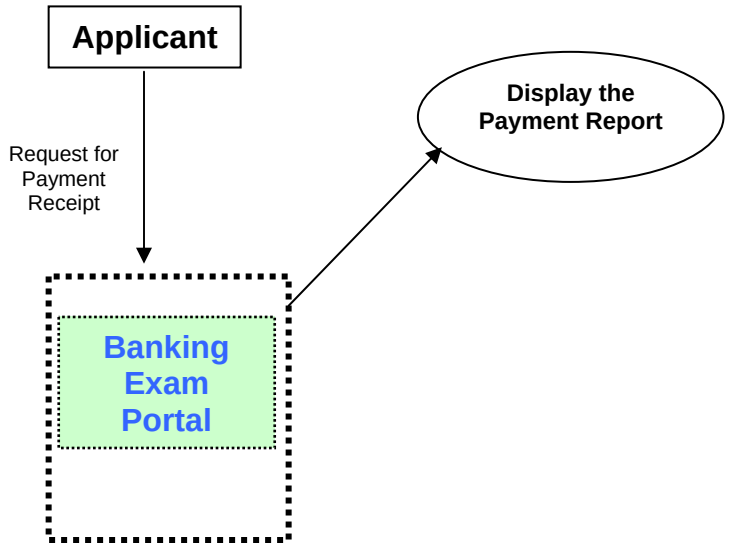
d. Print Receipt Function

Function No.	Function Name	Description
2.0.5	**Print Receipt Function**	▪ The applicant can print the payment details of his application using the Print Receipt function. ▪ On clicking the Print Receipt option the report containing the details of the payment is displayed.



In addition to the above functionality system also provides following features.

1. Security

a. Each page in the Banking Exam Portal web application checks for a valid user login by checking the value of a session variable. This scheme ensures that users cannot directly access any web page of the application by simply entering the URL of that page on the address bar of the browser.

2. Exception Handling

a. All exceptions occurring due to reasons external to the Banking Exam Portal system e.g. database/network related exceptions are trapped and appropriate error messages are displayed to the users.

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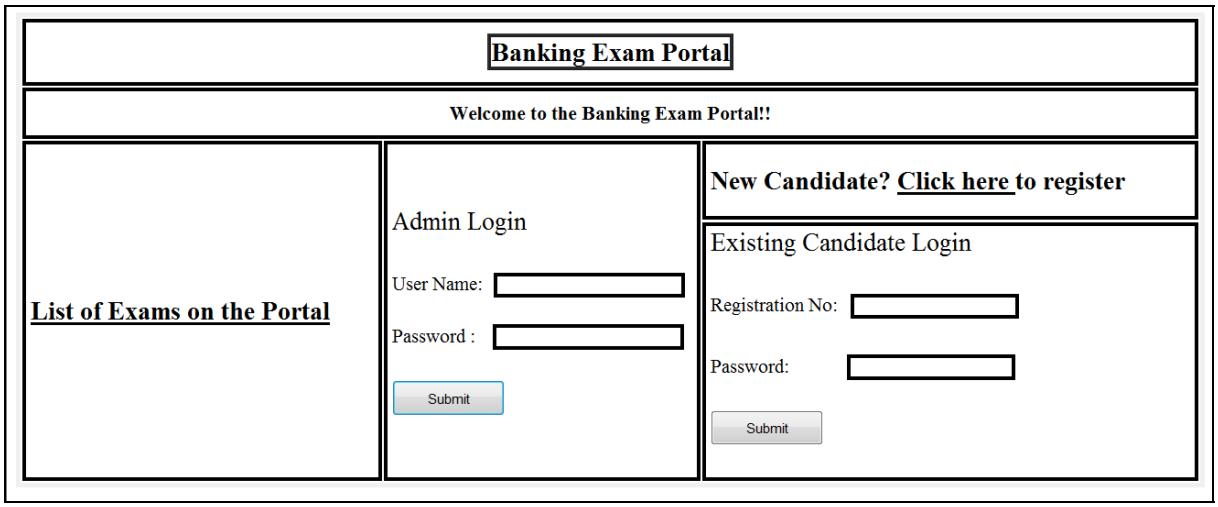
1.4: External Interface Requirement - User Interfaces

Home Page



Purpose	:	Main Home Page
Functionality	:	• The registered users can login into the system. • The list of exams can be viewed • The user can register on the banking exam portal

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
List of Exams on the Portal	Hyperlink	Users can click to view the list of exams offered	-	It should navigate user to the appropriate web page containing list of exams
User Name (Admin)	Text Box	Specify the admin user name	-	Username entered is validated with the data in the database
Password (Admin)	Password Box	Specify the admin password	-	Password entered is validated with the data in the database
Submit (Admin)	Button	On click validates the user credentials and based on the validation	-	-

