Story: Approval App for stock write-offs

Objective: Approvals for the inventory write-offs

Stakeholders:

- Warehouse Supervisor
- Accounting Officer
- Financial comptroller

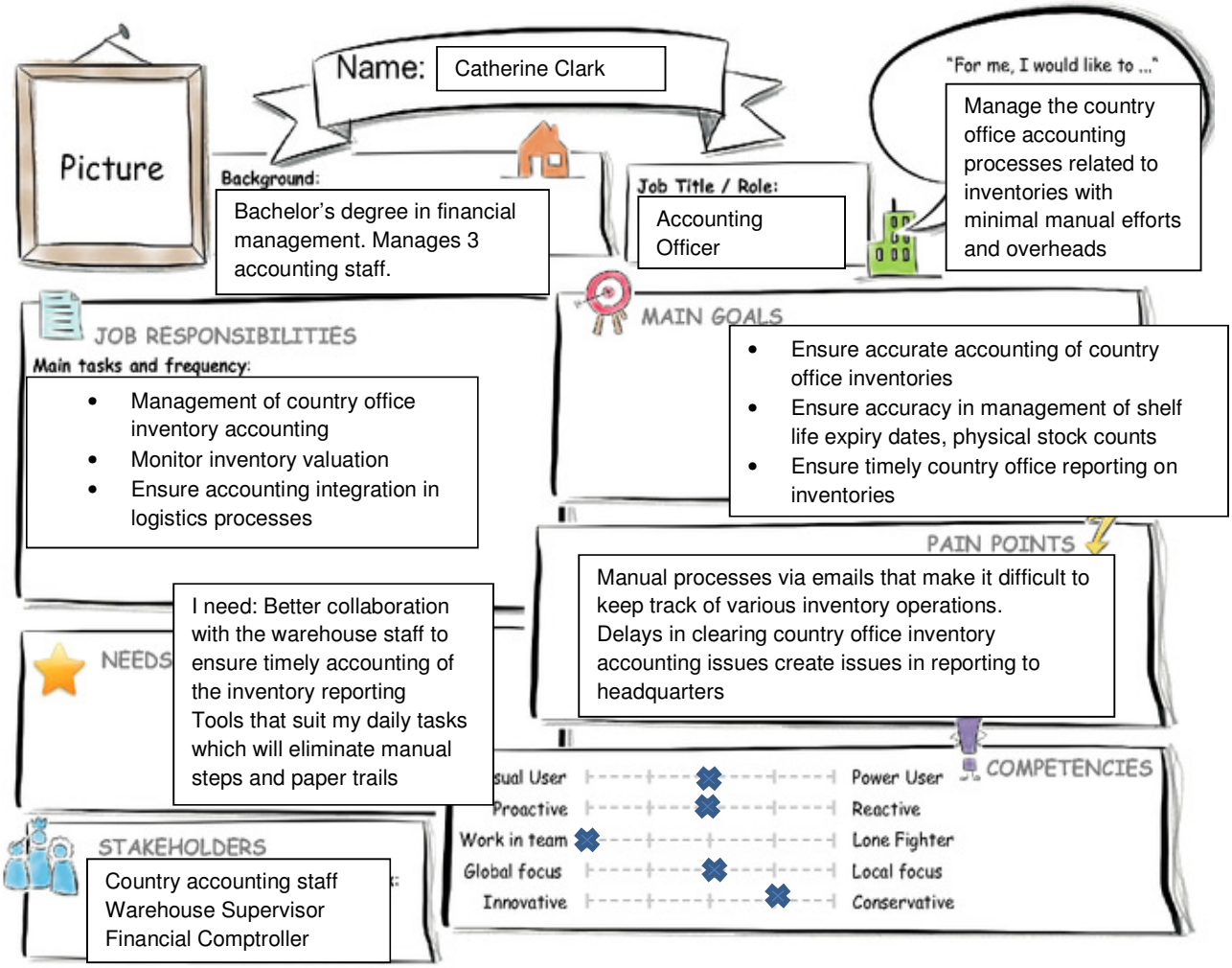
Inventories for the entire organization are managed in over 200 warehouses all over the world. Each warehouse is managed by the **warehouse supervisor** of that warehouse. In addition to the daily responsibilities of managing the warehouse, the warehouse supervisor is responsible for monitoring the stock approaching its shelf life expiry dates as well the stock that has already expired.

