

# Automation Of IFRS Code Creation Workflow

BY

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13MCEC12



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

AHMEDABAD-382481

April 2015

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# Automation Of IFRS Code Creation Workflow

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## Major Project

Submitted in partial fulfillment of the requirements

for the degree of

Master of Technology in Computer Science and Engineering

Submitted By

**Nidhi Verma**

**13MCEC12**

Guided By

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

INSTITUTE OF TECHNOLOGY

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AHMEDABAD-382481

April 2015

## Certificate

This is to certify that the major project entitled **AUTOMATION OF IFRS CODE CREATION WORKFLOW** submitted by Nidhi Verma (Roll No: 13MCEC12), towards the partial fulfillment of the requirements for the award of degree of Master of Technology in Computer Science and Engineering of Institute of Technology, Nirma University, Ahmedabad, is the record of work carried out by him under my supervision and guidance. In my opinion, the submitted work has reached a level required for being accepted for examination. The results embodied in this project, to the best of my knowledge, have not been submitted to any other university or institution for award of any degree or diploma.

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## Certificate



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I here by declare that the work which is being presented in the Major Project titled **”Automation Of IFRS Code Creation Workflow ”** in partial fulfillment of the requirement for the award of degree of Master of Technology in Computer Science And Engineering Institute of Technology, Nirma University, Ahmedabad is an authentic record of my own work carried out under the supervision of Mrs. Surbhi Singhal, External Guide and Mr. Bedanta Choudhury, Manager. The matter presented in this thesis has not been submitted in any other University/Institute for the award of my degree.

Date:

Place:

Nidhi Verma

It is certified that the above statement made by the student is correct to the best of my knowledge and belief.

Mrs. Surbhi Singhal  
Mentor and External Guide,  
DES-CCDS,

Mr. Bedanta Choudhury  
Senior Manager,  
DES-CCDS,

## Statement of Originality

---

I, **Nidhi Verma**, Roll. No. **13MCEC12**, give undertaking that the Major Project entitled "**Automation Of IFRS Code Creation Workflow**" submitted by me, towards the partial fulfillment of the requirements for the degree of Master of Technology in **Computer Science & Engineering** of Institute of Technology, Nirma University, Ahmedabad, contains no material that has been awarded for any degree or diploma in any university or school in any territory to the best of my knowledge. It is the original work carried out by me and I give assurance that no attempt of plagiarism has been made. It contains no material that is previously published or written, except where reference has been made. I understand that in the event of any similarity found subsequently with any published work or any dissertation work elsewhere; it will result in severe disciplinary action.

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Place:Ahemdabad

Endorsed by  
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(Signature of Guide)

## Abstract

An Organization aim is to automate their business processes .To increase efficiency and productivity tasks that are perform by manually are automated. Automation of IFRS Code creation system using sharepoint decreases the effort by the requester and other entities involved in workflow and also there is less chance of errorsin overall process.Save time and Productivity increases. provides requester a use rfriendly GUI to make request for IFRS Code. Approval System for IFRS Code creation is implemeted using SharePoint Workflow Feature.

SharePoint site that contains front end for IFRS Code Creation should provide information that is currently store in Mysql Database table, fetching of data from Mysql Database to Sharepoint server.For this Data Integration between SharePoint and MySQL Database is created using JQuery and AjaxRequest .Dumping IFRS code and associated information from SharePoint to Mysql Database is carried out by using VBA.Permissions in sharepoint manage by assigning users to various groups created on sharepoint site beacuse this site is for some specific group of people of belongs to company.

## Acknowledgements

It is giving me pleasure to express thanks and gratitude to Manager, ST Microelectronics, **Mrs SURBHI SINGHAL**, Mentor, ST Microelectronics, **Prof. MONIKA SHAH**, Internal Guide, Associate Professor, Computer Science Department, Institute of Technology, Nirma University, for their guidance and encouragement provided by them throughout the period. Due to their constant support and motivation, I have been able to attain my goal. The guidance provided by them has helped in improving my intellectual maturity, that will help me a lot in the time to come.

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And also Thankful for all faculty members of Computer Engineering Department, Nirma University.

I also owe my colleagues in the STMicroelectronics, special thanks for helping me on this path and for making project at ST more enjoyable.

- **NIDHI VERMA**

**13MCEC12**

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# Abbreviations

<b>IFRS</b>	International Financial Reporting Standard
<b>JSON</b>	JavaScript Object Notation
<b>XML</b>	Extensible Markup Language
<b>AJAX</b>	Asynchronous Java Script and XML

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# Chapter 1

## Introduction

Developing site for teams or peoples inside an organization to carry out work in effective and smoothly manner Sharepoint 2010 is best tool for this. Today in organizations there is need to develop a system that reduces unnecessary time and effort wastage in Business processes. IFRS Code Creation system in which IFRS Code is to be created for various Budget Programs. IFRS Code for requested Budget program can be created only after approval from both approvers (Financial Controller, Manager) . IFRS stands for International Financial Reporting Standards. Providing information from MySQL Database to Sharepoint GUI . Means we have to fetch data from Mysql Database and show on SharePoint server in form of list. For consistency and efficiency in Business decision the interaction among the peoples make through that system and so there is no need to sending emails by individual user for approval of their request so it reduces human effort and time. Also dumping of IFRS code creation system output in sharepoint list to Mysql database using VBA. Access to this site is for some specific group of people of ST , access rights are manage by creating groups of valid users and assign them the permission to access site

## 1.1 Tool Description

### 1.1.1 Sharepoint 2010

Organizations use Sharepoint to create websites. SharePoint is a web application framework and platform developed by Microsoft. Use for creating collaboration site. The collaboration website on sharepoint also termed as Workspace. A sharepoint site provides collaboration, communication, sharing among team members.

Features of sharepoint are-List, Library, View, Webpart. SharePoint 2010 is used by organization to create collaborative site for peoples, teams, Organisation. SharePoint is a web application platform offering a set of tools that can be used to provide intranet portals, collaboration, social networks, document and file management,

Sharepoint is not

a program its a platform, its not install on your desktop or laptop install on backend machine then you connect to your machine to it to use sharepoint. SharePoint Designer 2010 allow to customize site on Sharepoint by customizing webpages on sharepoint site. SharePoint increases the productivity of organization[3].

There are two flavours of SharePoint :SharePoint Foundation 2010 and SharePoint server 2010. Sharepoint Foundation is basic framework on which Sharepoint server stands. Sharepoint server 2010 is paid version on other hand Sharepoint Foundation is free version. Sharepoint Foundation is a basic requirement of SharePoint 2010. If you want to connect to office ,Excel, Acces you need to have SharePoint server. Having only SharePoint Foundation you can only search through particular Document.