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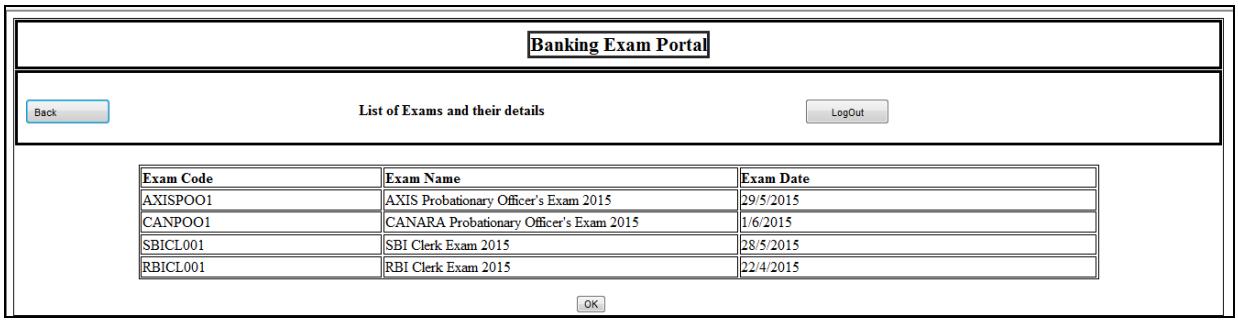
		result allows or disallows Admin from logging to the website		
Click Here	Hyperlink	On click new users can register to the website	-	It should navigate the new user to the **Register** web page
Registration No	Text Box	Specify the registration number	-	Registration No entered is validated with the data in the database
Password	Password Box	Specify the applicant's password	-	Password entered is validated with the data in the database
Submit	Button	On click validates the user credentials and based on the validation result allows or disallows user from logging to the website	-	

List of Exam and Their details



Purpose	:	List of Exam and Their details
Functionality	:	• This page gives the list of exams and their details

Role	Details / Business Rule / Constraints
Applicant	These users can invoke this functionality.

Control Label	Control Type/ Length/	Description/ Business Rule	Default Value	Validation

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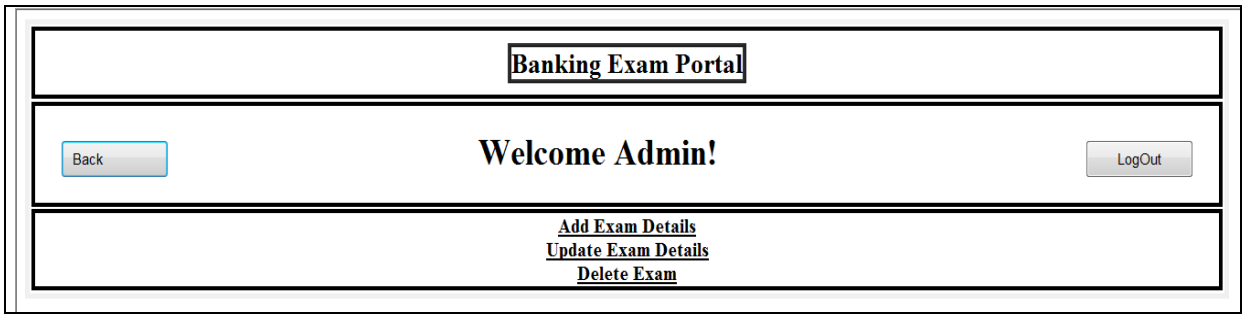
	Multi select			
Back	Button	On click redirects to the main home page of the portal	-	-
LogOut	Button	On click logs out the admin from the portal	-	-
OK	Button	On click goes back to the home page	-	

Admin Home Page



Purpose	:	Admin Home Page
Functionality	:	• The admin's functionality of adding, updating and deleting exam can be accessed from this page

Role	Details / Business Rule / Constraints
Administrator	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click redirects to the main home page of the portal	-	-
LogOut	Button	On click logs out the admin from the portal	-	-
Add Exam Details	Hyperlink	Admin can click to add a new exam and its details	-	It should navigate the Admin to the **Add Exam Details** web page
Update Exam Details	Hyperlink	Admin can click to update an exam's details	-	It should navigate

