

*Bill Payments System*  
*Detailed Design Specifications*

Screen Design

**1. Welcome Screen**

This is the initial screen displayed when the system is launched.

**Welcome to Online Bill Payment System**

[Click here to Login](#)

Processing

- a) When clicked on the hyperlink, launch the login screen.

## 2. Login\_Section

The user is already a customer of the bank and has the Username and Password issued by the bank. These need to be validated before providing access to the Bill Payment modules.

### Login

Username \*

Password \*

Submit

Clear

Cancel

### Validations

- a) Validate the Username and Password against the Customer table.

### Processing

- a) If the username = "Admin" and the password is valid  
Direct the user to "Bill Payment Menu" screen
- b) If the Username and Password combination is valid,
- If the customer is not registered for the Bill Payment function  
Direct the user to "Bill Payment Registration" screen
  - If the customer is already registered for the Bill Payment function  
Direct the user to "Bill Payment Menu" screen
- c) If "Clear" is clicked, Refresh the values in Username and Password fields.



*Bill Payments System*  
*Detailed Design Specifications*

- d) If “Cancel” is clicked, return to the Welcome screen.

*Bill Payments System*  
*Detailed Design Specifications*

### 3. Bill Payment Registration

Existing bank customers can register for bill payment facility. The customer name is retrieved from the database using the login username. A customer can select two preferred accounts for funding the bill payment

<u>Bill Payment Registration</u>	
Customer Name :	xxxxxxxxxxxxxxxx
Preferred Account 1	<input type="text"/> 
Preferred Account 2	<input type="text"/> 
<u>Terms and Conditions</u>	
I hereby declare that I have read the terms and conditions completely as mentioned in the Bill Payment Agreement and I unconditionally agree to abide by these terms and conditions.	
*	<input type="button" value="I Agree"/> <input type="button" value="Cancel"/>

#### Validations

- a) Preferred Account 1 and Preferred Account 2 should not be the same.
- b) Preferred Account 2 should not be entered if Preferred Account 1 is not entered.