### 1.1.2 Sharepoint Designer 2010

To customize SharePoint sites and applications the web and application design program are used that are developed Sharepoint Designer 2010 tool. To design the look and feel of site, build powerful workflow enabled solutions.

### 1.1.3 JQuery

JQuery is a lightweight JavaScript library. JQuery takes lots of similar tasks that require many lines of JavaScript code to accomplish and put them into methods that can be call with a single line of code. JQuery is a single Javascript file we can reference it with HTML `<script>` tag. JQuery makes it easier to use javascript on your website. You dont need to be expert to use JQuery .Jquery simplifies lots of complicated things from javascript like DOM manipulation and AJAX calls. JQuery plugins are available for most of task thats why it is most popular. Jquery simplifies working with javascript.

Its free and open source. Using only javascript is not a good option, using JQuery with javascript provides some advanced functionality like page manipulation(HTML elements), animations that doest provide by javascript alone. Issues related to browser incompatibilities may be occur by using direct javascript ,makes javascript applications difficult to code and high maintenance cost is require. Jquery aims is to ease all of these problems by providing Many cross browser and advanced functions to standard language. Installing JQuery to be use with javascript need to import it in

### 1.1.4 MySql Workbench 5.7e

It is a visual database design tool .MySQL Workbench enables a DBA, developer, or data architect to visually design, model, generate, and manage databases.

# Chapter 2

## Literature Survey

### 2.1 Literature Review

#### 2.1.1 Sharepoint 2010 Overview

Microsoft SharePoint makes it easier for people to work together. .Using SharePoint one can create site for thier team so that it become a common place for sharing information ,among team members.Publish reports to help everyone make better decision.

- What Sharepoint Can do? A portal server with delegated administration:Sharepoint enables to create attractive,almost instantly,functioning website without any need of knowing Website design.[1]
- A groupware application kit:A site on sharepoint is for collaboration,communication by creating Documents Libraries,Wikis,blogs and team oriented list such as Announcements and tasks.
- A workow host: Business processes can be organized and modeled with workflow that are triggered by associated events.
- A data store:SharePoint allows to data integration between sharepoint site and Database like Mysql,Oracle etc.Also using Client object model can fetch data from Database( Mysql,Oracle ) on Sharepoint site.

- Features Of Sharepoint List Library View Webpart
- A list in sharepoint is like a table in database contains row and column.Each row entry of list is known as item.Any no. of Views of list and library created.If we want to hide some column of list from particular user or group of user so the use of term view comes here.
- A SharePoint document library is a place on a site where you can create, collect, and update files with others. Library stores images ,pages,document on sharepoint site[3].Display content on webpage.Filter relevant items from a list through webpart.For example to reach particular decision group typically follows series of steps. This automation results in, overall fruitfull interactions, and often a reduction in error and more speed .

### 2.1.2 WorkFlows in Sharepoint 2010

SharePoint workflow represent Custom Business processes.A workflow is a way to run set of workunits or activities that represents work process.SharePoint workflow is flexible enough it can implement both human actions and system functions necessary for the workflow to complete.In Business process to reach to a particular decision group typically follows series of steps.This automation results in reduction in error,adequate interactions.

While creating custom workflow using SharePoint Designer 2010 you can create workflow that can be use for specific library,list and content type or we can save a custom workflow as reusable template that can be associated with more than one library,list and content type[1]. events, actions, conditions and steps these are building blocks of workflow.A workflow consists of one or more steps and each contains action and associated conditions with it.Workflow in Sharepoint designer is Code free.Written in interpersonal steps.

### **2.1.3 How to manage Rights in SharePoint 2010**

#### **Groups and Permissions in Sharepoint 2010**

Groups on sharepoint enable you to manage access for set of group of user instead of managing rights for individual user. We have to put all the people who we want to give same access right. For example, you might add the Windows security group for your team to a SharePoint group, to grant access to the whole team at the same time.

LIST PERMISSIONS	DESCRIPTION	DEPENDENT PERMISSIONS	Full Control	Design	Contribute	Read	Limited View Access Only
Manage Lists	Create and delete lists, add or remove columns in a list, and add or remove public views of a list.	View Items, View Pages, Open	x	x			
Override Checkout	Discard or check in a document which is checked out to another user.	View Items, View Pages, Open	x	x			
Add Items	Add items to lists, add documents to document libraries, and add Web discussion comments.	View Items, View Pages, Open	x	x	x		
Edit Items	Edit items in lists, edit documents in document libraries, edit Web discussion comments in documents, and customize Web Part Pages in document libraries.	View Items, View Pages, Open	x	x	x		
Delete Items	Delete items from a list, documents from a document library, and Web discussion comments in documents.	View Items, View Pages, Open	x	x	x		
View Items	View items in lists, documents in document libraries, and Web discussion comments.	View Pages, Open	x	x	x	x	x
Approve Items	Approve a minor version of a list item or document.	Edit Items, View Items, View Pages, Open	x	x			
Open Items	View the source of documents with server-side file handlers.	View Items, View Pages, Open	x	x	x	x	
View Versions	View past versions of a list item or document.	View Items, Open Items, View Pages, Open	x	x	x	x	x
Delete Versions	Delete past versions of a list item or document.	View Items, View Versions, View Pages, Open	x	x	x		
Create Alerts	Create e-mail alerts.	View Items, View Pages, Open	x	x	x	x	x

### 2.1.4 JSON

Java Object Notation is a popular format for data serialization[2].Programmer use this to encode data transfer between Ajax Application and server to conect two server communicatingthrough webservice.In programming Commonly we use scalar variables,linear lists and key value pairs. JSON represent these structure in natural and serialization way, that makes processing of data fastly.Most widely used format for exchanging data over web.

JSON Data format: Program:[ Id:123, name: CMOS, ]

### 2.1.5 XML Vs JSON

Data structures that JSON represent are exactly the same data structres that programming languages represent[2] .WhenAjax was formulated ,the X in Ajax was supposed to be xml but it is realized that its so hard,some prefer JSON is better option as it is much easier and faster.As the specification of XML does't match with data model of most of the programming languages so it is very tedious to parse by programmer[4].On the other hand Json format matches with most of the data model of programming languages.