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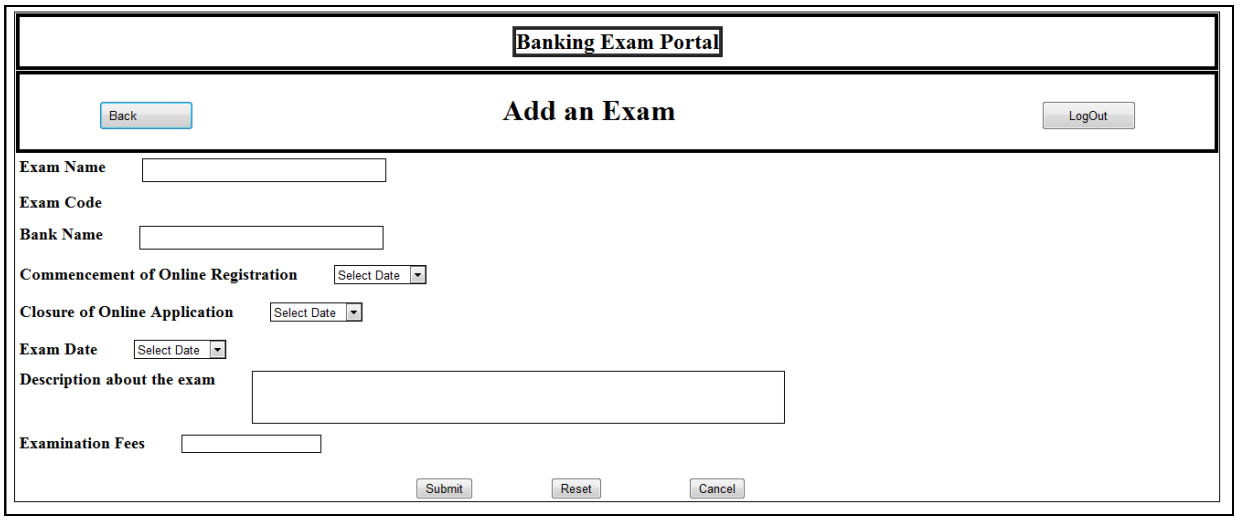
				the Admin to the **Update Exam Details** web page
Delete Exam	Hyperlink	Admin can click to delete an exam	-	It should navigate the Admin to the **Delete Exam** web page

Add an exam Page



Purpose	:	Add an Exam Page
Functionality	:	• A new exam and its details can be added using this page

Role	Details / Business Rule / Constraints
Administrator	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click redirects to the home page of the admin	-	-
LogOut	Button	On click logs out the admin from the portal	-	-

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Exam Name	Text Box	Exam name for the exam can be given here	-	Should be a unique name
Exam Code	Auto Generated Text	On giving the exam name an exam code is generated by the system	-	A unique value should be generated after the exam name is entered
Bank Name	Text Box	Bank name can be given here	-	Should accept valid bank name
Commencement of Online Registration	Calendar Control	Date can be selected for the commencement of the online registration	-	Calendar should get populated while clicking on the control. It should be a future date.
Closure of Online Application	Calendar Control	Date can be selected for the commencement of the online application	-	Calendar should get populated while clicking on the control. Should be 30 days from the commence ment date.
Exam Date	Calendar Control	Date can be selected for the exam	-	Calendar should get populated while clicking on the control. Should be more than 60 days from the date of commence ment date.
Description about	Text Box	Description about the	-	It can

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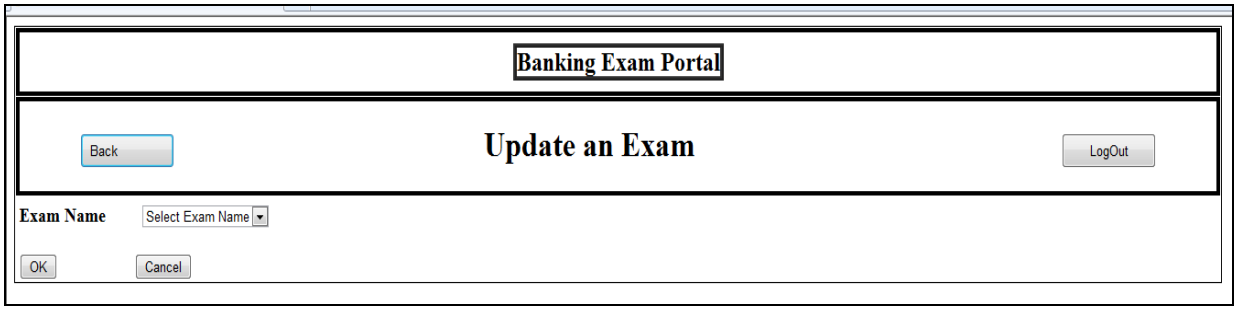
exam the exam		exam can be given here		accept characters and numeric values.
Examination Fees	Text Box	The fee amount can be entered here	-	It can accept only numeric values.
Submit	Button	On click it submits all the details	-	-
Reset	Button	On click it resets the details	-	-
Cancel	Button	On click cancels the operation and closes the web page	-	-

Update an exam Page



Purpose	:	Select an exam to update
Functionality	:	• The exam to be updated is selected from this page

Role	Details / Business Rule / Constraints
Administrator	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click redirects to the home page of the admin	-	-
LogOut	Button	On click logs out the	-	-

