Procure-To-Pay Process of ERP

Made By

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Introduction:

The Procure-to-Pay is a process in which an organization purchases the raw materials and services which are required to do business. It is the process of requisitioning, purchasing, receiving, paying and accounting for goods and services. It involves the number of sequential stages, ranging from need identification to invoice approvals and vendor payment.

The main steps in procure to pay, starts with the requisition order which is an internal request to purchase something. It starts the ordering process during which a Purchase Order (PO) is created. The next steps involve receiving the goods where the Goods Receipt is created and also includes the delivery of goods and order confirmation. Finally, it follows with the payment process, which typically includes,

- Creating an invoice,
- Arranging to pay suppliers
- Recording the transaction in the accounting system.

Use Case: Procure to Pay --> Load Updated Data Delete User Register Organisation Register User Validation Login - Error Message Login Change Password Update Profile Forgot Password Create purchase requisition Load requisition to database Select Vendor Create purchase order Retrieve purchase 4 order from database approval of receipt Load invoices to database List of invoices send by buyer Select invoice and make payment Holdback/retension

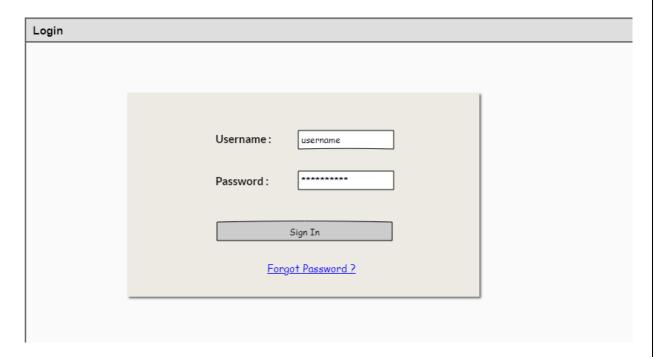
The Procure to Pay Process has the following steps.

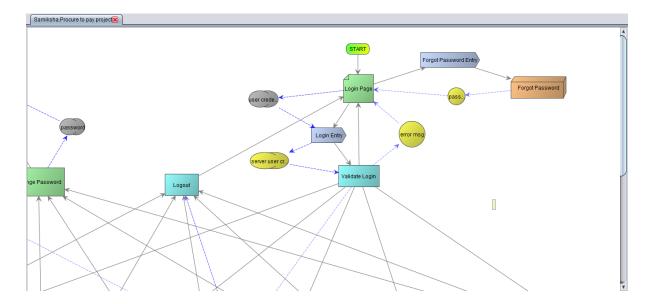
- 1. The employee will log in to the system and create the requisition and send it to the manager for further approval.
- 2. The manager will next approve or reject the requisition as per the requirements and need of the company.
- 3. If the manager rejects the requisition, then the reasons need to be mentioned, which will store in the database
- 4. If the manager approves the requisition then according to the selected vendors, Purchase Order is created.
- 5. The vendor will review the Purchase order and generates Goods receipt and send it with the goods to the shipping address.
- 6. The Manager will inspect and approve or reject the receipt, if any additional item is present.
- 7. The Vendor will create an invoice and load it to the database.
- 8. The Manager will retrieve and check the invoice and approve it and forward it to the finance team.
- 9. The Finance Manager will log in to the system and make the payment to the vendor.

Xsemble Flow Process:

Login Page

Firstly, the actor login to the system. The process contains five actors. Only the Admin has the right to register the users. User can Sign in to the system, also can change the password, if forgotten. When the user login to the page, it will validate the account and then the user can access their account.





Firstly, the Login Page will be displayed to the user, where user can input their username and password. Login Entry is an entry point where the request is then sent to the server and the Validate Method will validate the login credentials. If the login is not successful, the control returns to the login page accompanied with an error message. The login page is thus shown, displaying the error message. There are several successful outcomes of the Validation method, indicated with several outgoing grey arrows, each corresponding to different role.

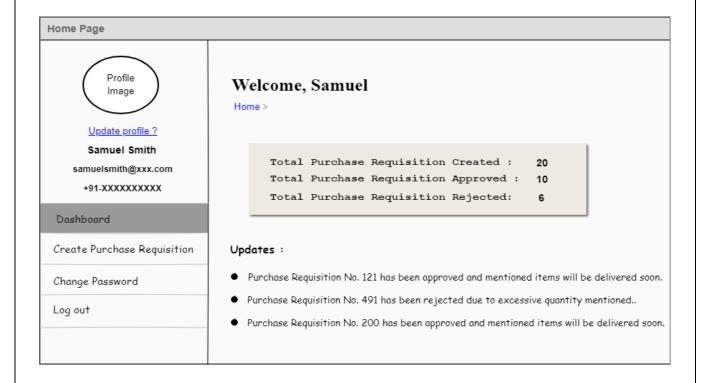
The Login page also has a link to the "Forgot password" functionality which is implemented in the "Forgot Password" subproject. (A subproject corresponds to another flow diagram.)

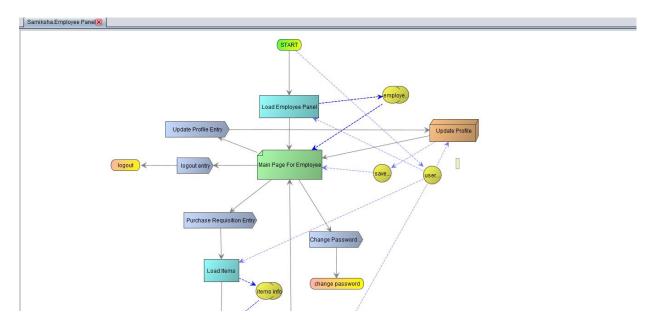
After successful user validation, then user can set new password then they can access their account.

Employee Panel

Home Page for Employee

As the Employee logs in to the account, the requests and updates are shown in their Home Page. They can view the total Purchase Requisition created and also the status of approvals or rejections. Other functionality such as, update profile and change password can also be done by the User.



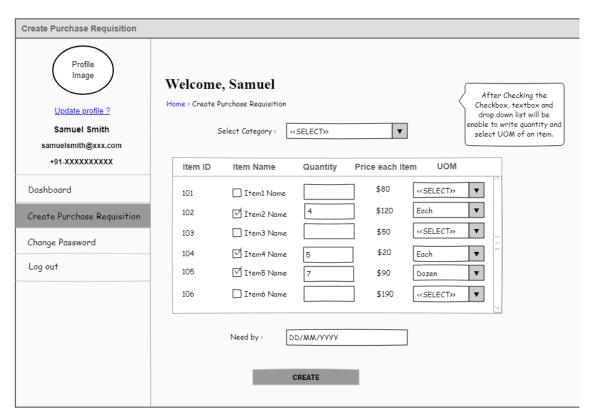


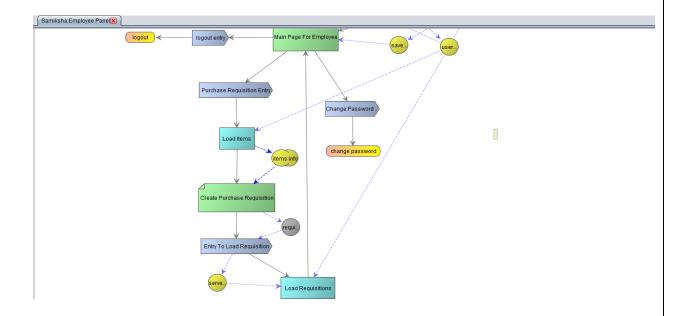
The method Load Employee Panel will process the employee details and the Main Page for Employee will display all updates and status. If the user needs to update his profile, the entry point will link to the server and the individual can update their profile. If the user wants to change their password, they can create the new password and can access their account. User can also log out from their main page.

Create Requisitions

They can create a Purchase Requisition as per the requirements of the goods and material which is an internal request for purchasing. Here, it will create the list of those items which are selected by the employee. The Purchase Requisition form includes the following information.