# Chapter 3

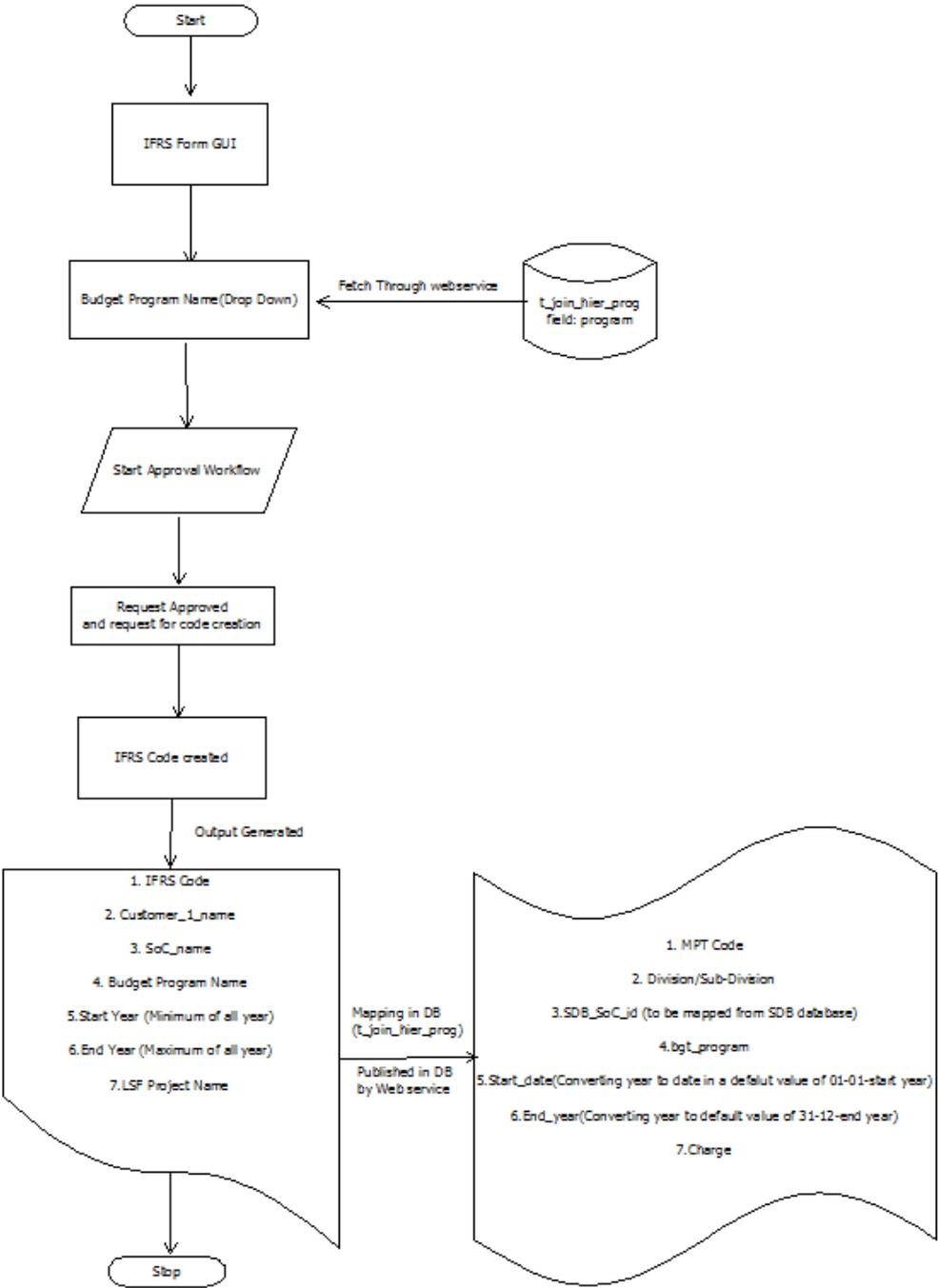
## Project Overview

### 3.1 Problem Definition

Here's the aim to develop a system using SharePoint 2010 for a group of people inside STMicroelectronics Ltd. This system automates the IFRS Code creation approval process. So, here is a need to create a GUI so that customers can easily interact with entities involved in this overall system (Manager, Financial Controller etc). This GUI is created; it has information that needs to be fetched from a Database for this Data Integration framework. The use between SharePoint and MySQL.

Then workflow which is a step-by-step process including submitting of request then approval by Managers and Financial Controllers and after this code creation is done. This overall workflow is implemented using SharePoint Designer 2010 workflow. Also, every time a new IFRS Code is created, its update in DataGovMaster DB on MySQL Workbench using the concept of connecting SharePoint to Excel and VBA.

### 3.1.1 Overall Flow Diagram of Project



### 3.1.2 Entities involved in IFRS Approval system

Groups in Use with their permissions:

- **IFRS Approvers (people who approve the IFRS Requests including the CC Manager):** - Rights:Design,Read,Limited Access,IFRS Approver. - Purpose:IFRS Approvers group include the people who approve the IFRS Requests including CC Manager, Financial Controllers.
- **IFRS Submitters (people who submit the IFRS Line Request):** - Rights:Full Control,Read, IFRS Submitters. - Purpose:IFRS Submitters group include the people who submit the IFRS Requests .
- **Code creators(people who create the IFRS code and Project Name once all approvals are in place):** - Rights: Full Control, Design,Limited Access, IFRS Code Creator. - Purpose:IFRS Submitters group include the people who create the IFRS code and Project Name once all approvals are in place
- **IFRS Notification (people who are notified once the request completes):** **Read,Limited Access.** -Rights: Read,Limited Access. -Purpose:IFRS Notificationgroup include the people who are notified once the request completes
- **Permissions in Use with description:**
  - **IFRS Submitter:**Add Items,Edit Items, View Items, Open Items, View Versions, Create alerts.
  - **IFRS Approver:**Edit Items,View Items, Open Items, View Versions, Create alerts.
  - **IFRS code Creator:**Edit Items,View Items, Open Items, View Versions, Create alerts.

# Chapter 4

## Implementation

### 4.1 Module 1 :GUI for IFRS Code creation

beginitemize

- Using list feature of Sharepoint 2010 ,GUI is created.
- Some column of that is kept hidden like IFRS Code,program name because these fields Filled by code creators only.From requester these are hidden becomes visible to requester after the IFRS Code is created but
- Cant edit these field only can see.
- Validations on column is applied
- This application system is applicable to people belongs to PIMDS or CPUGPU team of ST.Using SPservices permissions are check against the Requester are some fields in this GUI that provides information which is store in Database (DataGovMaster DB) Budget Program Name(Drop Down),Project Techno Node(Drop Down). For this Data Integrated Framework between SharePoint 2010 and MySQL Workbench is use implemented JQuery,Javascript and Ajax.

