# ACCOUNT MANAGEMENT SYSTEM

#### 1 Objective

Design and develop a simple account management system as per following specifications

#### 2 Actors / Roles

- Visitor
  - o Able to see home page of the bank and apply for new account
- Account Holder
  - o Able to login to internet banking
  - o View / download statements of one or more accounts
  - o Transfer / Withdraw / Deposit Funds
  - o Pay Bills
- Administrator
  - o Process New Account Applications
- System

### 3 Use Cases

Title	Actors	Functionality
New Account Opening Application	Visitor	Following information to be captured while requesting opening of new account  Title (Mr/Mrs/Ms etc) Full Name of the person Date of birth Email address Mobile Number Pan Card Number Aadhar Card Number Upload scanned copies of Pan card & Aadhar Card Application ID (system generated)  Allow successful submission if age >18. Application number will be auto generated and an email will be sent to the email applicant that new account opening application has been received
Approve New Account Application	Administrator	<ul> <li>Search details of applications received between 2 dates</li> <li>On click should open selected application and show details</li> <li>Accept amount deposited for account opening &gt; 1000</li> <li>On Successful submission         <ul> <li>System will create a new account (6 digit auto generated)</li> <li>Account balance would be updated with initial deposit amount</li> <li>If there does not exist user id same as applicant email id new user id with applicant email address will be created. If user id is newly created send mail to applicant informing about user id</li> <li>Send email to applicant mentioning new account number</li> <li>System will keep track of all accounts linked to same user id (email address)</li> </ul> </li> </ul>
First time access to internet banking	Account Holder	User enters email

		<ul> <li>For verification system will ask for new account number and pan card number</li> <li>Once verified user can set password</li> <li>Password will be 8 – 12 characters with at least 1 capital letter, at least 1 small case letter, at least 1 digit and at least 1 special character #, +, -, _</li> <li>Passwords will be hashed</li> </ul>
Subsequent Login to internet banking	Account Holder	<ul> <li>User enters email address and password</li> <li>On successful authentication user can see landing page</li> <li>Landing page will display all accounts linked to the user id</li> <li>Landing page will have menu and / or left side navigation panel</li> </ul>
Change Password	Account Holder	<ul> <li>Authenticated User can change existing password</li> <li>System will prompt for old password, new password and new password confirmation</li> <li>Password rules will be as mentioned above</li> </ul>
Deposits / Withdrawal	Account Holder	<ul> <li>Authenticated user can withdraw or deposit (assumed cash)</li> <li>User will select the account from dropdown to which deposit or withdraw from</li> <li>Enter amount &gt; 0</li> <li>For withdrawal maximum allowed amount will be account balance – 1000</li> <li>Enter remarks</li> <li>On success account will be credited or debited</li> </ul>
Register Payee	Account Holder	<ul> <li>User can transfer funds to any valid account holder within the bank</li> <li>First user has to register payee with following details Short Name and account number (assumed payee account is in same bank)</li> <li>If Payee account number exists the Payee will be registered</li> </ul>
Transfer Funds Own Accounts	Account Holder	<ul> <li>Select own account from which transfer has to happen (dropdown)</li> <li>Select own target account to which amount is to be transferred</li> <li>Enter amount (&lt; source account balance – 1000)</li> <li>Enter Remarks</li> </ul>

		<ul> <li>On success source account will be debited and target account will be credited</li> <li>System will send email to the account holder that their specific account has been debited or credited</li> </ul>
Transfer Funds Others	Account Holder	<ul> <li>Select own account from which transfer has to happen (dropdown)</li> <li>Select payee from list of registered payees (dropdown)</li> <li>Enter amount (&lt; source account balance – 1000)</li> <li>Enter Remarks</li> <li>On success source account will be debited and target account will be credited</li> <li>System will send email to both account holders that their specific account has been debited or credited</li> <li>Note: User can transfer funds from their own account</li> </ul>
Account Statements	Account Holder	<ul> <li>Authenticated users can view their account history</li> <li>From Landing page they can select account for which they want to view statement</li> <li>Enter From and To Dates</li> <li>Onscreen Table / Grid will be populated</li> <li>User can download in XLS or PDF format</li> </ul>
System Functions	System	<ul> <li>Maintain log of all debits / credits account wise with date time stamps. Each transaction will have unique transaction reference number</li> <li>Maintain audit log of user log in and log off with date time stamps</li> </ul>

#### 4 Validations

- Name Only alphabets and spaces
- Email valid Email address
- $\bullet \hspace{0.1in}$  Pan Number Of the format XXXXXNNNNX where X is alphabet and N is digit
- Aadhar Card number 16 digits