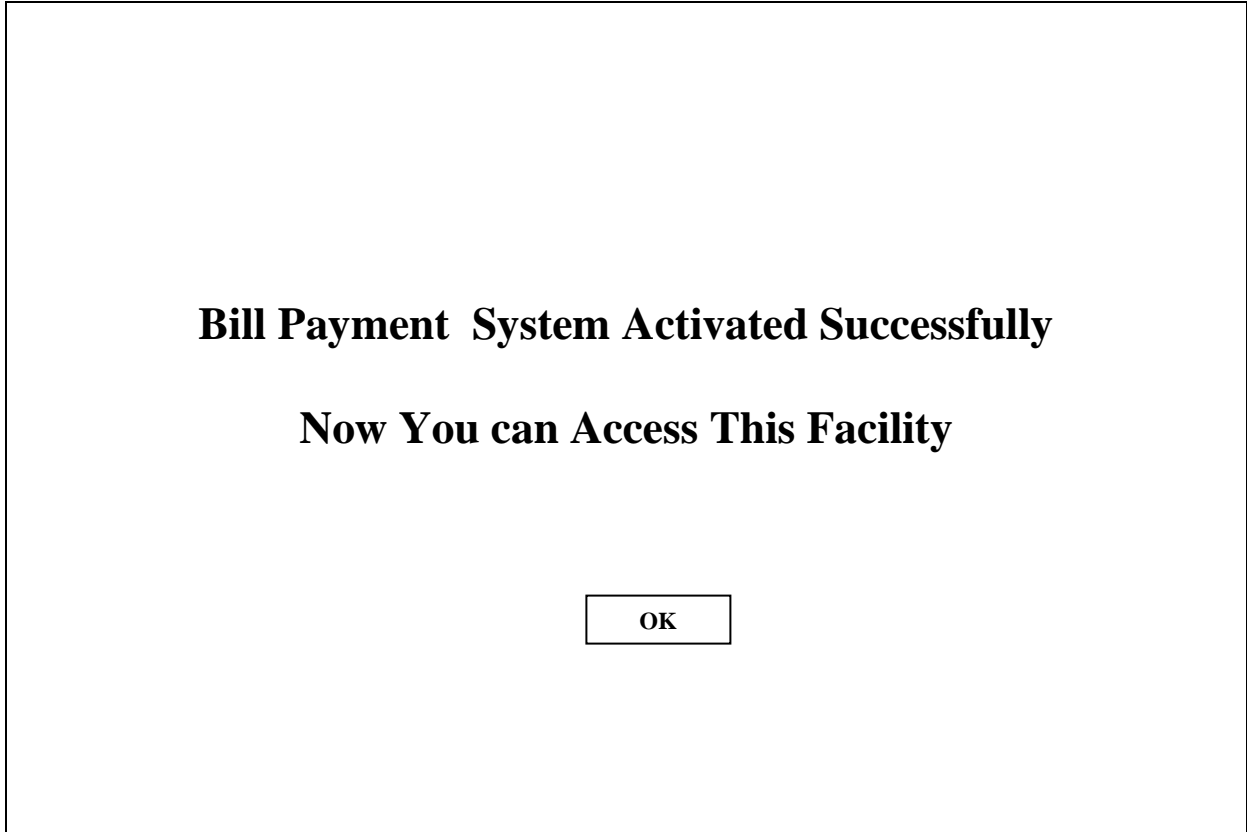
#### Processing

- a) Display Customer's accounts (only of Savings and Checking type) in the Preferred Account fields.
- b) If the user clicks on "I Agree"

*Bill Payments System*  
*Detailed Design Specifications*

- Update the Bill\_Pay\_Registered to “Y” in the Customer table for the customer’s ID
  - Update the Bill\_Pay\_PREFERRED to “Y” in the Account table for the preferred accounts selected on the screen
  - Display the “Activation” screen
- c) If “Cancel” is clicked, return to the Login screen.

**4. Activation screen**



**Processing**

- a) If "OK" is clicked, direct the user to "Bill Payment Menu" screen.

## **5. Bill Payment Menu**

<b><u>Bill Payment Menu</u></b>
<p><u>Manage Billers</u></p> <p><u>Make Payment</u></p> <p><u>View Payment History</u></p> <p><u>Logoff</u></p>

### **Processing**

- a) Based on the option selected, direct the user to respective page
- b) If Logoff is selected, return to the Welcome page.

*Bill Payments System*  
*Detailed Design Specifications*

## 6. Manage Billers

This screen allows the user to add new billers and modify or delete existing billers.

**List of Billers**

Select	Biller Name	Address	Category
<input type="radio"/>			
<input type="radio"/>			
<input type="radio"/>			
<input type="radio"/>			
<input type="radio"/>			

Add

Update

Back

### Validations

- a) For Update, one of the billers displayed on the screen should be selected

### Processing

- a) All the billers defined by the customer are loaded into the screen when it is displayed.
- b) If “Add” is clicked, display the “Add New Biller” page
- c) If “Update” is selected, display the “Update Biller” page



*Bill Payments System*  
*Detailed Design Specifications*

- d) If “Back” is selected, display the “Bill Payment Menu”

*Bill Payments System*  
*Detailed Design Specifications*

**7. Add a New Biller**

This screen is used to add a new biller.

**Add a New Biller**

<b>Biller Name</b>	*	<input type="text"/>
<b>Address</b>	*	<input type="text"/>
<b>City</b>	*	<input type="text"/>
<b>Pin Code</b>	*	<input type="text"/>
<b>Category</b>	*	<input type="text"/> <input type="button" value="v"/>


**Processing**

- a) If “Submit” is clicked
  - Generate a unique ID for biller
  - Store Biller details in the Biller Table
  - Return to “List of Billers” screen
  
- b) If “Back” is selected, display the “List of Billers”

*Bill Payments System*  
*Detailed Design Specifications*

8. Modify Biller

This screen is used to modify the details of an existing biller.