.png

Figure 4.1: Fetching Data from Mysql server to SharePoint server

### 4.1.1 Data Integrated Framework between SharePoint Server and MySQL Workbench server Description:

- We need to use web services in order to fetch data from DataGov DB to SharePoint.
- Webservice is written in java url :-`http://col2qa-fe1.cro.st.com:10190/DataGovAdminProd/GetTHierGroupPrg?year=2014`
- The whole implementation is in SharePoint site so we can only implement using jQuery and JavaScript.
- We are making request using jQuery AJAX and data type as JSONP.

Flow diagram for DataIntegration between Sharepoint and MySql  
(DataGov DB)

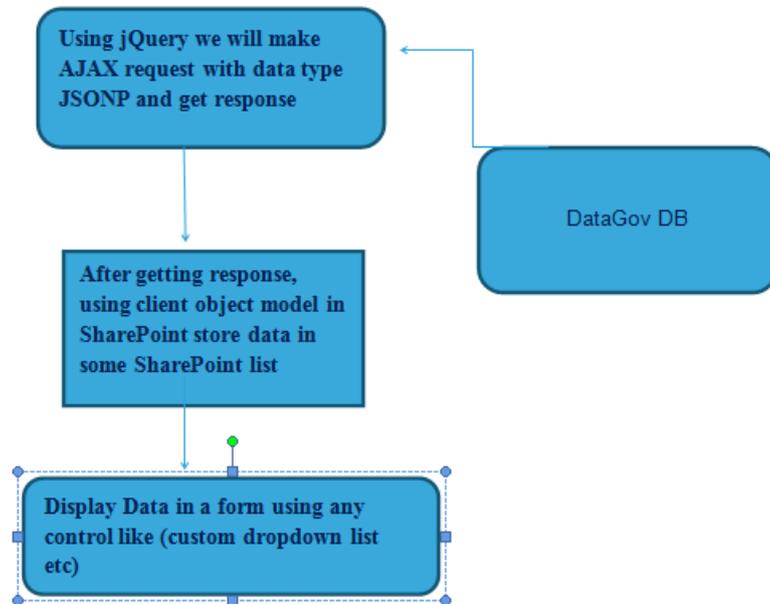


Figure 4.2: Data Integrated Framework between SharePoint Server and MySQL Workbench server

- Reason behind using JSONP is to use web service we need to make cross-domain request. And if you try to use only XML or JSON for this purpose you will not get proper response.

AJAX request is

```
.ajax(url : "http : //col2qa-fe1.cro.st.com : 10170/XmlToJson/getJsonp?
```

- url= http://col2qa-fe1.cro.st.com:10190/DataGovAdminProd/GetTHierGroupPrg?year=2014"

- dataType: jsonp,

- async: false,

- jsonpCallback: callback,

- success: function(data)

- URL : url of web service

- Datatype : here JSONP must be data type

Its a normal JSON with extra padding

Eg.callback(json)

- Async : it should be false so serialize execution
- jsonpCallback : name of callback function in our case it must be callback
- On success: response will be in data variable.

### **JQuery for adding JSON data Fetched from Database to sharepoint list:**

```
jQuery.each(data.tHierGroupPrgs.THierGroupPrg, function(index, item)
```

```
addNewItem('program','Title',item.bgt_program,'program',item.bgt_program,'parent;d',item.id)
```

4.1.2 List name program contains budget program name fetched from Mysql Database by calling Java webser-vice

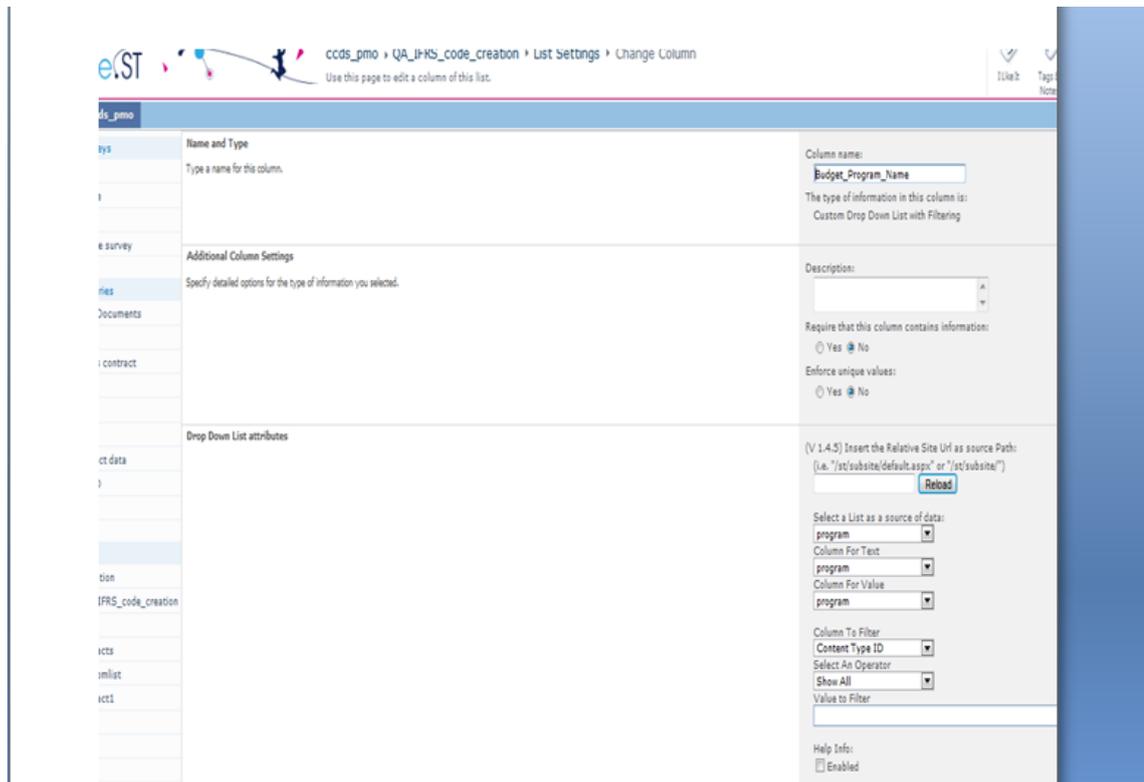
The screenshot shows a web application interface with a search bar at the top right labeled "Search this site...". Below the search bar is a table with three columns: "Title", "program", and "parent\_". The table contains a list of program entries, each with a small icon to its left. The entries are as follows:

Title	program	parent_
CMOS 07	CMOS 07	
CMOS 10	CMOS 10	
CMOS 14 FDSOI	CMOS 14 FDSOI	
CMOS 28 FDSOI	CMOS 28 FDSOI	
CMOS 28 FDSOI	CMOS 28 FDSOI	
CMOS E80	CMOS E80	
CMOS M10 ULP&RF	CMOS M10 ULP&RF	
CMOS M10+	CMOS M10+	
CMOS M10 ULP&RF	CMOS M10 ULP&RF	
CMOS M40 APG	CMOS M40 APG	
CMOS M40 MCD	CMOS M40 MCD	
CMOS M40 SMD	CMOS M40 SMD	
CMOS P90	CMOS P90	
IMG 140 LPLD (Auto/HDR, DSC)	IMG 140 LPLD (Auto/HDR, DSC)	
DISPLAY 130	DISPLAY 130	
IMG 110 BSI	IMG 110 BSI	
IMG 140 BSI	IMG 140 BSI	
IMG 140 LPLD (Auto/HDR, DSC)	IMG 140 LPLD (Auto/HDR, DSC)	
IMG 140 LPLD IR	IMG 140 LPLD IR	
BICMOS 55	BICMOS 55	
GREEN NET	GREEN NET	
HCMOS 9 SOI	HCMOS 9 SOI	
PHOTONICS	PHOTONICS	
ADVANCED R&D	ADVANCED R&D	
MANAGEMENT & SUPPORT INFRASTRUCTURE	MANAGEMENT & SUPPORT INFRASTRUCTURE	
MANAGEMENT & SUPPORT INFRASTRUCTURE	MANAGEMENT & SUPPORT INFRASTRUCTURE	
SW INFRASTRUCTURE	SW INFRASTRUCTURE	

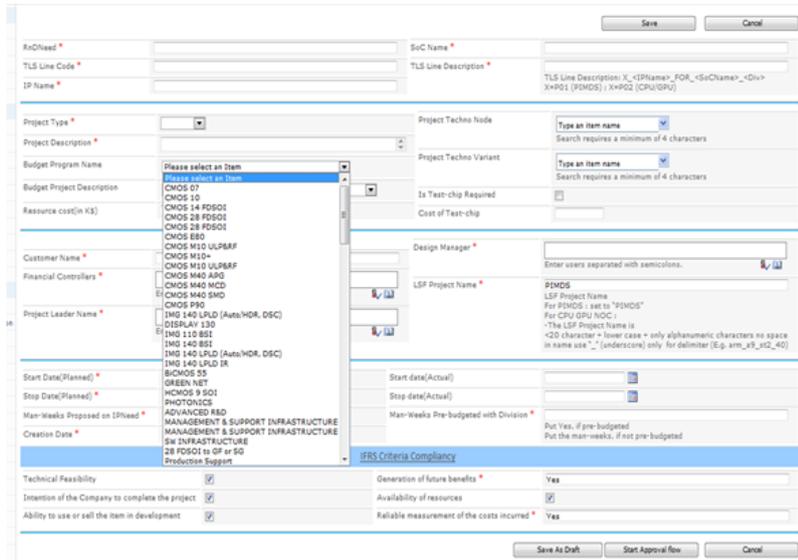
### 4.1.3 IFRS GUI in which column Budget Program Nameae contains data from program list

The screenshot displays a web-based form for IFRS Criteria Compliance. The form is organized into several sections with various input fields and dropdown menus. At the top right, there are 'Save' and 'Cancel' buttons. The form includes fields for 'RnDNeed', 'SoC Name', 'TLS Line Code', 'TLS Line Description', 'IP Name', 'Project Type', 'Project Description', 'Budget Program Name', 'Budget Project Description', 'Resource cost(in K\$)', 'Customer Name', 'Financial Controllers', 'Project Leader Name', 'Start Date(Planned)', 'Stop Date(Planned)', 'Man-Weeks Proposed on IPNeed', 'Creation Date', 'Project Techno Node', 'Project Techno Variant', 'Is Test-chip Required', 'Cost of Test-chip', 'Design Manager', and 'LSF Project Name'. A red circle highlights the 'Budget Program Name' dropdown menu, which currently shows 'Please select an item'. A red arrow points from the text 'Contains data store in datagovernanceDB Table' to this dropdown menu. The 'LSF Project Name' field has a detailed description: 'PIMDS LSF Project Name For PIMDS : set to "PIMDS" For CPU GPU NOC : -The LSF Project Name is <20 character + lower case + only alphanumeric characters no space in name use "\_" (underscore) only for delimiter (E.g. arm\_a9\_st2\_40)'. The bottom of the form features a blue bar with the text 'IFRS Criteria Compliance'.

### 4.1.4 Connecting two list of share Point The GUI list and list (program lis) that contains program names from MySQL database table



### 4.1.5 Showing list of Budget Program names as in Mysql Database Server



Here the data in dropdown is come from "Program" list on sharepoint that contains list of program from DataGov DB.