- Material quantity, Category of Goods and Services.
- Item ID, Item Name, UOM and estimate price of the material.
- Need by date



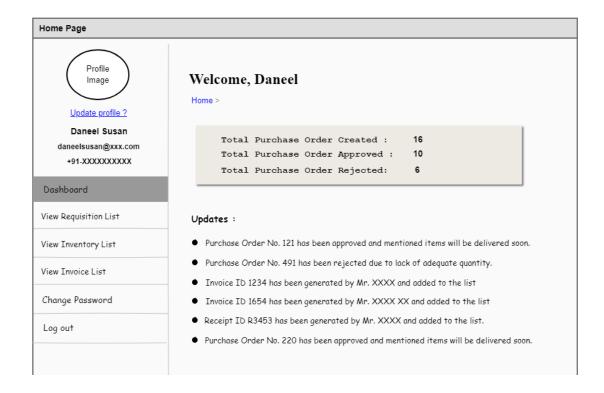


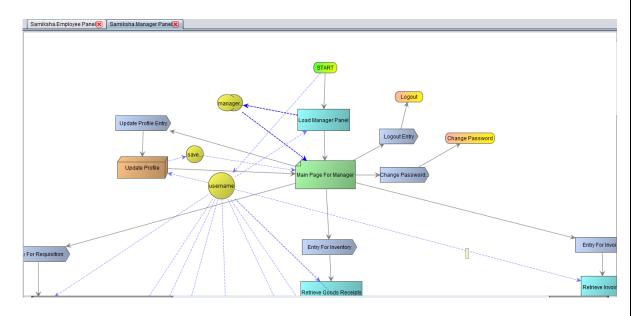
From the <u>Main Page</u>, an entry point is used to create the Purchase Requisition. The <u>Load Method</u> contains in-argument <u>username</u> (session variable) will retrieve all the item information (Item ID, Item Name, Price, Quantity), category list and UOM list. In Purchase Requisition Page, category list will be displayed. By selecting the category, items list will be displayed. The Employee will select the required items from the list and also specified the date. The <u>Load Requisition</u> Method will load them into the database.

Manager Panel

Home Page for Manager

As the Manager Log in to the account, the requests and updates will be shown in their Home Page. They can view the total Purchase Orders created and also the status of approvals or rejections. The manager can also view the Inventory and Invoice List created by the vendor. Other functionality such as, update profile and change password can also be done by the User.

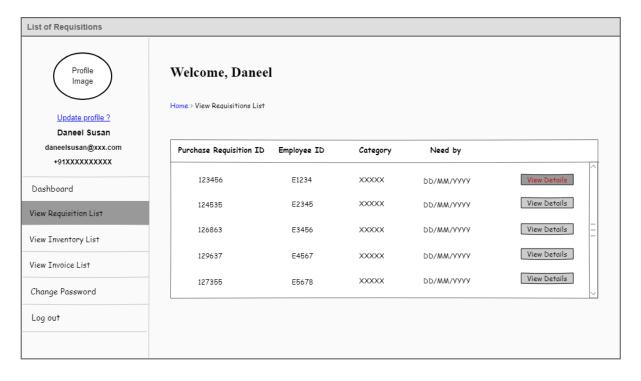


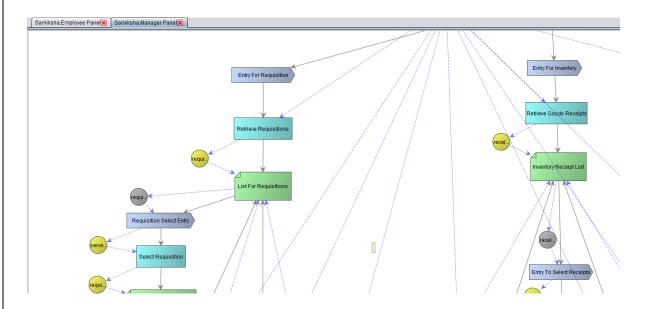


The START node will begin the process. The <u>Load Manager Panel</u> Method will retrieve the manager details and display it to the <u>Main Page for Manager</u>. In the Main Page, they can view all the updates and status. If the user needs to update their profile, the subproject (Update Profile) is used and they can update their profile. If the user wants to change their password, they can create a new password and the user can access their account. Also, they can logout from the Main Page.

List of Purchase Requisition

On this page the list of the Requisitions will be displayed along with the Purchase Requisition ID and Employee ID. They can view the information in detail by clicking on the <u>View Details</u> button.





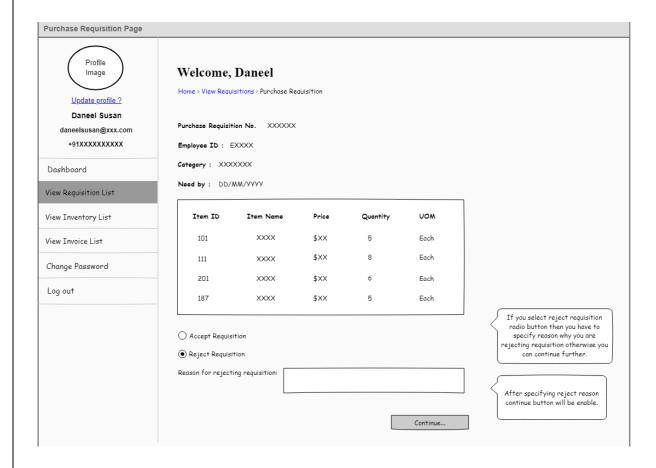
Here, an <u>Entry to Requisition</u> entry point will link to the server. The <u>Retrieve Requisition</u> Method will retrieve the requisition list from the database and will be displayed in the <u>List of Requisitions</u> page.

Purchase Requisition Page

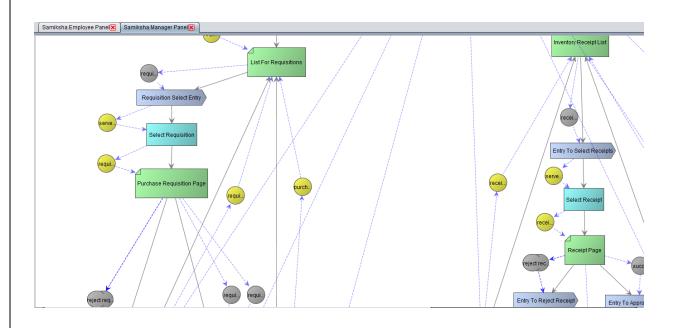
When the Manager will select a Purchase Requisition from the requisition list, they can view the complete details about it. It includes the items list, Purchase Requisition ID, Employee ID, Category and due date.

The Manager can approve or reject the Requisitions by evaluating needs, verifying the available budget and also by checking the Inventory. Incomplete purchase requisitions are rejected back to the initiator for correction and resubmission. If the Requisition gets approved, then the Purchase Order will be generated. If the Requisition gets rejected, then they have to mention the reason for rejection. The status will be shown in the Employee account. As the Requisitions get rejected the further process will stop otherwise the Manager will create the Purchase order for the approved Requisition.

Wireframe:



Xsemble Flow:

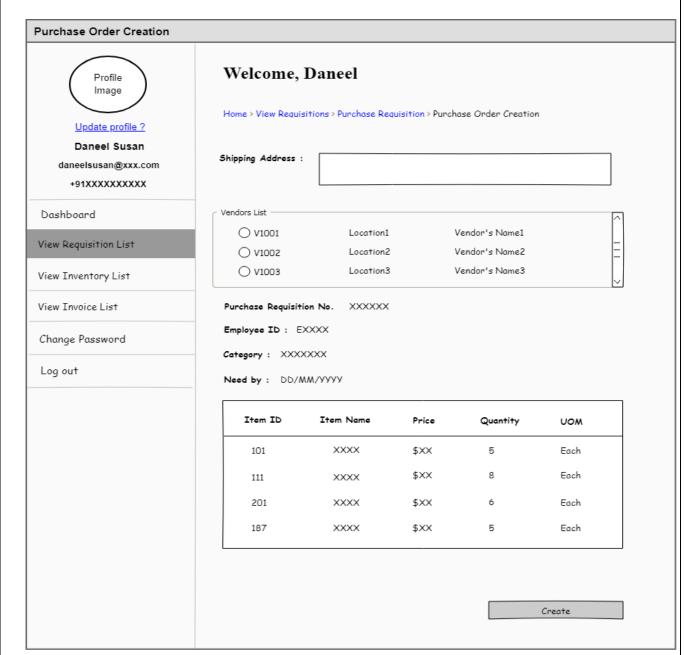


With the help of Purchase Requisition ID, we select a requisition. The Select Requisition Method will retrieve the requisition details and display it to the Purchase Requisition Page. If Manager approves requisition, then we move forward to create Purchase Order Otherwise Reject Requisition Method will save the status along with the specified reason into the database. Also a message will be displayed to the user in the List of Requisition Page.