There is an organization policy for the management of the expired stock wherein the warehouse supervisor gets the expired stock moved to a specific storage bin called as "PSB" with the objective of writing off that stock so that it can be destroyed and removed from the warehouse. All the stock that is written-off must be accounted for in the financial books. The write-off must be approved by the **Accounting Officer** at the office. A monthly report is given to the corporate **financial comptroller** for the written-off stock all over the world during that month. The entire process is called as "PSB process".

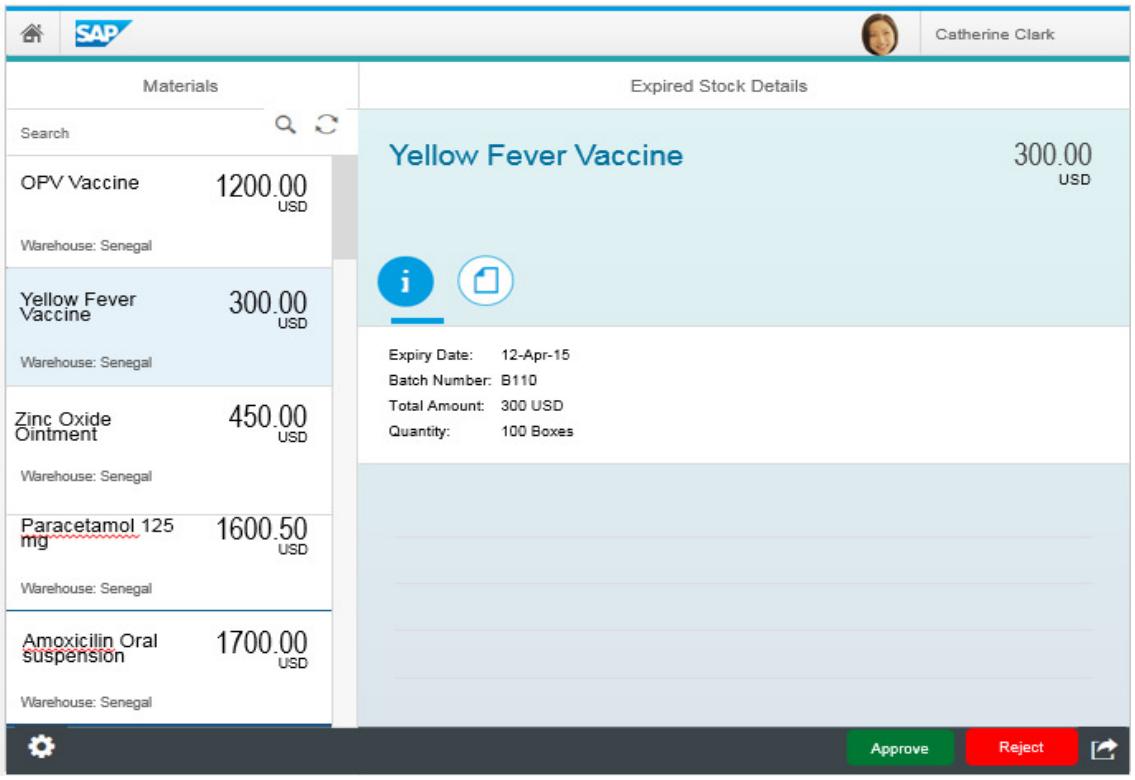
The current PSB process is managed primarily via email correspondence among the stakeholders. Basic stock lists are attached to the emails sent by the Warehouse Supervisor. The approvals or the rejections are also sent via emails and the warehouse Supervisor is responsible for keeping the paper record of approvals received. Upon receiving the approvals, the write-off process is initiated by the Warehouse Supervisor in the system which results in generation of the documents pertaining to the goods movements – the material document and the accounting document. Due to the lack of a structured Approval process, there are delays in the stock write-offs leading to subsequent issues in recording of the related accounting entries and the stock reconciliations.