<u>Modify Biller Information</u>	
<b>Biller Name</b>	* <input type="text"/>
<b>Address</b>	* <input type="text"/>
<b>City</b>	* <input type="text"/>
<b>Pin Code</b>	* <input type="text"/>
<b>Category</b>	* <input type="text"/> 
<b>Status</b>	* <input checked="" type="radio"/> Active <input type="radio"/> Inactive
<div><input type="button" value="Update"/><input type="button" value="Back"/></div>	

Validations

- a) If status is changed from Active to Inactive
- Check if there are any outstanding payments for the biller in the Payment Instruction table. If Yes, give an error message

Processing

## *Bill Payments System*

### *Detailed Design Specifications*

- a) If “Update” is selected, modify the Biller details in the Biller table. Return to “List of Billers” screen
- b) If “Back” is selected, display the “List of Billers” screen

## 9. Make Payment

**Make Payment**

<b>AC No</b>	*	<input type="text"/>	<input type="button" value="v"/>	<b>X,XX,XXX.XX</b>
<b>Biller</b>	*	<input type="text"/>	<input type="button" value="v"/>	
<b>Bill Amount</b>	*	<input type="text"/>		
<b>Pay now?</b>	*	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
<b>Payment Due Date</b>	*	<input type="text"/>	<input type="button" value="Calendar"/>	
		<input type="button" value="Submit"/>	<input type="button" value="Cancel"/>	

### Validations

- Payment Due Date should not be a past date
- If Pay now = "Yes", Bill amount should be < or = account balance

### Processing

- Populate the preferred account numbers from the Account table.
- Populate the biller field with active billers from the biller table.
- When the account number is selected, display the current balance.
- In case of Pay now, payment due date should be disabled.
- If Pay now = "Yes"

*Bill Payments System*  
*Detailed Design Specifications*

- i. Deduct the bill amount from account balance
  - ii. Store the instruction in Payment\_Instr table with status = "Processed"
- If Pay now = "No"
  - i. Store the instruction in Payment\_Instr table with status = "Received"

## 10. View Payment History

This screen allows the customer to view the payment instructions for a selected period.

**View Payment History**

Category

Status

From  To

Date	AC No	Biller	Amount	Category	Status

### Validations

- a) To-date should not be less than From-date

### Processing


## *Bill Payments System*

### *Detailed Design Specifications*

- a) If category is not entered, assume all categories.
- b) If status is not entered, assume all statuses.
- c) From-date should be pre-filled with the first day of current month. To-date should be pre-filled with today's date.
- d) When Search is clicked,
  - Search the Payment instructions table for the given category, status, date range and the list of accounts owned by the customer
- e) When Cancel is clicked
  - Return to the Bill Payment menu
- f) When user clicks on the instruction link,
  - Display payment instruction details



## **11. Payment Instruction details**

<b><u>Payment Instruction details</u></b>		
<b>AC No</b>	<b>XXXXXXXXXXXXXX</b>	<b>x,xx,xxx.xx</b>
<b>Bill</b>	<b>XXXXXXXXXXXXXXXXXXXX</b>	
<b>Bill Amount</b>	*	<input type="text"/>
<b>Payment status</b>	<b>XXXXXXXXXXXXXXXXXXXX</b>	
<b>Payment Date</b>	*	<input type="text"/> 
<div><input type="button" value="Save"/> <input type="button" value="Delete"/> <input type="button" value="Cancel"/></div>		

### **Validations**

- Payment Due Date should not be a past date

### **Processing**

- Delete and Save should be enabled only if the payment status = "Received".
- If Delete is selected, delete the instruction from the payment instruction table
- If Save is selected, update the instruction with the updated values

*Bill Payments System*  
*Detailed Design Specifications*

- If Cancel is selected, return to “View payment instructions” screen.