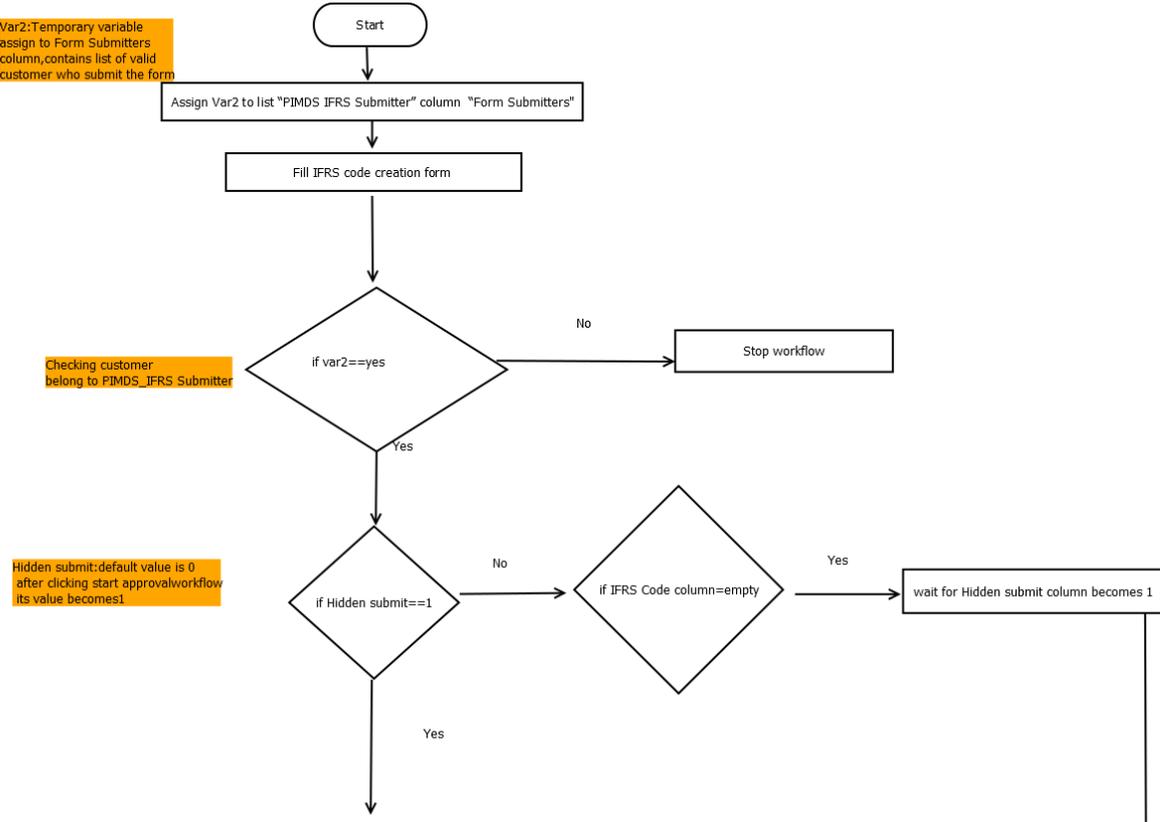
## 4.2 Module 2:IFRS Code Creation Approval Workflow

Lists in Use and Purpose:

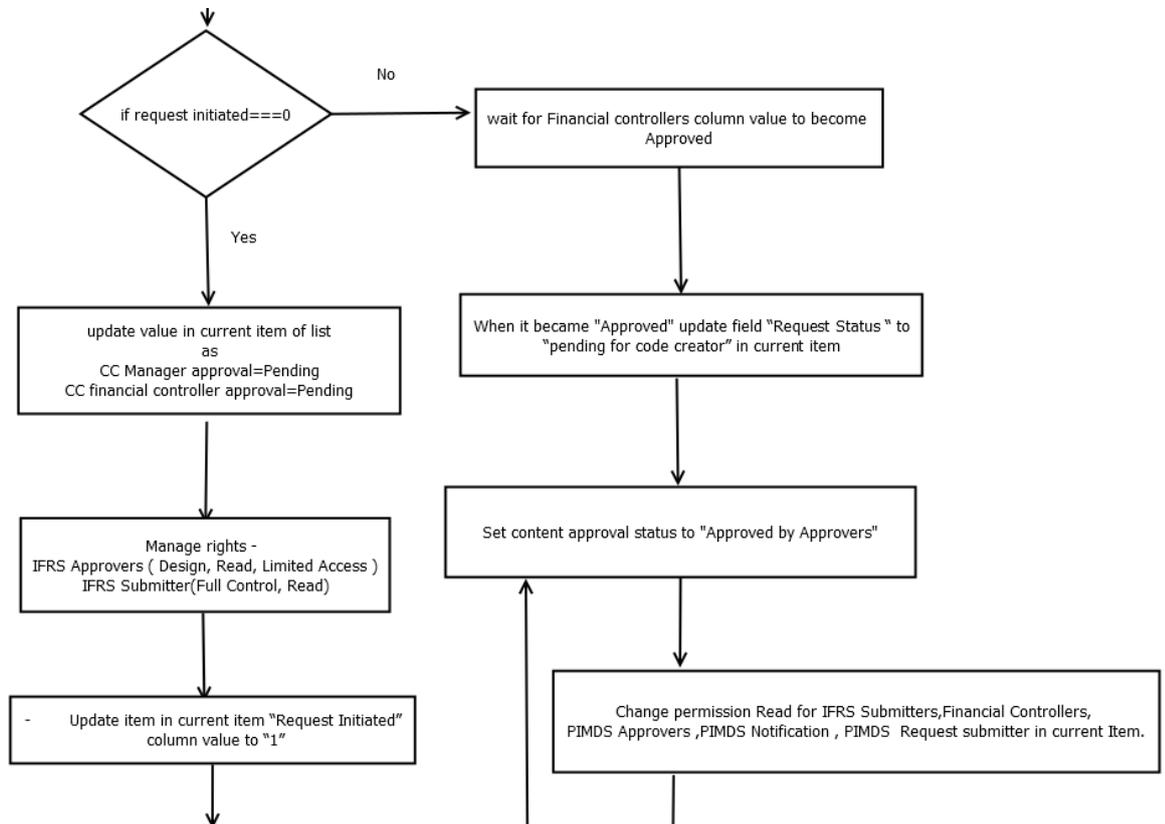
- IFRS code creation to fill the specification of product
- PIMDS IFRS Submitter this list is use to validate submitters only those who are the part of this list workflow will start only with them.

4.2.1 Flow Diagram IFRS Code creation Approval Workflow

4.2.2 Sharepoint level flow Diagram of IFRS Code creation Approval Workflow



4.2.3 Contd.



4.2.4 Contd.

mm]img33.png

This workflow will start: - if any new item is created - if any item is changed in IFRS list. It can also be started manually.

The workflow is associated with IFRS Code Creation list Entire workflow is written in impersonation step Assign a temporary variable var2 to list PIMDS IFRS Submitter column Form Submitters [PIMDS IFRS Submitteris a list that contain all the customer who will submit the form]

**Purpose:** To validate submitters only those users who are part of PIMDS IFRS Submitterlist workflow will start only for them.

### 4.2.5 Steps to be followed in IFRS Approval Workflow

**First If condition** First it check the value of IFRS List column hidden submit value if it is 1 and var2 contain value yes than Check Request Initiated column value if it is 0 than update value in current item of list.