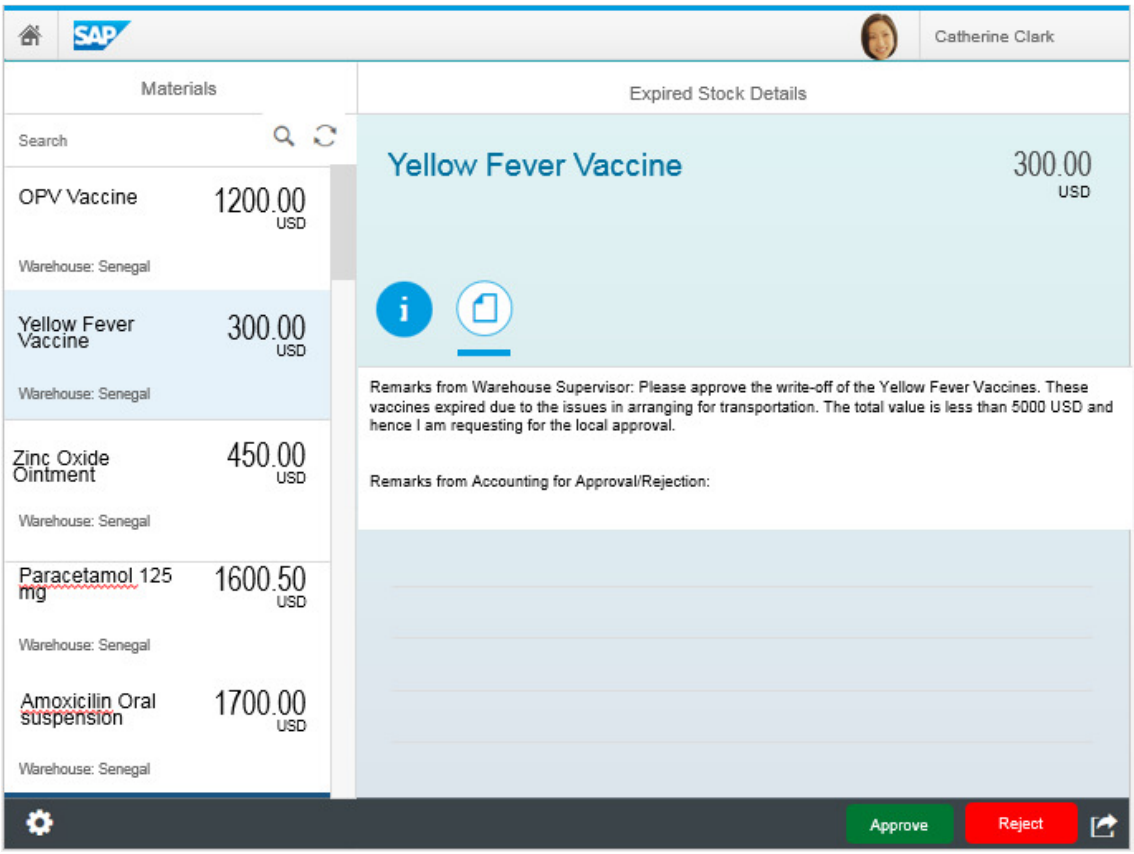
An Approval app is desired that would automate the PSB process. The App should be simple and suit the tasks of the Accounting Officer. The Approval of the proposed write-off will trigger the goods movement and generation of the material and accounting documents. The App should also have the facility to capture remarks to facilitate the process and subsequent reporting and audit needs.