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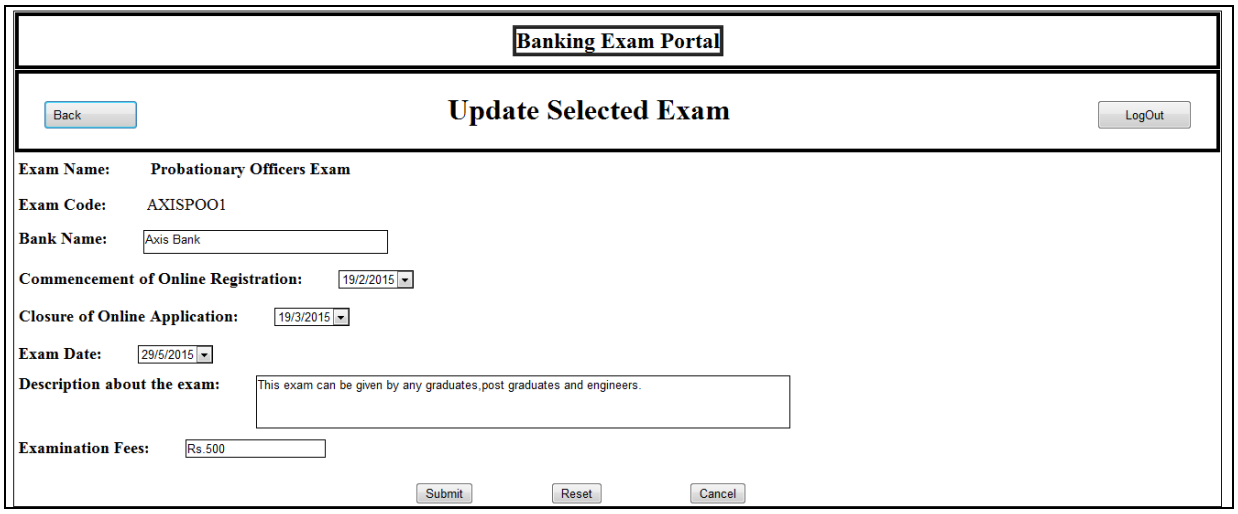
		admin from the portal		
Exam Name	Drop Down Box	Exam name to be updated can be selected from the list	-	All the exams available should be present in the list
Ok	Button	On click ,redirects to the next page	-	-

Update selected Exam Page



Purpose	:	Update Selected Exam Page
Functionality	:	• The exam selected can be updated using this page. All the details entered previously for the selected exam gets populated in the page.

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Role	Details / Business Rule / Constraints
Administrator	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click redirects to the exam selection page	-	-
LogOut	Button	On click logs out the admin from the portal	-	-
Exam Name	Text	Selected Exam name from the previous page gets reflected here	-	It should display the name of the exam to be updated. It is a non-editable field.
Exam Code	Text	Corresponding exam code is shown here	-	It should display the exam code of the exam to be updated. It is a non-editable field.
Bank Name	Text Box	Bank name can be changed or edited here	-	Should accept valid bank name.
Commencement of Online Registration	Calendar Control	Date can be changed or edited for the commencement of the online registration	-	Calendar should get populated while clicking on the control. It should be a future date.
Commencement of Online Application	Calendar Control	Date can be changed or edited for the commencement of the online application	-	Calendar should get populated while clicking on the control. Should be

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				30 days from the commencement date.
Exam Date	Calendar Control	Date can be changed or edited for the exam	-	Calendar should get populated while clicking on the dropdown box. Should be more than 60 days from the date of commencement date.
Description about exam the exam	Text Box	Description about the exam can be changed or edited here	-	It can accept characters and numeric values.
Examination Fees	Text Box	The fee amount can be changed or edited here	-	It can accept only numeric values.
Submit	Button	On click it submits all the details	-	-
Reset	Button	On click it resets the details	-	-
Cancel	Button	On click cancels the operation and closes the web page	-	-

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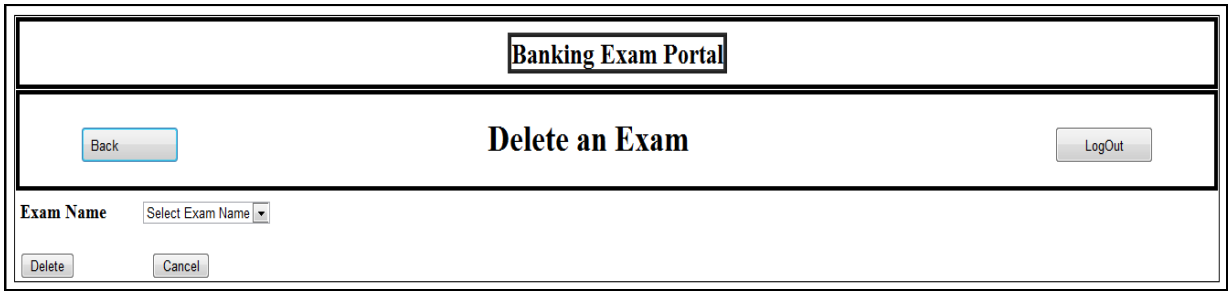
Delete an exam Page



Purpose	:	Select Exam to be deleted
Functionality	:	• The exam to be deleted can be selected in this page.