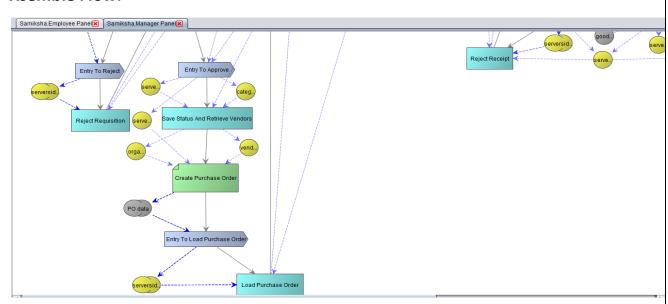
Purchase Order Creation:

The Manager will create the Purchase Order for the approved Requisition. A Purchase Order is a formal request to the vendor to supply the materials and services under certain conditions. It contains the Requisition details, Vendor details and Shipping Address.

Wireframe:



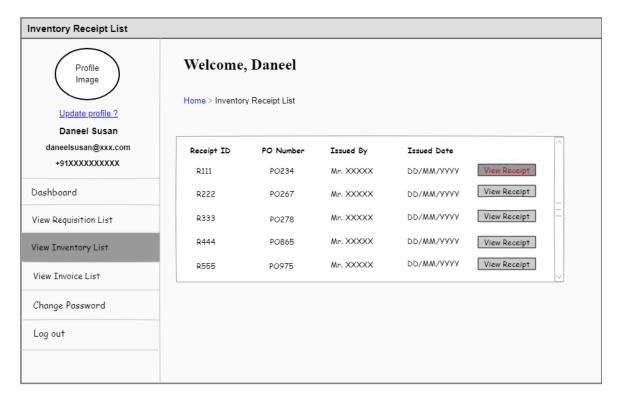
Xsemble Flow:

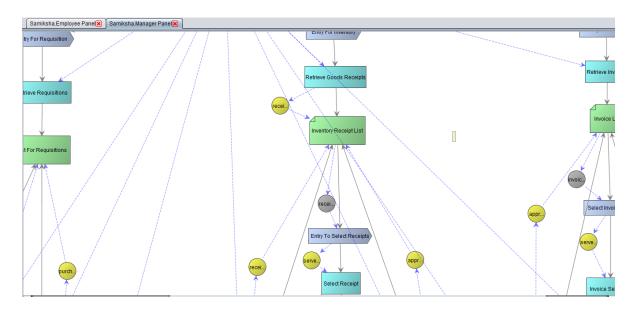


Both the entry point to approve and reject the Purchase Requisition is maintained. The Reject Requisition Method get proceed if the Manager rejects the requisition with the specified reason, it will be stored into the database. If the manager approves the requisition, then the Save Status and Retrieve Vendors Method will save the status as approved and proceed further to retrieve the list of vendors from the database. The vendors' information is in the Vendors' info data node and the organizations' information is in the organizations' info data node. After approving the Purchase Requisition, the Manager will create the Purchase Order for the respective requisition. The Create Purchase Order page will contain all the details of the items list, Vendors' list and shipping address. An Entry to Load Purchase Order Method will load the Purchase Order to the database.

List of Inventory:

Once the supplier delivers the promised goods/services, the buyer inspects the delivered goods or services to ensure that it complies with the contract terms. When the goods are received at the warehouse of the buying organization, the receiving staff checks the delivery note. The goods receipt is then checked by the Manager. The Inventory list contains Receipt ID, PO Number, issued by and Issued Date. The Manager can view the details of Receipt by clicking on the <u>View Details</u> button.

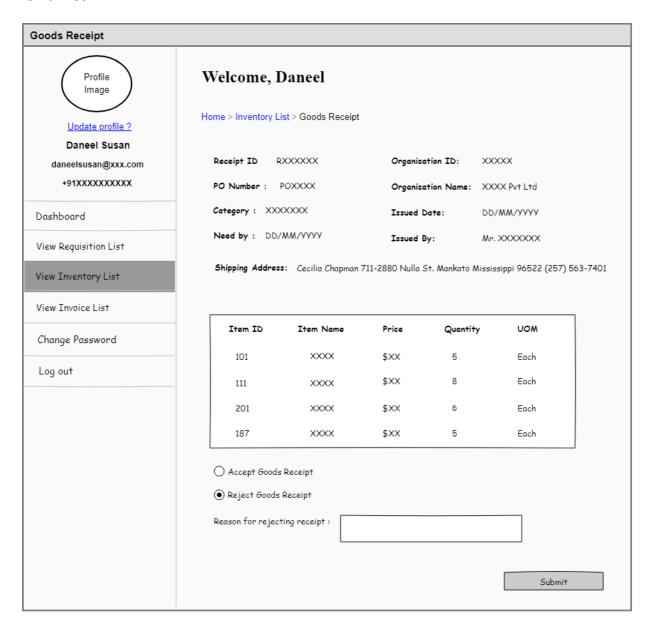


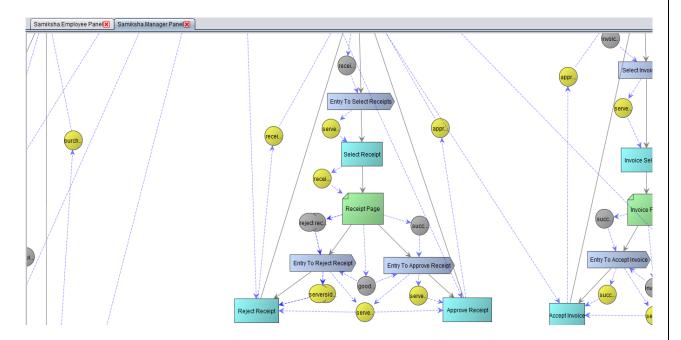


An Entry to Inventory entry point is used and the Retrieve Goods Receipt Method will retrieve the list of the Goods Receipt from the database.

Receipt Page:

The Goods Receipt has all the details which were to be supplied to the organization. Receipt ID as well as the PO Number along with the shipping address. The vendor detail will also have been mentioned on Goods Receipt Page. The Manager can approve or reject the receipt based on the standard specified in the purchasing contract or Purchase Order. If the Manager will approve the Goods Receipt, then the Vendor will proceed with the Invoice creation otherwise they will be notifying with the status and reason for rejection.

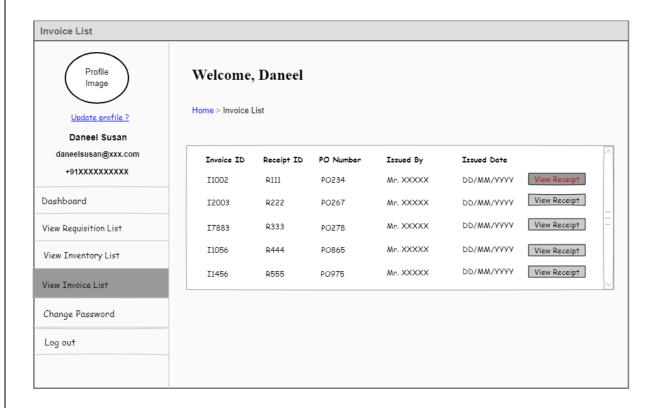


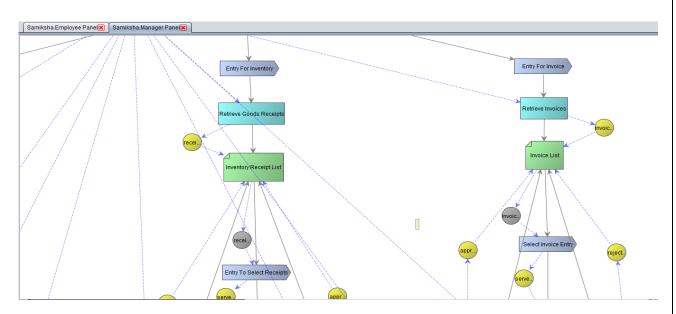


By the help of Receipt ID Manager can select the Receipt from the Receipt list. The Select Receipt Method will retrieve the information for the selected Receipt ID. The Receipt details will be shown to the Receipt Page. The Manager can view the complete information about the receipt on the Receipt Page. The manager then can approve or reject the receipt. Approve Receipt Method will update the success status and Reject Receipt Method will update the reject status along with the reason for rejection. Both Method will send back the control to the Inventory Receipt List page with the message.