Personas: Approval App for Stock Write-Offs

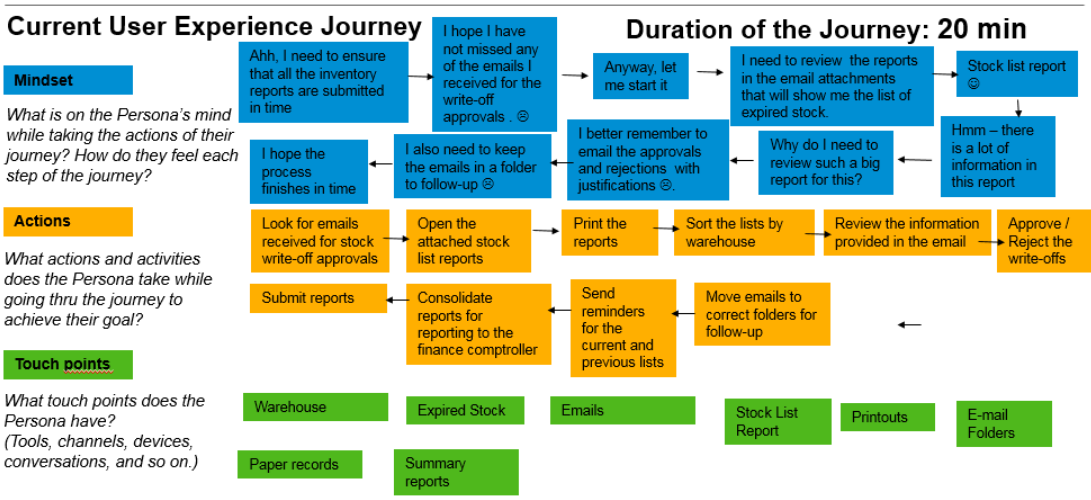


Mock Up – Using the Prototype Kit

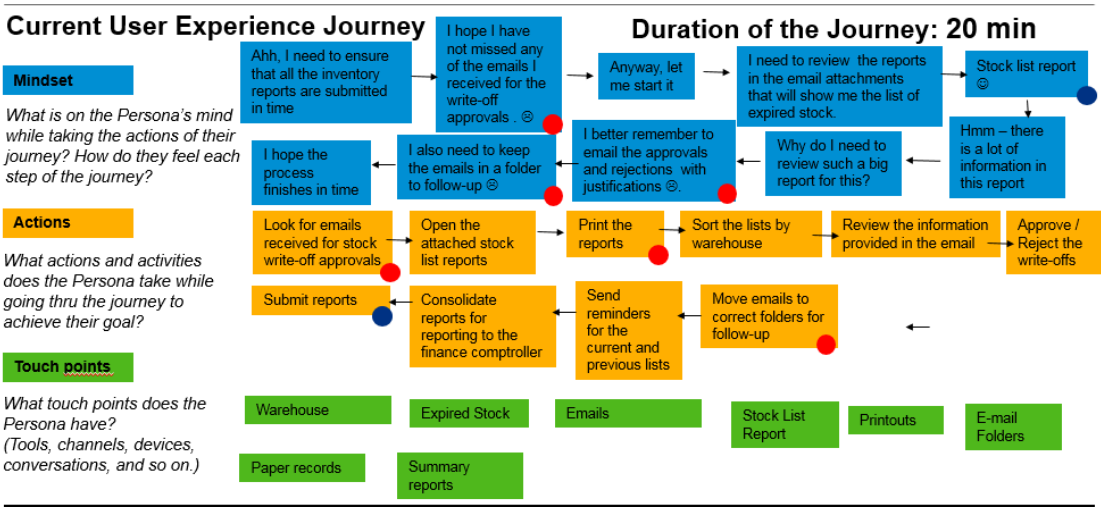




User Experience Journey:



Pain points:



App Prototype: Approval App for stock write-offs

Purpose: The main purpose of this App is to enable an approval process for the stock write-offs. Please refer to the "Story" for the detailed background for this App.