Role	Details / Business Rule / Constraints
Administrator	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click redirects to the home page of the admin	-	-
LogOut	Button	On click logs out the admin from the portal	-	-
Exam Name	Drop Down Box	Exam to be deleted can be selected from the list	-	All the exams available should be present in the list.
Delete	Button	On click it deletes the selected exam and the details of that exam from the database.	-	-
Cancel	Button	On click cancels the operation and closes the web page	-	-

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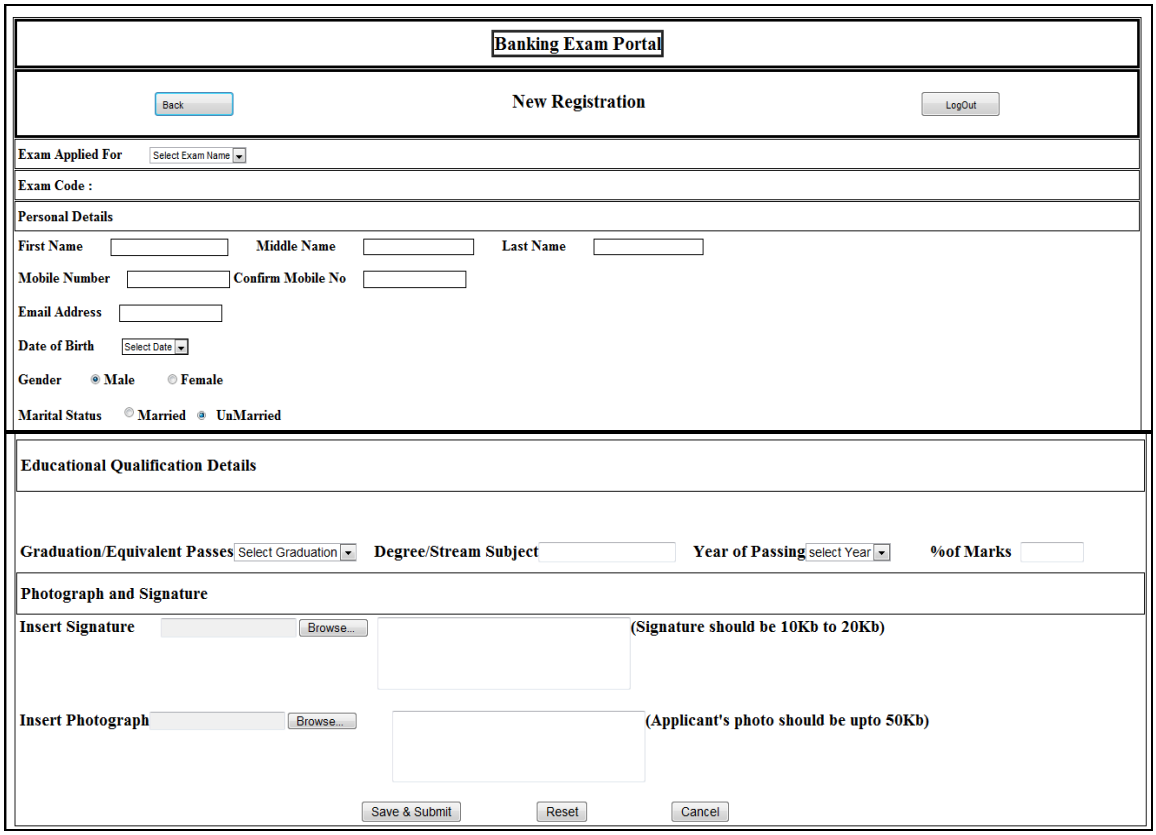
New Registration Page



Purpose	:	Registration page
Functionality	:	• A new applicant can register into the portal using this page

Role	Details / Business Rule / Constraints
Applicant/User	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click takes to the main home page of the portal	-	-
LogOut	Button	On click logs out the applicant from the portal	-	-
Exam Applied For	Drop Down Box	Exam name can be selected from the drop down list	-	Valid exam names should get displayed

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				in the drop down list
Exam Code	Text Box	Corresponding exam code is shown here	-	The exam code of the selected exam should be displayed. It is a non-editable field.
First Name	Text Box	First name of the applicant can be given here	-	Should accept only alphabets.
Middle Name	Text Box	Middle name of the applicant can be given here	-	Should accept only alphabets.
Last Name	Text Box	Last name of the applicant can be given here	-	Should accept only alphabets.
Email Address	Text Box	Email address of the applicant can be given here	-	It can accept characters, numeric values,_ and should end with a domain name from the values of gmail.com, yahoo.com and Hotmail.com.
Date of Birth	Calendar Control	Date can be selected for the date of birth	-	Calendar should get populated while clicking on the control.
Gender	Radio button	Applicant can select any one from the two options given	-	Two radio buttons to be provided
Marital Status	Radio button	Applicant can select any one from the two given options	-	Two radio buttons to be

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				provided
Graduation /Equivalent Passes	Drop Down Box	Appropriate qualification can be selected from the drop down list	-	All relevant qualifications should be mentioned in the drop down list
Degree/Stream/Subject	Text Box	Appropriate subject of the degree can be mentioned here	-	Should accept only characters
% of marks	Text Box	Marks of the applicant can be mentioned here	-	Should accept only numeric values
Insert Signature	File Control	The image file for signature of the applicant can be selected and uploaded here	-	It should allow to select the image from the place where it is stored in the system. The image file should be between 10Kb and 20Kb.
Insert Photo	File Control	The image file for photo of the applicant can be selected and uploaded here	-	It should allow to select the image from the place where it is stored in the system. The image file should not be more than 50Kb.
Save & Submit	Button	On click it submits all the details	-	-
Reset	Button	On click it resets the details	-	-
Cancel	Button	On click cancels the operation and closes the web page	-	-

