**Overview**

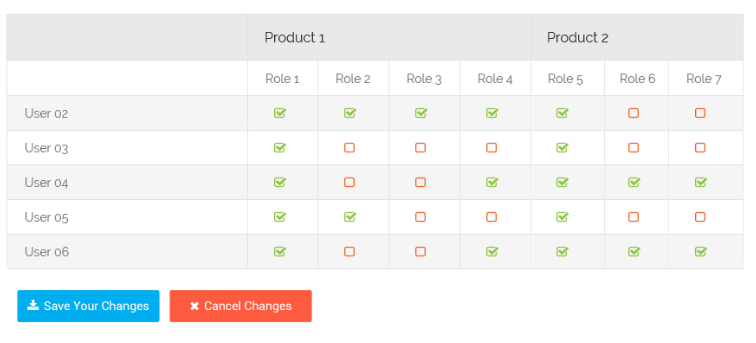
The Product aims to serve as Membership model for future product developments. The membership model needs to be flexible to accommodate future changes.

**Product framework**

1. Web platform, MVC5, HTML5, WebApi.
2. Bootstrap framework to be used.
3. Fast, Highly scalable, Cache Storage(redis), optimised Images, Localised.

**Product Features : Part A**

1. **User Management**
   1. **User Info** : UserId (self generated), Email, Password, Name (optional), Company(optional), address(optional), contact Info(optional), status (Active/disabled).
   2. Site Login : UserId / Password
   3. Password to be hashed & not encrypted.
   4. All deletion operations are soft deleted.
   5. A clear Audit History needs to be recorded for all core table changes.
      1. Include Who Changed, When, IP address.
      2. CreatedDate, CreatedBy, LastModifiedDate, LastModifiedBy.
   6. **Simple registration (Owner User Acc) :** 
      1. Each individual (self registered) is a user of type **Owner.**
      2. **Only Email & Password required**. A registration form to capture Email, password and captcha should be provided. The IP address of the machine & machine environment to be captured as part of the process.
      3. A link to given email is sent to create account.
      4. The system should hold registration info in a separate storage(table) and wait to create UserId (auto generated) after email activation is done.
      5. Once User clicks registration Link, a new UserId should be created in main DB table and the same should be emailed to the user for future login. Other details can be filled in after successful activation of account(in Member area).
      6. There can be only One Owner user (irrespective of status, active or not) per Email Address. Hence verify existing owner accounts with same email before sending registration link.
      7. If an Owner account with same email exists and the user is trying to re-register (with same Email) then inform user of an existing Account by displaying message stating “Account already exists with email Id, please use Login Page to sign in”.
      8. The registration information stored in separate storage should be deleted after 24hr & hence the registration link would thus be expired. Any attempt to click the registration Link after 24hrs should report expired time for Acc activation and suggest user to re-register again.
      9. If user tries to activate the account more than once within 24hrs then display page with a message stating “Account already activated, please use login page to access member area”. Suggest user towards Sign in Problem page.
      10. Owner UserId should start with “W” as prefix (such as W000001, W201991).
      11. **Only an Owner account can be re-activated (after it was deactivated) when the user simply logs back successfully**.
   7. **Owner Users functionalities**
      1. Edit their Account :
         1. Name, Password, Company, address, contact-Info.
      2. Edit their Status : If the owner decides to deactivate his account then
         1. All Groups, Users will be deactivated & All GroupUserProductAuthorisations under it will automatically deleted.
         2. A warning must be shown before user commits the change and the user then be logged off & diverted to Home Page(Login Page be shown).
         3. If a **deactivated** user(Only Owner Acc) successfully logs back again then his account should automatically be activated but none of the Groups or Users should be activated. The Owner can always selectively activate groups, members & GroupUserProductAuthorisations anytime.
      3. Edit their Email: Three step edit
         1. Request change by providing the UserId, old email, new email & **confirm Password**.
         2. A link to old email will be sent for ***email change*** (The email will contain a bold warning notification of Email change request to their associated user account)
         3. By clicking the link and **verifying their password on website**, the transition is complete. A confirmation email to be sent(to both old & new email) after successful change of email. The email should detail the change as well, detailing UserId, Old email, new email.
      4. Forgot userId : User should be able to request to get all UserIds associated with his email. A list of his UserIds(with active/inactive details) should be emailed to their email address. No authentication verification needed.
         1. User should provide his email which he thinks has registered with.
      5. Forgot password facility & thus password change request sent via link to their email Id. (**irrespective of Acc being active or not : only for Owner User types).** 
         1. User should provide correct **UserId & Email combination** for this facility.
         2. System should check the above combination to be correct & only then send the link.
      6. **Add/Edit User Accounts.** 
         1. Add
            1. By providing user Email, confirm Email & password (copy paste should not be allowed).
            2. A new user Acc is generated with a UserId (Start with Uxxxxx Eg : U000191, U000192)and sent to the User & owner email.
            3. Emails of user accounts under a Owner account should be unique. A check for same should be made before creating the user Acc.
            4. Same email for User Accs can be present under different Owner, but will have a different UserId.