The Approval App will be used by the Accounting officers in the country offices. Only the required information is provided in the App and the approved write-offs generate the material and accounting documents thus automating the entire approval process.

Build process:

Step 1: Open SAP Web IDE and login with your credentials

Step2: From the "Development" environment, select **File > New > Project from Template**

Step3: Select the **SAP Fiori Master Detail Application** template

Step4: Click on the Next button and give a name to the project – I will call it as "**Approval_Stock_WriteOffs**"

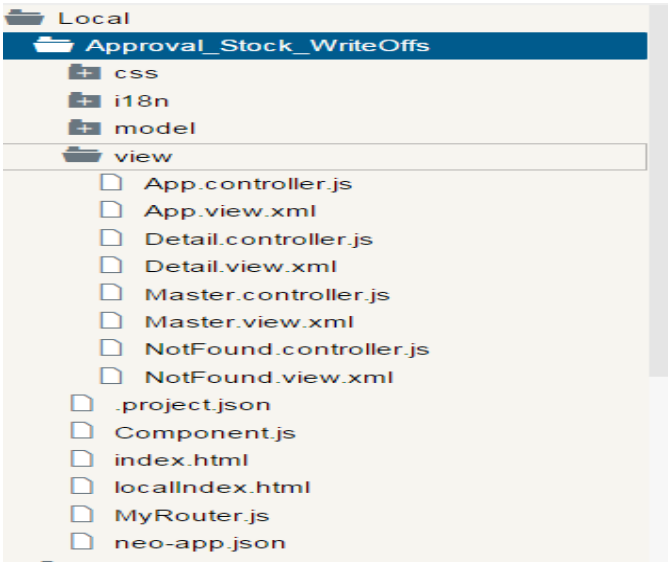
Step5: Click on the Next button and select the **SAP Gateway Demo system** and select the OData service **MATERIAL**

Step6: Click on the Next button and fill in the desired values in the **Master Section** and the **Detail Section.** Select the OData Collection MaterialCollection from the list of available values.

Note: Since my App requires specific information, the OData model will be changed by modifying metadata.xml file under the model view using the OData Model Editor.

Step7: Click on the Next button and then click on the Finish button.

After following the above steps, the wizard will generate the files as shown below.



Customizing the App:

Model:

In order to change the OData model to suit the App requirements, open metadata.xml in the OData Model editor in the SAP Web IDE.

Change/add the contents of the file under the Entity Type tag <EntityType>

The above step will put the required fields in the OData Model which can then be used subsequently in the "Views" of the App.

Since we do not have a backend system to fetch the data, I will create Mock data using the Mock data editor in the Model part of the web IDE.

Right click on metadata.xml and select **Edit Mock Data**

Click on the "**Add Row**" button

Enter the desired data.

This action will create a JSON file **Material.json** based on the data entered via the Mock Data Editor.

Now, we have the desired Data Model. Next, we customize the Master and Detail views.

View:

To customize the **Master View** (the left hand side of the layout), open the Master.view.xml in the Layout Editor or the Code Editor by positioning the cursor on **Master.View.xml** and RightClick to select the **Code Editor**.

I want to display the Material Number, Material Description and the Warehouse name in the Master view. So change the Data binding to: {MaterialNumber}, {MaterialDescription}, {Warehouse}

In the **Detail View**, I want to display the Expiry date, Total Amount and the Quantity that is to be written off.

I need to change the icons for the Detailed View. I found the suitable icons from the predefined icon library via URL
https://sapui5.netweaver.ondemand.com/sdk/#iconExplorer.html

The Title, Detailed Text and the texts for the Icons for Approve and Reject buttons for the Detail layout as well as the texts for the Master View can be specified in the **i18n file** as shown in the below screenshot:

Please look at the video for a quick demo of the App using the following URL.

http://youtu.be/LluL6mNZGSA