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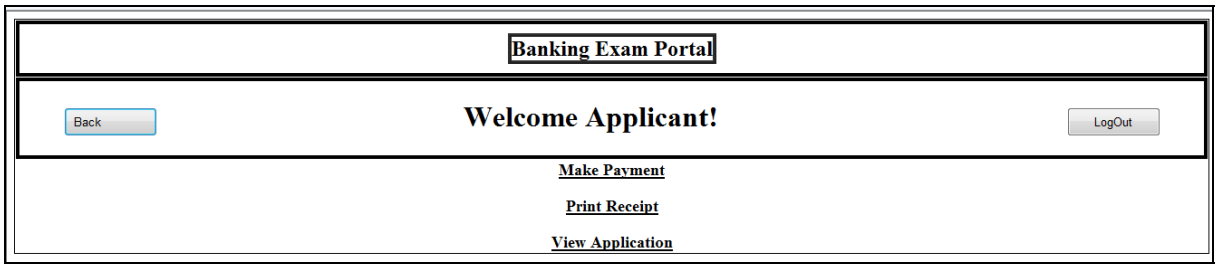
Applicant Home Page



Purpose	:	Applicant's home page
Functionality	:	• The applicant's functionality of making payment, printing the receipt and viewing the application can be accessible from this page

Role	Details / Business Rule / Constraints
Applicant/User	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click redirects to the main home page of the portal	-	-
LogOut	Button	On click logs out the applicant from the portal	-	-
Make Payment	Hyperlink	Applicant can make the payment for an exam using this link	-	It should navigate the new user to the **Make Payment** web page
Print Receipt	Hyperlink	Applicant can print the receipt using this link	-	It should navigate the new user to the **Print Receipt** web page
View Application	Hyperlink	Applicant can view the application using this link	-	It should navigate the new user to the **View Application** web page

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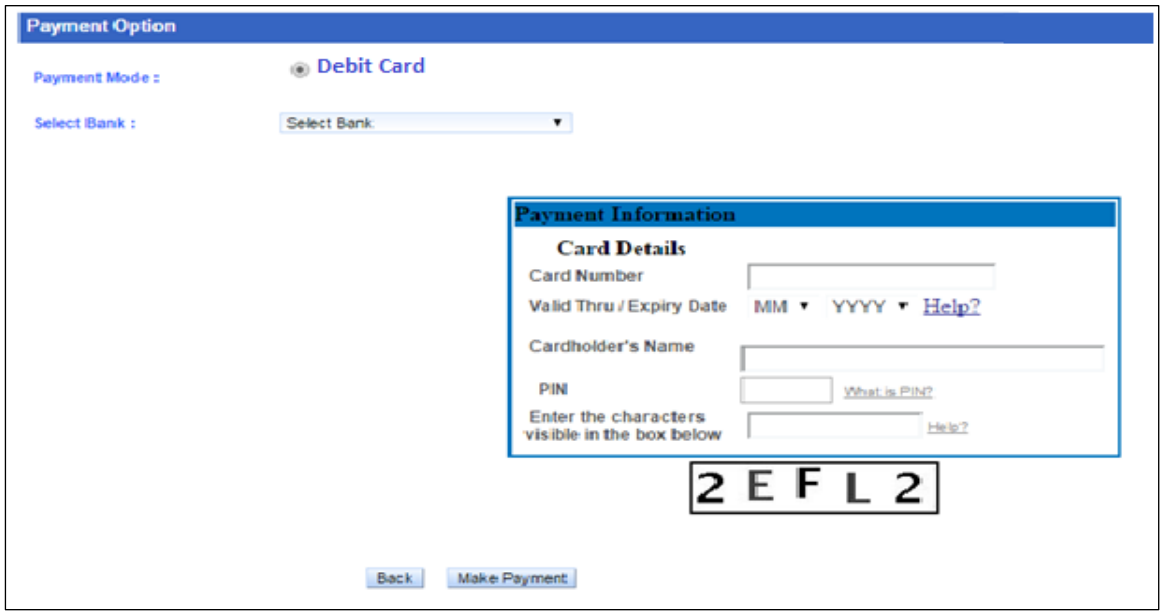
Payment Page



Purpose	:	To make the payment for the exam applied
Functionality	:	• The payment for the exam applied can be done through this page

Role	Details / Business Rule / Constraints
Applicant/User	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Payment Mode	Radio Button	The payment mode of 'Debit Card' can be selected	-	Should have only 1 value of Debit Card
Select Bank	Drop Down Box	Bank name can be selected from the list of names	-	Should contain valid bank names in the list
Card Number	Text Box	Debit card number of the applicant can be mentioned here	-	It should accept only 14 digit numeric values.
Valid Thru/Expiry	Drop down Box	Expiry month of the	-	MM should