List of Invoice:

After the approval of the Goods Receipt by the Manager, Vendor will create and send the Invoice to the Manager for the payment. The Manager can view all the Invoices generated by the Vendors. It contains the Invoice ID, Goods Receipt ID and PO Number. The Manager can view the details of an invoice by clicking on the <u>View Receipt</u> button.

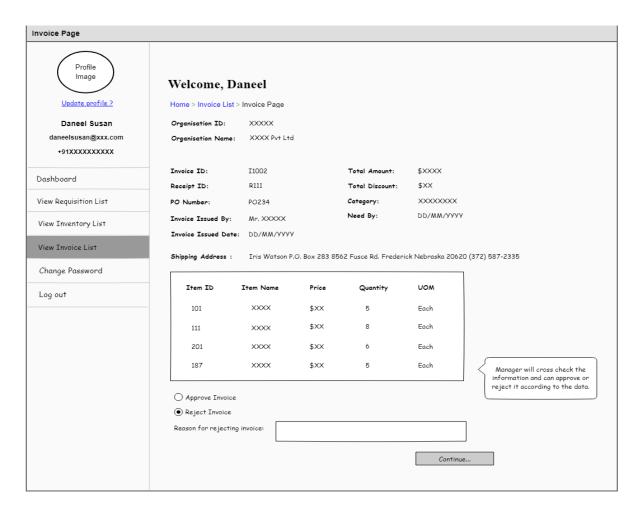


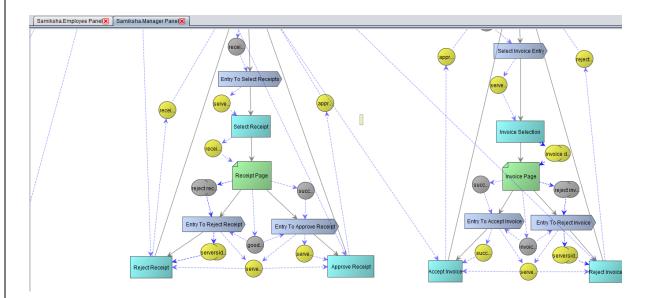


The Retrieve Invoice Method will retrieve the invoice list and display it to the Invoice List page.

Invoice Page:

The Manager can view the payment details i.e. the net amount and total discount allowed. If the details are correctly mentioned then they can approve the invoice to make the payment or else they can reject the invoice where they need to justify the reason for rejection.



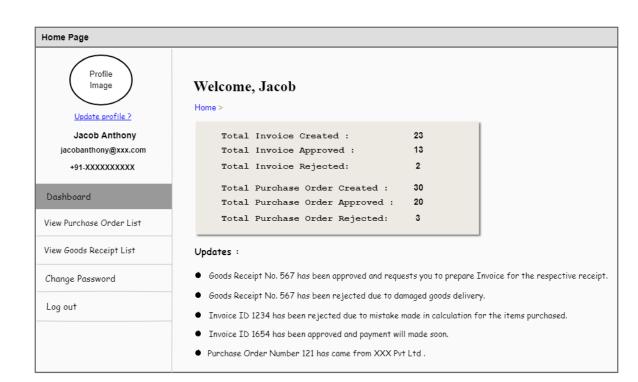


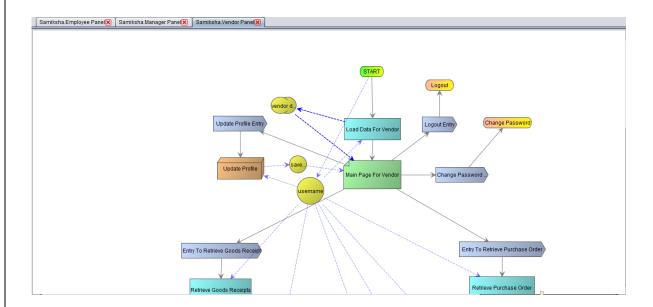
From the list of Invoices, the manager will select Invoice ID for further processing. The <u>Invoice Selection</u> Method will retrieve the invoice details, PO details and Goods Receipt details. The manager can cross check the details on the <u>Invoice Page</u>. After that, the Manager can approve or reject the Invoice. The entry points for the approval and rejection of the Invoice is maintained. The <u>Accept Invoice</u> Method will update the success status and <u>Reject Invoice</u> Method will store the reject status along with the reason for rejection.

Vendors' Panel

Home Page for Vendor

As the Vendor login to the page, the updates and request will be shown on the Home Page. They can view the status about Purchase Orders and Invoice creation. Functionalities such as change password and update profile can be used as per the need.

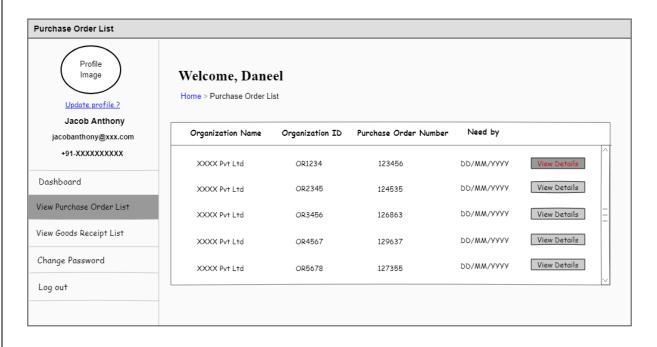


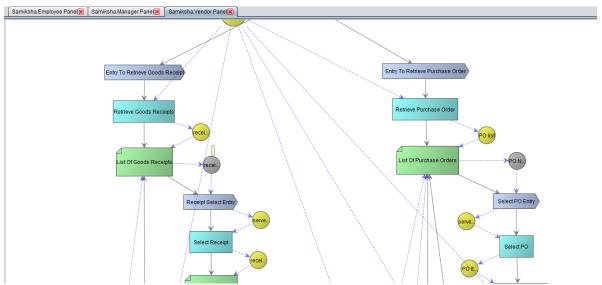


The START node will begin the process. The <u>Load Data for Vendor</u> Method will process the Vendor details and will display to the <u>Main Page for Vendor</u>. On the Main Page, they can view all the updates and status regarding Invoice and Goods Receipt. If the user needs to update their profile, the subproject (Update Profile) is used and they can update their profile. If the user wants to change their password, they can create a new password and the user can access their account. Also they can logout from the Main Page.

List of Purchase Order

The Manager of the organization will send the Purchase Order to the vendor for the delivery of goods and material. The vendor will get to know that by which organization the Purchase order has been generated. The due date for the delivery is also mentioned with the PO Number.