Purpose of hidden submit field :- this field value is set by java script when submitter click on Start Approval Flow button. Initially it is 0

Purpose of Request Initiated field:- Default value of this field is 0 once workflow get started we change the value of this field to 1 via workflow if again any changes is done in IFRS list workflow will not start again

- Update item in current item CC Manager Approval to pending and Financial Controller Approval to pending
- Manage rights of users dynamically in IFRS Submitter group and IFRS Approver group
- Update item in current item Request Initiated column value to 1
- Assign permission dynamically of read , IFRS Submitter ,IFRS Approver Start Approval Process IFRS Approval Process on current item of list with IFRS Approver group. IFRS Approval Process
- Change behavior of overall task: When approved (task process completed) update CC Manger Approval Column value to Approved If approved, CC Manager Approval column value is set to Approved.
- Once CC Manager approval is done, Start approval process with Financial Controllers if it is also Approved, set Financial Controller column value to Approved. Set content approval status to Approved With all approvers.
- Else if Request Initiated equals to 1 [this field was updated when Approval process start] wait for Financial Controllers column Value to become Approved [wait for com-

mand Is uses When an item Is created and the "Wait for anyfield change in current item" ]

- When it became Approved update field Request Status to pending for code creator in current item . Set content approval status to Approved by Approvers. Change permission dynamically to Read for IFRS Form Submitter, Current Item: Financial Controllers, PIMDS Approvers ,PIMDS Notification, PIMDS Request submitter in current Item. Assign permission of IFRS code creator and Read to Code Creators group

- Send mail to code creators. Wait for IFRS code column value to become not empty. When IFRS code and Project Name field value become not empty Then Update field Request Status to Completed in current item.

Set content approval status to Approved and Request Initiated column Value to 0. Change permission to read only for current user and send mail to Submitter

- If Current Item Approval Status equals rejected. Update Request Status to Deferred and email to Submitter , notification group. Replace their Permission with read.

### **Second If condition**

- If var2 equals Yes and hiddensubmit collumn value equals 0 and IFRS code column value is empty than wait for hiddensubmit column value to become equals 1

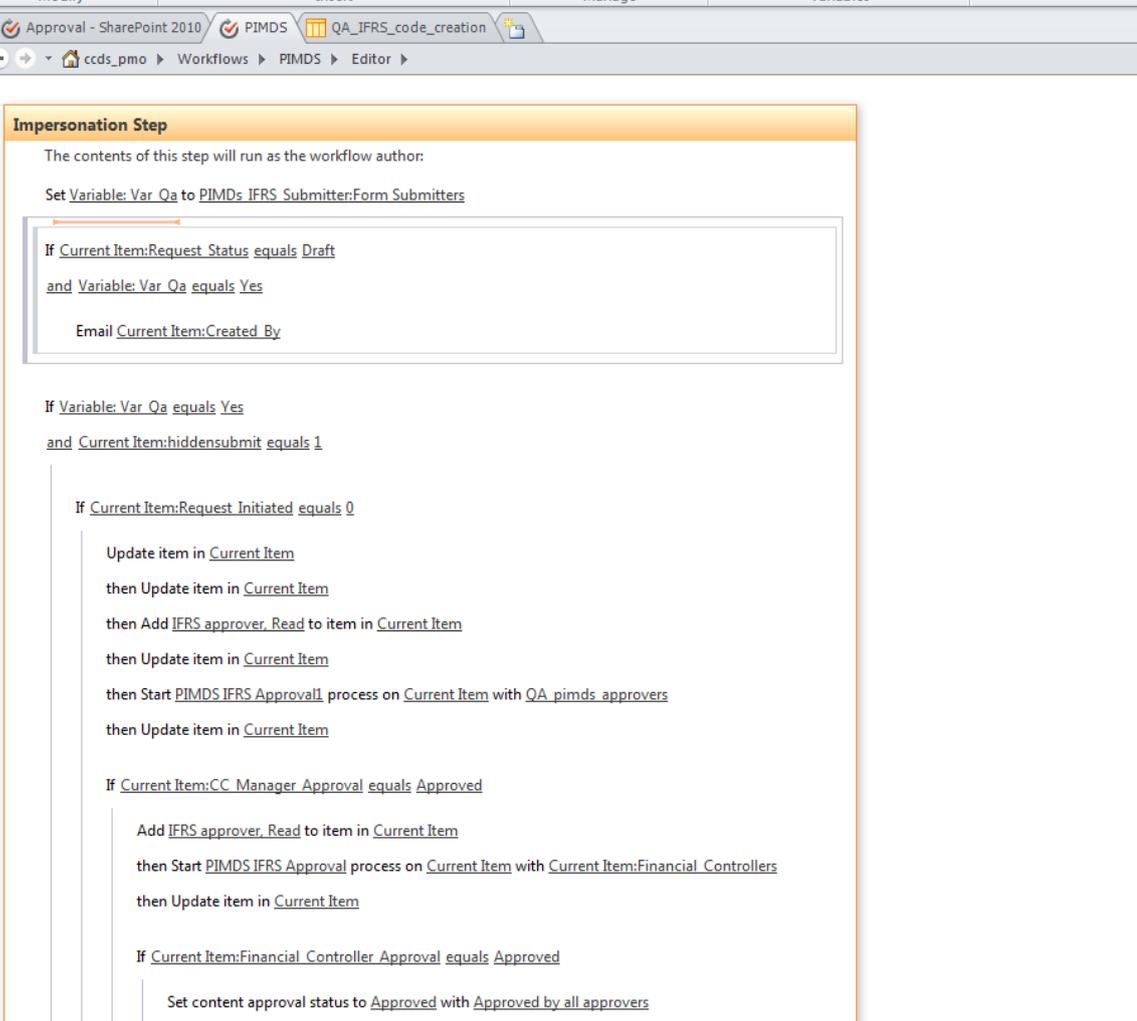
- **Purpose :-** if submitter click on save button workflow will not start this state is draft state.

### **Third If condition**

-If var2 equals value No than Stop workflow that means it does not belongs to PIMDS group.Reject the request for code creation process

**Purpose:-** submitter is not belongs to PIMDS IFRS Submitter list and is not a valid user.

## 4.2.6 Workflow IFRS Approval



The screenshot displays the 'Impersonation Step' configuration in a SharePoint 2010 workflow editor. The browser address bar shows the URL: `Approval - SharePoint 2010 / PIMDS / QA_IFRS_code_creation / Editor`. The workflow step is titled 'Impersonation Step' and contains the following logic:

- The contents of this step will run as the workflow author.
- Set Variable: Var\_Qa to PIMDS IFRS Submitter:Form Submitters
- If Current Item:Request Status equals Draft and Variable: Var\_Qa equals Yes:
  - Email Current Item:Created By
- If Variable: Var\_Qa equals Yes and Current Item:hidensubmit equals 1:
  - If Current Item:Request Initiated equals 0:
    - Update item in Current Item
    - then Update item in Current Item
    - then Add IFRS approver, Read to item in Current Item
    - then Update item in Current Item
    - then Start PIMDS IFRS Approval process on Current Item with QA pimds approvers
    - then Update item in Current Item
  - If Current Item:CC Manager Approval equals Approved:
    - Add IFRS approver, Read to item in Current Item
    - then Start PIMDS IFRS Approval process on Current Item with Current Item:Financial Controllers
    - then Update item in Current Item
  - If Current Item:Financial Controller Approval equals Approved:
    - Set content approval status to Approved with Approved by all approvers