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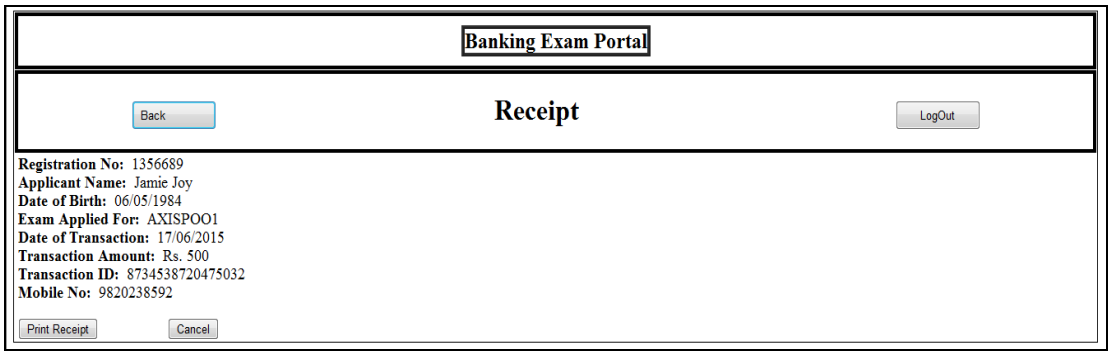
date (MM)		Debit Card can be selected		contain values from 01 to 12.
Valid Thru/Expiry date (YYYY)	Drop down Box	Expiry year of the Debit Card can be selected		YYYY should contain values from 2000 to 2020
Cardholder's Name	Text Box	Name of the cardholder can be mentioned	-	It should accept only characters
PIN	Password Box	PIN number can be mentioned here	-	It can accept only 4 digit numeric values
Examination Fees	Text Box	The fee amount can be entered here	-	It can accept only numeric values
Enter the characters visible in the box below	Text Box	The characters visible in the box can be entered here	-	It can accept both numeric and alphabets
Make Payment	Button	On click it makes the payment for the exam	-	-
Back	Button	On click redirects to the applicant's home page of the portal		

Receipt Page



Purpose	:	To view the receipt for the payment made and a print can be taken
Functionality	:	• The receipt for the payment made can be viewed through this page along with print receipt functionality

Role	Details / Business Rule / Constraints

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Applicant/User	These users can invoke this functionality.

Control Label	Control Type/ Length/ Multi select	Description/ Business Rule	Default Value	Validation
Back	Button	On click redirects to the applicant's home page	-	-
LogOut	Button	On click logs out the applicant from the portal	-	-
Print Receipt	Button	On click prints the receipt visible on the page	-	-

View Application Page

Purpose	:	To view the application details
Functionality	:	• The applicant can view the application details through this page

Role	Details / Business Rule / Constraints
Applicant/User	These users can invoke this functionality.

Sample Application Details Page

Registration Details			
Exam Applied For	AXISPOO1		
Personal Details			
Full Name	Jamie Joy		
Mobile No	9820238592		
Email Address	Jamie.joy@gmail.com		
Date of Birth	06-05-1984		
Gender	Female		
Marital Status	Married		
Education Qualification Details			
Graduation/Equivalent Passed	**Degree/Stream Subject**	**Year of Passing**	**% of Marks**
Bachelor of Engineering	Information Technology	2006	78
Application Fees Details			
Payment Mode	Online		
Payment Status	Paid		
Transaction Date	17/06/2015		
Amount	Rs.500		
Declaration			
I hereby declare that all the statements made in this application are true, complete and correct to the best of my knowledge and belief. I understand that in the event of any information being			

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found untrue or incorrect at any stage or I am not satisfying any of the eligibility criteria stipulated, my candidature is liable to be cancelled. In case of creating influence, candidature of the candidate shall be cancelled. **Date: 17-06-2015** **Signature of the applicant**

Purpose	:	The entire application can be viewed
Functionality	:	• The applicant can view the application and the details entered during registration and payment through this page.

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Lab 2. Identify ambiguities in the requirements

Goals	• In this lab you'll perform a requirements review for QWERTYsoft by reviewing the QWERTYsoft Requirements Document. • Identify problems with specific phrases and sections. • Try to fix those problems by rewording the phrase, changing the sentence, adding new sentences, or even whole new paragraphs.
Time	120 Minutes

1. Scope QWERTYsoft - Requirements Document

This document specifies the requirements for a family of Internet kiosks called QWERTYsoft. These kiosks shall provide cash, credit card, and debit card customers with simple, fast, reliable Internet access in public places for reasonable prices per minute of usage.