            5. If owner tries to add same email, the system should stop the user & should error with message “**Account with email XXX already exists**”.
            6. Unlike owner account activation, there is no activation link for user Accs(by default User Accs are Actived).
         2. Edit
            1. Name, Password, Company, address, contact-Info.
            2. Status: Active/Disable. If a User Account is disabled then all his GroupAuthorisations (across all Groups) are also deleted automatically. However Activating the User Acc will not automatically activate his GroupAuthorisations. The Owner or GroupAdmin should selectively give his GroupAuthorisations. **Disabled users cannot be assigned any ProductAuthorisations in the Grid**.
         3. Email : Cannot change email of the user Accounts. Can only Add or delete Email & its User Acc.
      7. Add/Edit Groups
         1. Add
            1. Groups : [GroupId(self generated), GroupName, GroupDescription, GroupAdmin(dropdown selection of users – Include Owner Acc by default as Admin) Status(active/inactive)]
            2. GroupNames should be unique under single owner.
            3. By Default the Group status is Active
         2. Edit
            1. GroupName, GroupDescription, Groupstatus(active/inactive), GroupAdmin.
            2. If a group is deactivated then all its corresponding **Groups** **member’s authorisations** are automatically deleted. A warning must be shown before user commits this change. Please note, **only Group & its member authorisations are deactivated**, not the members, not the products.
      8. Manage Group - Members/Products/Authorisations
         1. Subscribe/Unsubscribe Users, subscribe/unsubscribe Products and Assign/unassign ProductAuthorisation to users in Group.
         2. If a Product is unsubscribed from a Group then All UserAuthorisations with that product, for all users in that Group are also deleted.
         3. If a User is unsubscribed from a Group then All its associated UserAuthorisations are also deleted from that Group.
      9. Make one of the **activate user (Owner Acc or Non-Owner Acc)** as GroupAdmin to manage that group. There can only be one User in a Group as GroupAdmin.
   8. **GroupAdmin functionalities** :
      1. If GroupAdmin is non-Owner Acc then following Functionalities are the limits else follow as stated above.
      2. Edit their Account :
         1. Name, Password, Company, address, contact-Info.
      3. Edit their Status : Not allowed.
      4. Edit their Email : Not Allowed
      5. **A deactivated user(Non-Owner) can never login.**
      6. Forgot userId : User should be able to request to get all UserIds associated with his email. A list of his UserIds(with active/inactive details) should be emailed to their email address. No authentication verification needed. User needs to provide his email Id which he thinks has registered with.
      7. Forgot password facility & thus password change request via link sent to their email Id. (**Only when Acc is active).** User should provide correct UserId & corresponding Email for this facility. If account is deactivated then an error message to be shown “**Account not active, please contact your group administrator or owner**”. The same message to be shown for deactivated User (non-Owner) when they try to login.
      8. Cannot create new Groups but can edit GroupName, GroupDesc (excluding Group status) for which he is Admin.
      9. Cannot change GroupAdmin.
      10. Cannot Add/Edit User Accounts.
      11. Can Only Subscribe/Unsubscribe Users, subscribe/unsubscribe Products and Assign/unassign ProductAuthorisation to users in Group for which he is Admin.
          1. If a Product is unsubscribed from a Group then All UserAuthorisations with that product, for all users in that Group are also deleted.
          2. If a User is unsubscribed from a Group then All its associated UserAuthorisations are also deleted.
   9. **Group members(NonAdmins) Funtionalities**
      1. Edit their Account :
         1. Name, Password, Company, address, contact-Info.
      2. Edit their Status : Not allowed.
      3. Edit their Email : Not Allowed
      4. **A deactivated user can never login.**
      5. Forgot userId : User should be able to request to get all UserIds associated with his email. A list of his UserIds(with active/inactive details) should be emailed to their email address. No authentication verification needed. User needs to provide his email Id which he thinks has registered with.
      6. Forgot password facility & thus password change request via link sent to their email Id. (**Only when Acc is active).** User should provide correct UserId & corresponding Email for this facility. If account is deactivated then an error message to be shown “Account not active, please contact your group administrator or owner”.
      7. Cannot Add/Edit Groups.
      8. Cannot Add/Edit User Accounts.
      9. Cannot Subscribe/Unsubscribe Users, subscribe/unsubscribe Products and Assign/unassign ProductAuthorisation.
   10. **Membership & Roles**
       1. Product roles to members should be shown on a Group level so it becomes easy to compare the users & their roles. It should be shown in a Grid with CheckBoxes as shown below.
       2. The grid should be auto populated from the Database, that is, If a new product or product role is added in DB then it should be shown in grid without any change to the UI Grid.