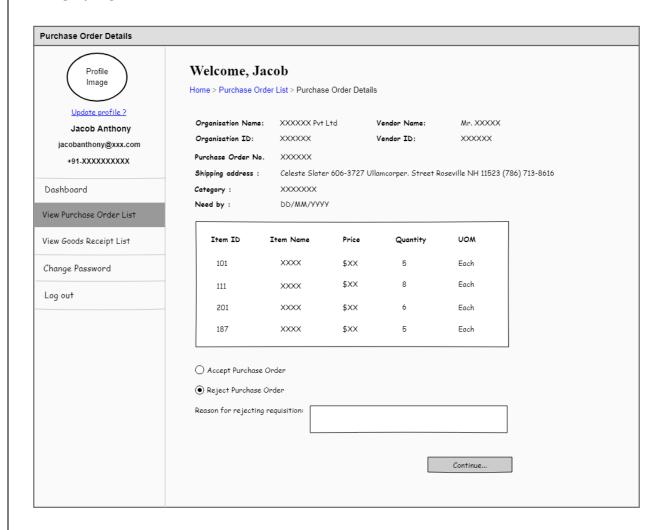


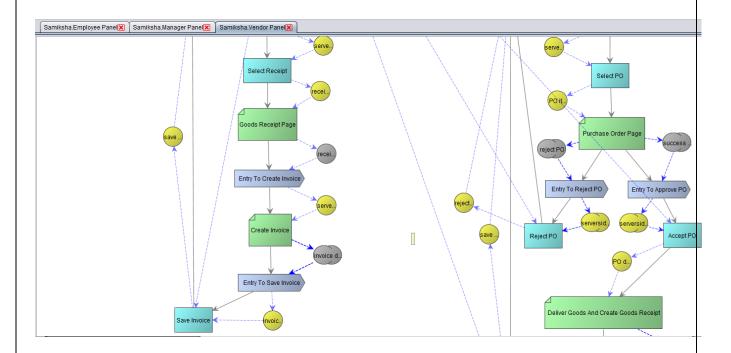


The entry point for the Purchase Order is made. The <u>Retrieve Purchase Order</u> Method will process and retrieve the purchase orders list from the database and display it to the Vendor in List of Purchase Order page.

Purchase Order Page

According to the PO Number, the Vendor will select the Purchase Order. The vendor can view it in detail, so that they can approve or reject the order as per the information mentioned in it. The purchase order has all the items included the expected delivery date and shipping address. If the requirements are met, then the vendor will approve the Purchase order or they can reject the Purchase order with the reason.



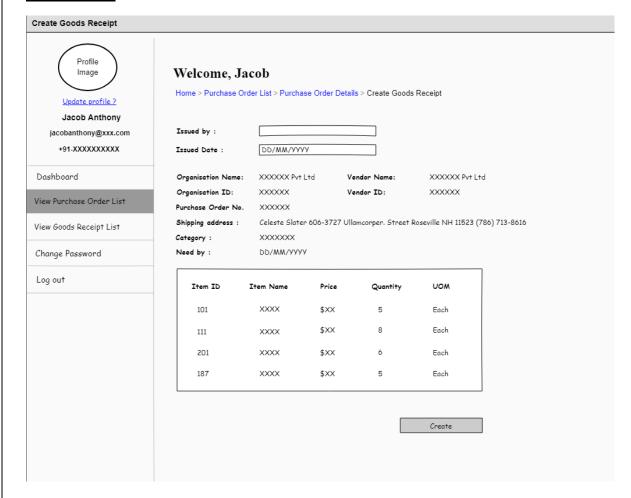


After the selection of Purchase Order from the list, the method <u>Select PO</u> will process and retrieves the respective details. <u>The Purchase Order</u> Page has all the detail information about the items. The vendor will review the Purchase Order. The entry points for approval and rejection is maintained. If the Purchase order gets rejected, then the method <u>Reject PO</u> will update reject status along with the reason for rejection in the database. These updates will be shown to the Manager panel. If Manager approves the order then, <u>Accept PO</u> Method will set the status and proceed further for creating Goods Receipt.

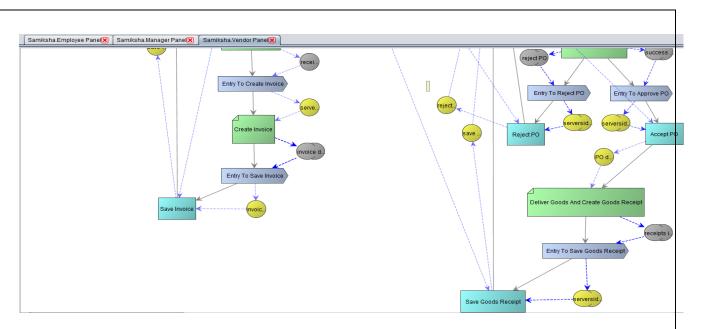
Creating Goods Receipt:

After approving the Purchase Order, Vendor will create Goods Receipt for the particular Purchase Order. It includes all details of Purchase Order and Issued Date of Goods Receipt.

Wireframe:



Xsemble Flow:

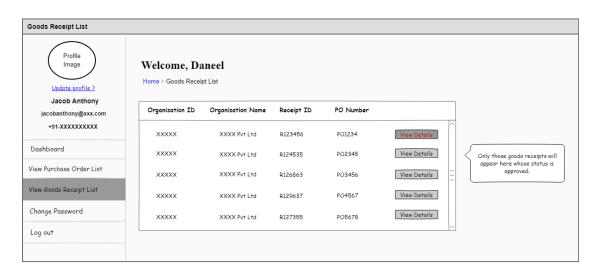


After approving the Purchase Order, Goods Receipt Page will display with all the details of Purchase Order, Issued by and Issued Date. The Save Goods Receipt Method will store the Goods Receipt in the database and sent the control back to the List of Purchase Order Page.

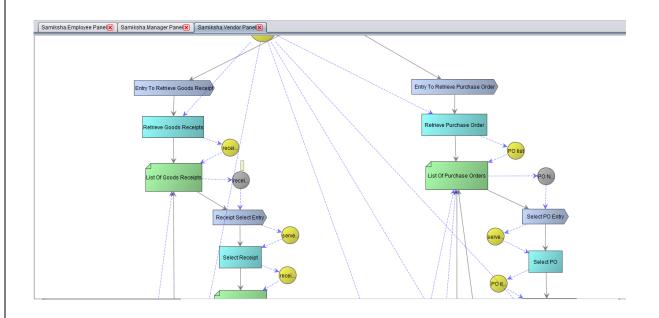
List of Goods Receipt:

The vendor can view the list of approved Goods Receipt in the list of <u>Goods Receipt</u> Page. Here, users can view the essential details like Organization detail, Receipt ID and PO Number. By clicking on the <u>View Detail</u> button, users can see the detail view of the Goods Receipt.

Wireframe:



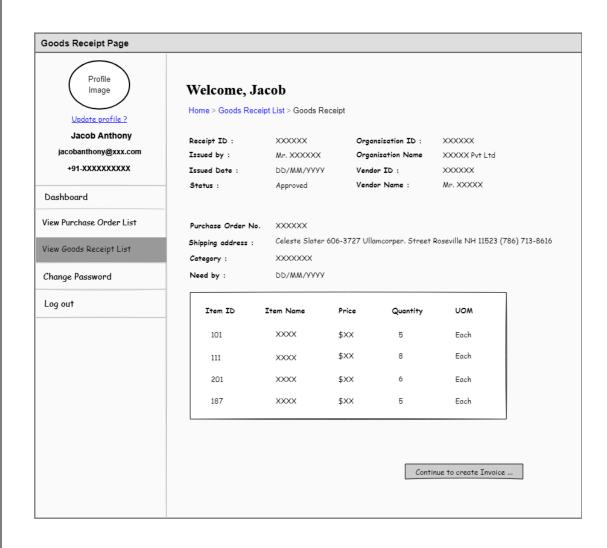
Xsemble Flow:

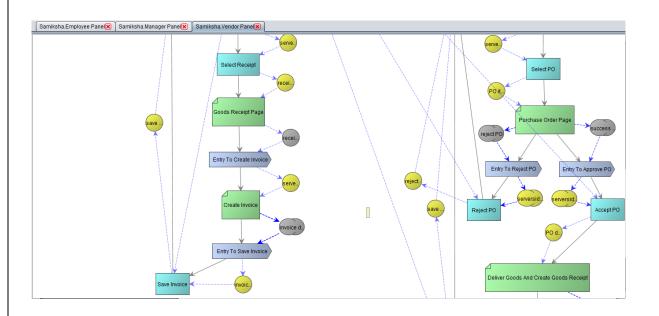


The Retrieve Goods Receipt Method will retrieve the Goods Receipt list from the database and display it to the List of Goods Receipt Page.