1.1 Terms, Acronyms, and Abbreviations

For the purposes of this project, the following abbreviations apply:

AS	Application Server
Cable	Cable high-speed Internet connection at least 128Kbps
CC	Credit card (for payment): American Express, Visa, or MasterCard
CS	Communication Server
DBMS	Database Management System (server)
DC	Debit card (for payment): PLUS or Cirrus networks.
DSL	Digital Subscriber Line high-speed Internet connection (either asymmetric or symmetric) at least 128Kbps
IE	The Internet Explorer Internet browser
Kbps	Kilobits per second
Kiosk	The free-standing QWERTYsoft Internet access point
Linux	Red Hat Linux Release 8.0 operating system
Opera	The Opera freeware Internet browser
PIN	Personal Identification Number (for debit card)
PSTN	Public Switched Telephone Network Internet connection (ordinary dial-up connectivity) at least 50 KBPS
URL	Universal resource locator

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WS	Web Server
WXP	Windows XP Professional operating system

2. Required release date

The first set of 1,000 QWERTYsoft kiosks shall be live, accepting payment and accessing the Internet, as of the financial third quarter.

3. Description of requirements

3.1 General technical requirements

QWERTYsoft shall give customers in airports, malls, theaters, and other public places access to the Internet. QWERTYsoft shall provide call center agents with access to information about current and past kiosk sessions as well as the ability to control current sessions.

4. Welcome

Between sessions, each QWERTYsoft kiosk shall display an inviting welcome message (see screen prototype K.1).

5. Payment

Once a user navigates past the Welcome screen, the kiosk shall give the user the option to purchase a block of browser time in the Payment screen (see screen prototype K.2). The kiosk shall sell blocks of time in five (5) minute increments, up to one (1) hour.

The system accepts the following forms of payment:

a) Cash (bills only) (see screen prototype K.3)
b) Credit card (American Express, Visa, or MasterCard only) (see screen prototype K.4 and K.7)
c) Debit card (PLUS or Cirrus networks only) (see screen prototype K.5 and K.7)

Once the current block of time is within sixty (60) seconds of expiration, the kiosk shall pop up a message asking if the user wants to purchase more time (see screen prototype K.9).

6. Internet Browser

At the Welcome screen, each QWERTYsoft kiosk shall provide the user with a choice of the latest version of Netscape, Opera, or Internet Explorer (available on Windows kiosks only).

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7. Performance

On kiosks operating with a PSTN connection, users shall have greater than 50Kbps connection speed.
On kiosks operating with DSL or cable connections, users shall have greater than 128Kbps connection speed.

8. Localization

Each QWERTYsoft kiosk shall be configured to operate in the primary local language for its installed locale.
In locales where multiple languages are commonly used, the Welcome screen shall present the user with the option to select the language for the session.
Each QWERTYsoft kiosk browser shall be configured to support all languages supported by the operating system and browser.

9. Content Control

Because QWERTYsoft users will access the Internet in public places, QWERTYsoft shall implement site blocking that prevents the display of pornographic, objectionable, lewd, obscene, or violent material.
QWERTYsoft shall protect each kiosk against sending or receiving a virus, worm, or other malicious code.

10. Session Termination

Users may terminate sessions in one of two ways:

a) Logging out (no refund is given for unused time)
b) Allowing time to expire.

11. Confidentiality

To protect user confidentiality — e.g., URLs visited — once a session terminates, each kiosk shall clear all cookies and other downloaded files, clear the URL history, exit the browser, and restart the browser at the Welcome screen.

12. Administration

a) Software Updates

Under ordinary circumstances, software updates will take place automatically. At 2:00 A.M. local time, each kiosk shall connect to the server farm and ask for updates. Those updates include:

- Operating system or browser patches
- New network, modem, or graphics drivers
- New logos
- Updated per-minute payment rate tables
- Virus, worm, malicious code, or other firewall definitions
- Blocked websites.
- If there are no updates available, the kiosk shall disconnect.

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If the update application on the application server tells the kiosk that it is overloaded, the kiosk shall disconnect, then retry at a later time. The delay for retry is a random period between ten (10) and sixty (60) minutes.
Call center agents may also push software updates to kiosks.

13. View Kiosks

Call center agents shall be able to browse a list of kiosks. For each kiosk, call center agents shall be able to see:

- Current operating system version
- Current browser version
- Total uptime since installation
- Total uptime since last software update
- Number of crashes, reboots, or other hard failures since last software update.

Kiosks shall connect to the server farm once per hour to report status. If a kiosk is not connected to the server farm, the call center agent may force a connection to check status.

If a kiosk is down, that kiosk shall show up at the top of the list of kiosks, highlighted in red.

14. View Users

For those kiosks that have active users, call center agents shall have access to the following information:

- Current and past URLs.
- Credit or debit card number (if applicable)
- Name (if available from credit card validation)
- Amount paid for this session
- Blocks of time purchased
- Previous session (if available from credit card number and name)
- Paid time remaining

15. Modify User

Call center agents shall be able to modify a user's session by adding blocks of time.
Supervisory override is required for an agent to add more than sixty (60) minutes of time per day.

16. Terminate User

If a call center agent believes that a user is engaged in illegal, inappropriate, or fraudulent use of a session, the agent may terminate that session.

The user shall receive a refund for any unused time at the point of termination. The user shall receive a message that the session was terminated for inappropriate activity. The message shall specify the amount of the refund.

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Note – Use the following Template to complete this lab.

SECTION #	PROBLEMATIC PHRASE OR SECTION	REWORDED PHRASE OR SECTION

Continued

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