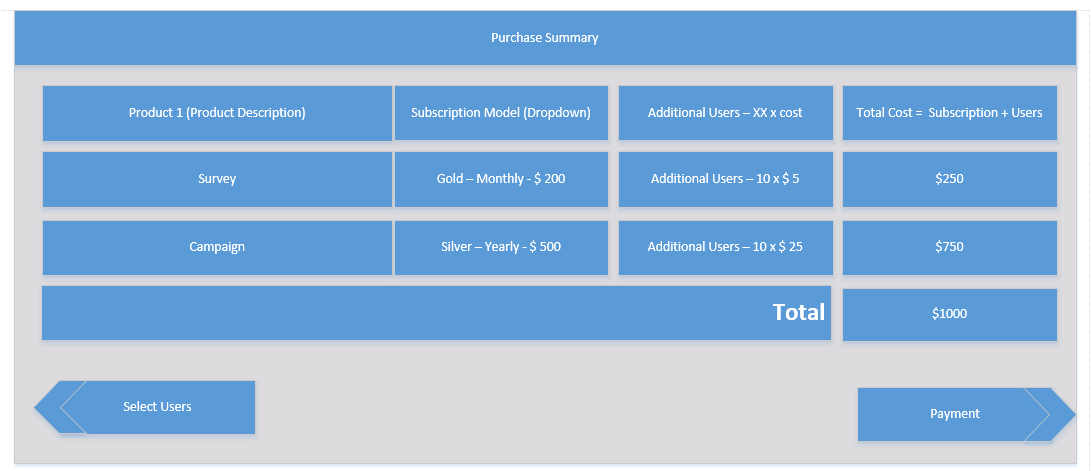


* 1. **Credit account**
     1. Owner Acc is associated with a CreditAccount which is then associated with following
        1. Product Credit Account Number( PCAN Id - self generated)
        2. Actual Product subscribed (Survey, Campaign or Social Media etc)
        3. Corresponding Product subscription Model (basic, silver, gold, platinum)
        4. From & To Dates (typically but not necessarily start & end of month/Year)
        5. **Financial Transaction Id** : Any Financial Transaction details should be captured separately into another storage
           1. Financial Trans Id
           2. Paid via medium (paypal and or Credit/debit card). Initially Only Paypal needs to be integrated.
           3. Additional Transaction Details
           4. Amount
           5. Date of transaction
           6. IP address of machine & other machine environment details
        6. Eg : WUser1 subscribed to 4 products for one month
           1. PCAN1 - Prod1 – Silver – 20150101 – 20150131– ByWUser1 – FinTransIDXX1
           2. PCAN2 - Prod2 – Gold – 20150101 – 20150131– ByWUser1 – FinTransIDXX1
           3. PCAN3 - Prod3 – Plat– 20150101 – 20150131– ByWUser1 – FinTransIDXX1
           4. PCAN4 - Prod4 – Basic – 20150101 – 20150131– ByWUser1 – FinTransIDXX1
     2. Each user who needs to do functional actions needs to be captured as follows
        1. UserId (Owner or other users : By default Owner Acc should be added to all Product Credit Account Number to which he has paid in. Other users will only be added if their payment was included in that particular product subscription.)
        2. Product Credit Account Number – PCAN1/PCAN2/PCAN3
        3. Eg :
           1. **WUser 1 – PCAN1**
           2. **WUser1 – PCAN2**
           3. **WUser1 – PCAN4**
           4. **WUser1 – PCAN4**
           5. SUser2 – PCAN1
           6. SUser2 – PCAN2
           7. SUser3 – PCAN3
           8. SUser3 – PCAN4
           9. SUser4 – PCAN1
           10. SUser5 – PCAN2
     3. Although when a new user (Non Owner) is added & is in Active state, they still cannot do any functional work until their account becomes paid account & this should be linked to Product Credit Account Number, with from & To dates
     4. The shopping cart for Above should be shown in following steps
        1. Select Multi Products & their subscription Models
        2. Add Additional Users for each Product Usage
        3. Calculate the Totals
        4. Then check out
     5. The monthly & yearly prices, including additional user prices for month & year are stored separately
        1. Product 1 – Period (Month/Year) – Per SubscriptionModel – Per MainUser – Price
        2. Product 1 – Period (Month/Year) – Per SubscriptionModel – Per ExtraUser – Price

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area | Basic | Silver | Gold | Platinum | Basic | Silver | Gold | Platinum |
|  | Monthly | | | | Yearly | | | |
| Product 1 | 0 | 30 | 50 | 100 | 0 | 300 | 500 | 1000 |
| Product 2 | 0 | 20 | 40 | 80 | 0 | 200 | 400 | 800 |
| Product 3 | 0 | 25 | 50 | 100 | 0 | 250 | 500 | 1000 |
| Product 4 | 0 | 20 | 40 | 50 | 0 | 200 | 400 | 500 |
|  | Additional User | | | | Additional User | | | |
| Product 1 | 0 | 6 | 10 | 20 | 0 | 60 | 100 | 200 |
| Product 2 | 0 | 4 | 8 | 16 | 0 | 40 | 80 | 160 |
| Product 3 | 0 | 5 | 10 | 20 | 0 | 50 | 100 | 200 |
| Product 4 | 0 | 4 | 8 | 10 | 0 | 40 | 80 | 100 |

* 1. **Every table should have** 
     1. CreatedDate
     2. CreatedBy
     3. LastModifiedDate
     4. LastModifiedBy

1. 

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