Goods Receipt Page:

This page includes Organization, Vendor and Order details of the selected Goods Receipt. Here, we can move forward to create the Invoice for the particular approved Receipt.

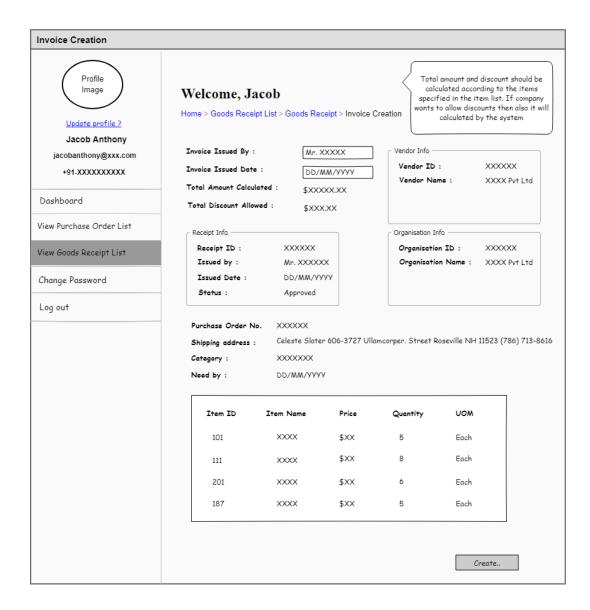


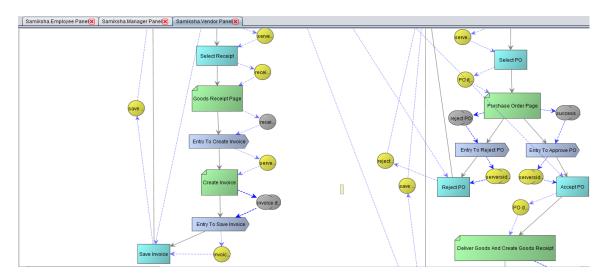


The Select Receipt Method will process and retrieve the Goods Receipt details from the database. According to the selected Receipt ID, the <u>Goods Receipt page</u> will display. For the selected Goods Receipt, the Vendor will create the Invoice for it.

Creation of Invoice:

After the approval of Goods Receipt, the vendor will create the invoice. The invoice contains the item details, Purchase Order Number and the Goods Receipt ID. The total amount as well as the discount strictly calculated according to the items specified in the items list. If the company wants to allow the discount, then also it will be calculated by the system itself.





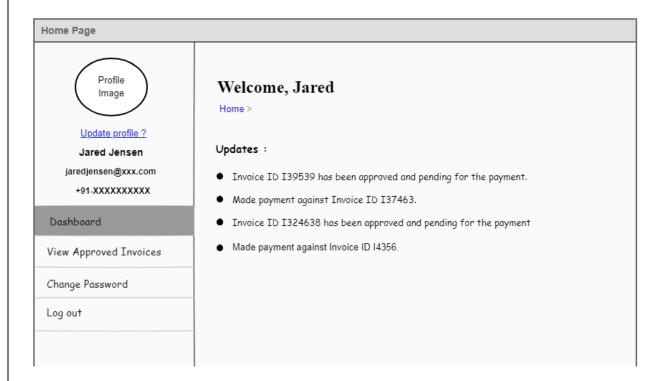
The vendor will specify the name and Issued date and the system will automatically calculate the net amount, total discount for the particular order. It also contains organizations detail and vendor detail. Save Invoice Method will successfully save the Invoice to the database. It also displays the message to the vendor and sends back control to the List of Goods Receipt Page.

Finance Manager Panel

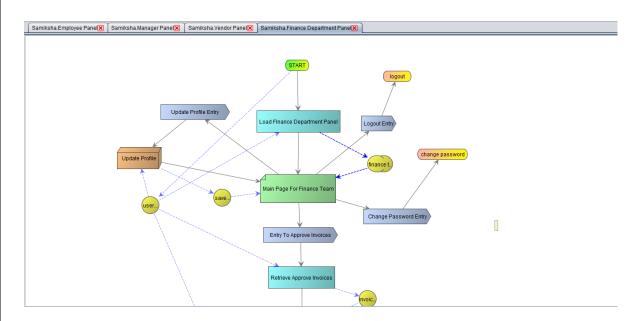
Home Page for Finance Manager

The Finance Manager will log in to the system and then they can view all the updates on the dashboard. They can view the approved Invoices. Also, they can view the updates for pending payment.

Wireframe:



Xsemble Flow:

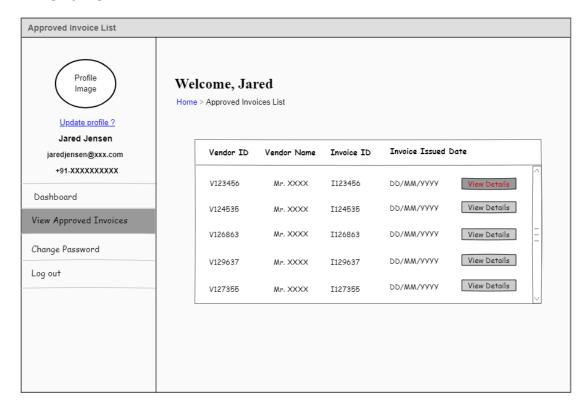


The START node will begin the process. The <u>Load Finance Department Panel</u> Method will process the Finance Manager details and the Main Page for the Finance Department will display. In the Main Page, the Finance Manager will get to know all the updates and status. If the user needs to update their profile, the subproject (Update Profile) is used and they can update their profile. If the user wants to change their password, they can create a new password and the user can access their account. Also they can logout from the Main Page.

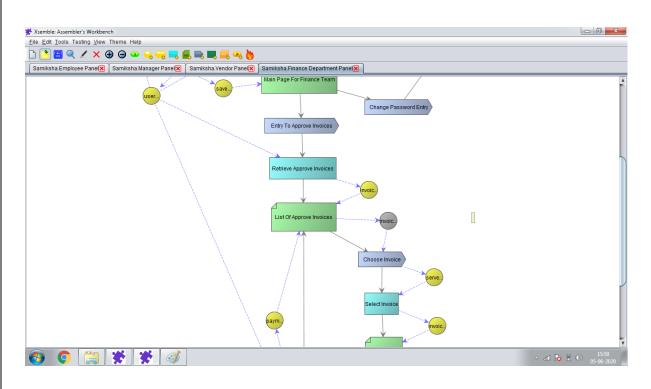
List of Approved Invoices

The Manager will approve the Invoice created by the vendor and then sent it to the Finance Manager for the payment of the goods and material. The Invoice contains the name and ID of the vendor. The Finance Manager can view the details to make further payment.

Wireframe:



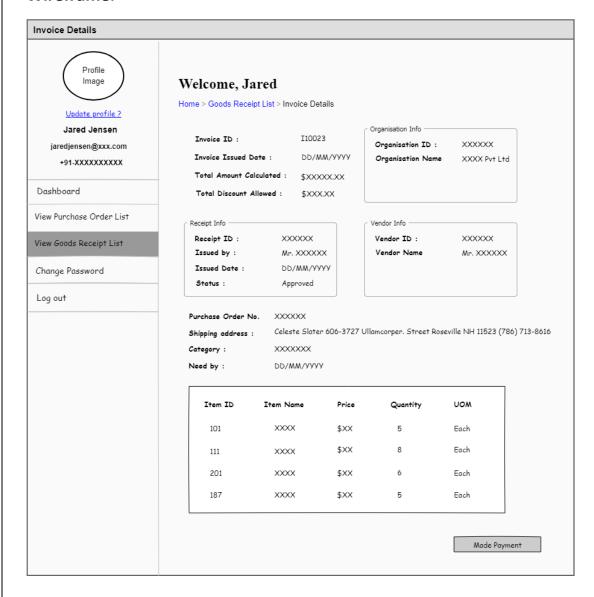
Xsemble Flow:

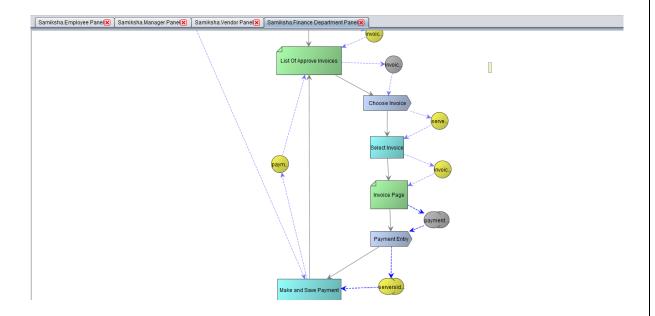


After login to the system, the Main Page for Finance Manager will display. The Retrieve Approved Invoices Method process and retrieve data from the database. The page with a list of all the Invoices will display. An entry point is used to select one Invoice from the list. The Select Invoice method will retrieve data for the Selected Invoice.

Invoice Details

The Finance Manager will view the Invoice details. If the details are correctly mentioned, then they will make the payment for the respective Invoice.





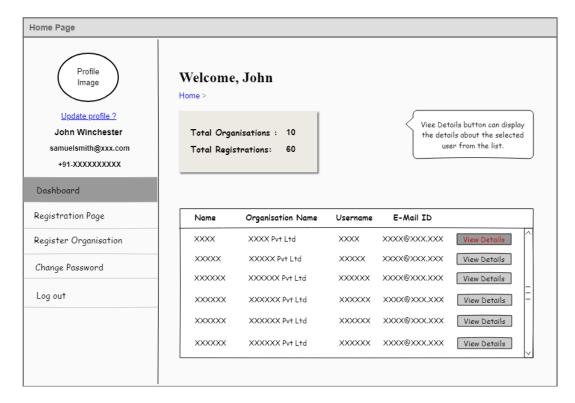
The Invoice page will display the Invoice details. The <u>Make and Save Payment</u> Method will make payment to the vendor's account and stores the payment details in the database.

Admin Panel

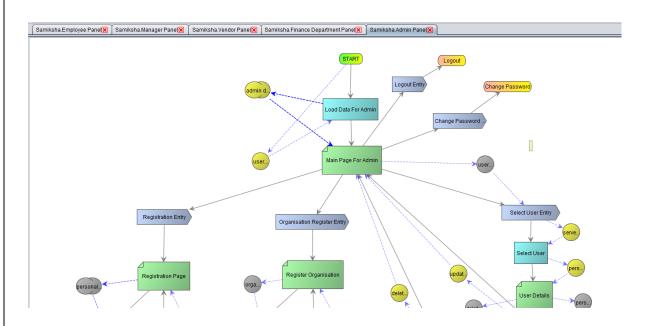
Home Page for Admin

Admin can log in to the system. He has the only right to register the new user. They can check how many organizations are there. They can also register the new organization to the system. Functionalities such as change password or update profile can also be used by the Admin. In the dashboard, they can view the list user and their respective organization. They can click on the view details button to make several operations.

Wireframe:



Xsemble Flow:

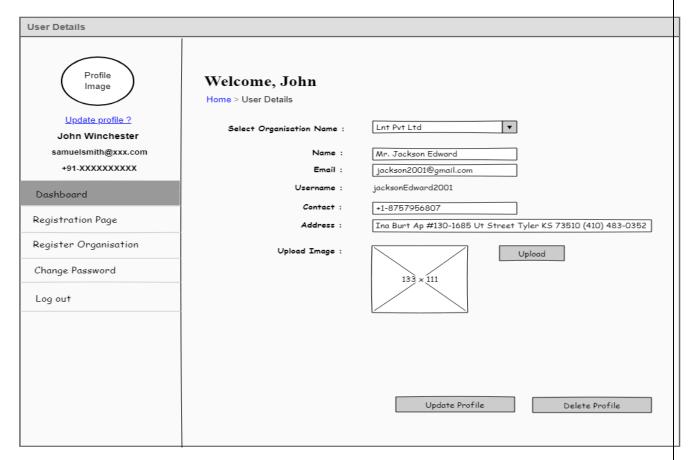


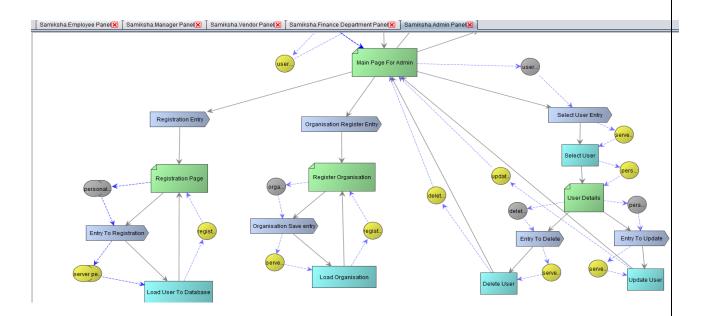
The START node will begin the process. The Load Data for the Admin Method will process the Admin details and the Main Page for Admin will display. In the Main

Page, the Admin will get to know all the updates and status. If the user needs to update their profile, the subproject (Update Profile) is used and they can update their profile. If the user wants to change their password, they can create a new password and the user can access their account. Also they can logout from the Main Page.

User Details

The user details will be shown on the <u>User Details Page</u>. If the admin wants to update the user, then they can use the <u>Update Profile</u> button to modify the user detail. Admin can also delete the user from this page. The status for both will be updated on the Admin Home Page.

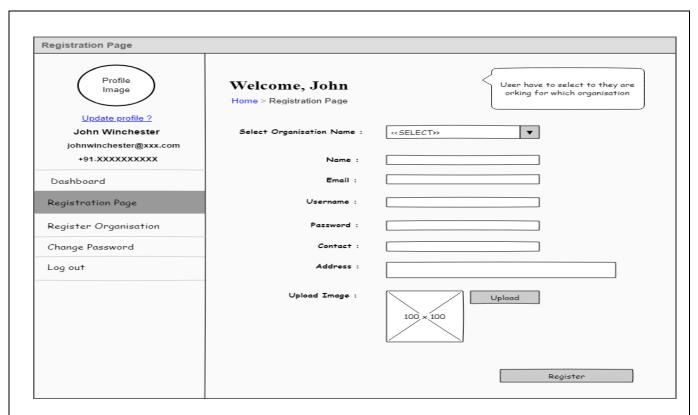


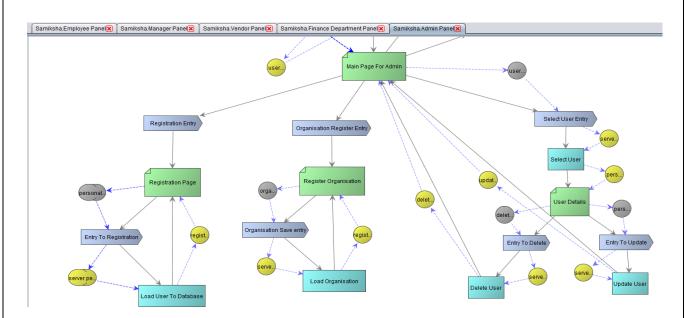


The Select User Method will retrieve the user details from the database. The detail of the user will display in the User Details Page. Update User Method will overwrite the existing detail of the user and Delete User Method will delete the user permanently.

Registration Page

Admin can register the user into the system. The organization name needs to be selected for which they are working. The detail information of the user needs to specify to register any user into the system. By clicking the Register button user gets register into the system.



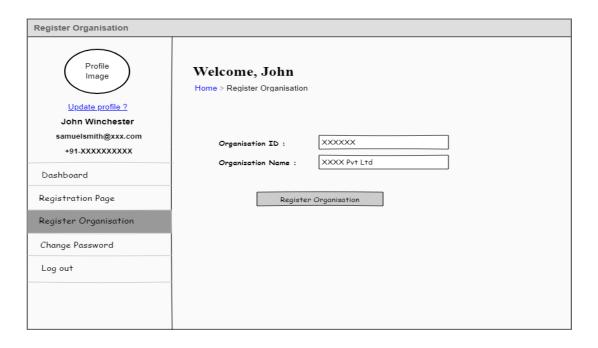


The Registration Page will display a form to the admin. Admin needs to fill the mandatory details of the user like username, password, E-mail and contact. The Load User to Database Method will save the user details into the database.

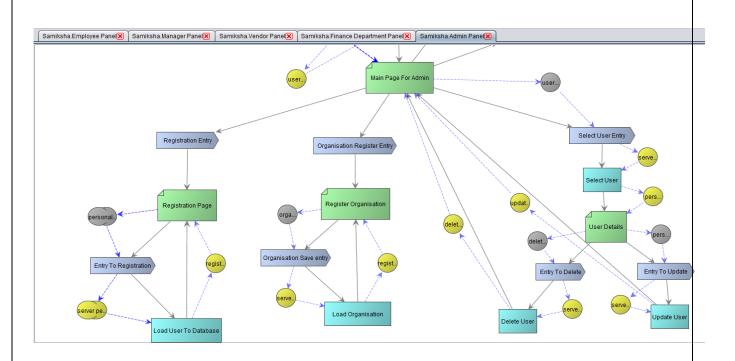
Register Organisation

The Admin can register the new organization into the system which contains the organization's name and ID.

Wireframe:



Xsemble Flow:



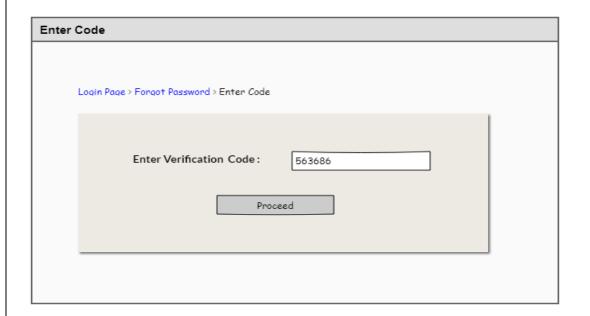
The admin can register the organization in the system. An entry point is made to register the organization. The <u>Register Organization</u> page appears. The <u>Load Organization</u> Method loads the organization into the database.

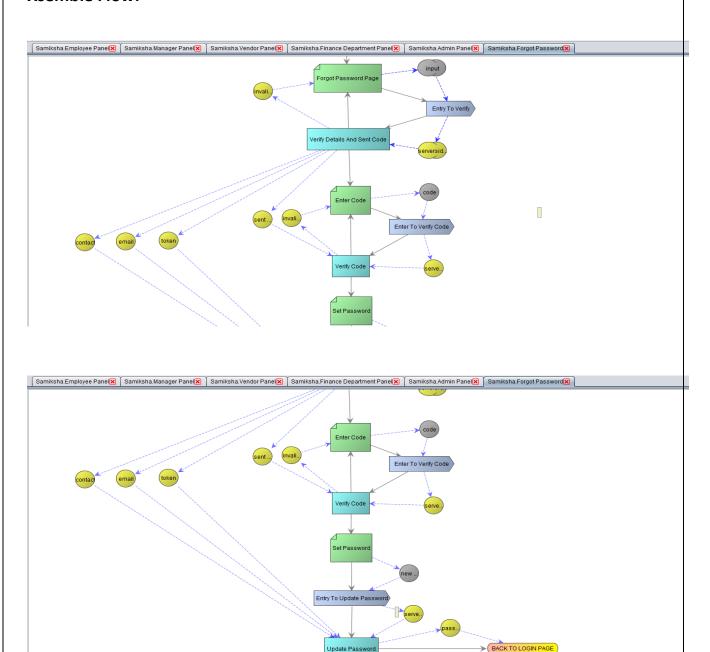
Forgot Password Functionality

If any user wants to log in to the system, but if they won't remember their password then they can change password by clicking on the forget password link. Here, the user has to specify their register E-mail. The code will have sent to their E-mail and then they need to enter it to set the new password for their account. By entering the new password, they can successfully login to the system.





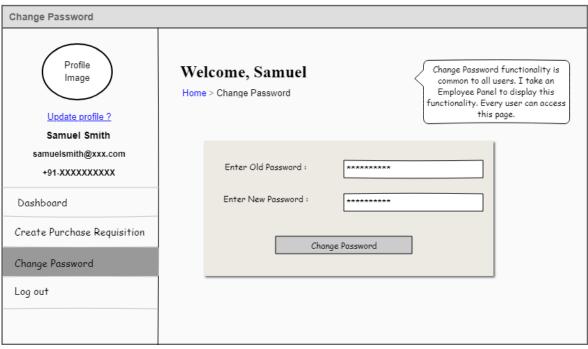


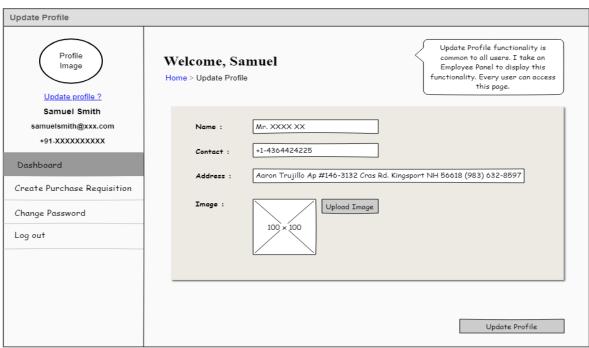


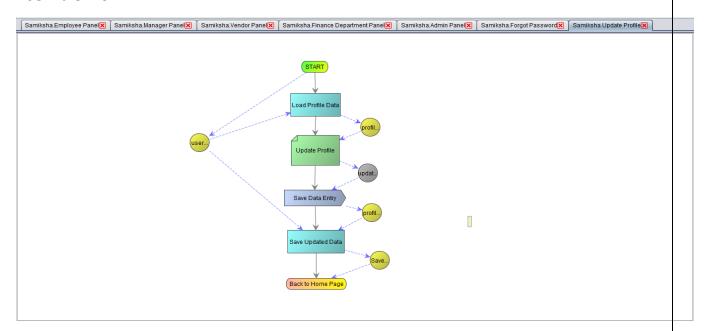
If the user forgets the password, then to change password further procedure will be followed. Forget Password page will ask the user to enter E-mail or contact number. The <u>Verify Detail and Send Code</u> Method will verify E-mail/contact. If the details verified successfully, the system will send a code to their E-mail. <u>Enter Code</u> Page will display, where user needs to enter the code which has been sent to their E-mail. The <u>Verify Code</u> Method will validate the code. The entered code get match then user can view <u>Set Password</u> Page. From here the user can set the new password and <u>Update Password</u> Method will update password for the particular user.

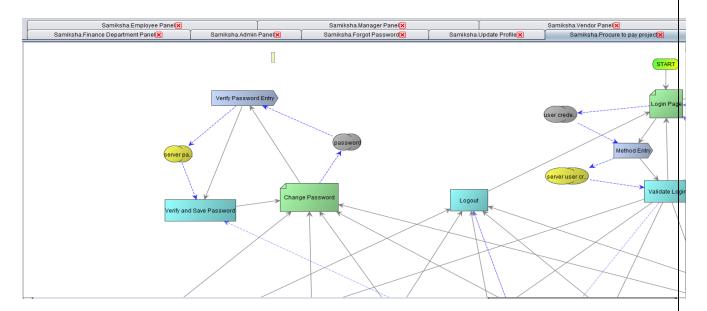
Change Password and Update Profile:

Change password and update profile functionality is common for all the users. They can change and update the profile as per the requirement.









The START node will start the process. The <u>Load Profile Data</u> Method will retrieve the user profile from the database. The <u>Update Profile</u> Page will display in which the user can update their information. The <u>Save Updated Data</u> Method will process and save the updated information into the system.

| he Change Password Page ask user to enter old and new password. The <u>Verify</u> nd Save Password Method will verify the old password and updates the new | | | | | |
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