### 4.2.7 Workflow IFRS Approval Contd.

Set content approval status to Approved with Approved by all approvers

Else

Wait for Financial Controller Approval to equal Approved

If Current Item:Financial Controller Approval equals Approved

Update item in Current Item

then Set content approval status to Approved with Approved by Approver

then Update item in Current Item

then Email QA code creators

then Wait for IFRS Code to not equal Please Enter Value

If Current Item:IFRS Code not equals Please Enter Value

and Current Item:Project Name not equals Please Enter Value

Update item in Current Item

then Set content approval status to Approved with Request Completed

then Set Request Initiated to 0

then Replace Read of item in Current Item

then Email Current Item:Created By

then Update item in Current Item

## 4.2.8 Workflow IFRS Approval Contd

If Current Item:Approval Status equals 1:#Rejected

Update item in Current Item

then Email Current Item:Created By

then Replace Read of item in Current Item

Else if Variable: Var Qa equals Yes

and Current Item:hiddensubmit equals 0

and Current Item:IFRS Code equals (ignoring case) Please Enter Value

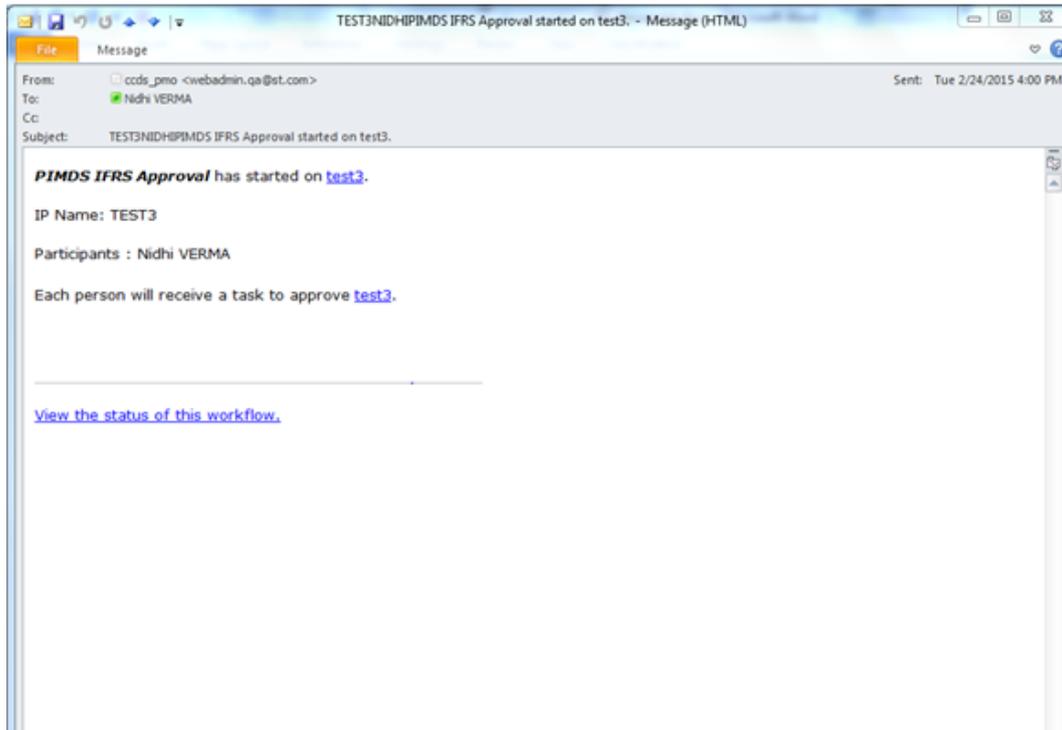
Update item in Current Item

then Wait for hiddensubmit to equal 1

Else if Variable: Var Qa equals No

Stop the workflow and log Not Mean for PIMDS

## 4.2.9 Notification mail To Notifier Group on sharepoint IFRS site



## 4.2.10 Form for approving Request for IFRS Code creation

mm]img64.png

### 4.2.11 Mail to Code creator for creating IFRS Code for Approved Request



### 4.2.12 IFRS Code creation form for a requested filled by IFRS code creator

The screenshot shows a web-based form for creating an IFRS Code. The form is divided into several sections:

- Project Information:** Project Type (Generic), Project Description (TEST), Budget Program Name (BCO AMS Design support), Budget Project Description (Alicante), Resource cost (in K\$) (0).
- Customer and Design Information:** Customer Name (NIDHI), Design Manager (Nidhi VERMA), Financial Controllers (Nidhi VERMA), Project Leader Name (Nidhi VERMA).
- Dates and Man-Weeks:** Start Date (Planned) (03/03/2015), End Date (Planned) (10/03/2015), Man-Weeks Proposed on IPNeed (4.0), Creation Date (25/03/2015), Start date (Actual) (04/03/2015), End date (Actual) (11/03/2015), Man-Weeks Pre-budgeted with Division (6).
- IFRS Criteria Compliance:**
  - Technical Feasibility:
  - Intention of the Company to complete the project:
  - Ability to use or sell the item in development:
  - Generation of future benefits: Yes
  - Availability of resources:
  - Reliable measurement of the costs incurred: Yes
- IFRS Codification:**
  - Project Name: Please Enter Value (As in Master Project Table)
  - IFRS Code: Please Enter Value
  - Approval Date (CC Manager): 10/03/2015
  - Approval Date (Financial Controller): 10/03/2015

At the bottom, there are buttons for "Save As Draft" and "Cancel". A status bar at the very bottom indicates the form was created on 03/03/2015 and last modified on 10/03/2015.

## 4.3 Module 3 : Publish to Database

To dump records from sharepoint tlist to Mysql Database. As approval workflow completed and IFRS Code for Child Budget Program is created by code creator, the Budget table in DataGovMaster DB is Updated with new Child Budget Program along with IFRS Code and other related information.

Sharepoint list IFRS Code creation stores result of IFRS Code creation workflow. To dump this data to Mysql database, I use VBA.

**Flow for Publish Sharepoint list data (IFRS Code creation) to Mysql database**

:

Step 1: Export Sharepoint list IFRS Code creation to excel sheet and save as ifrs main.xlsx

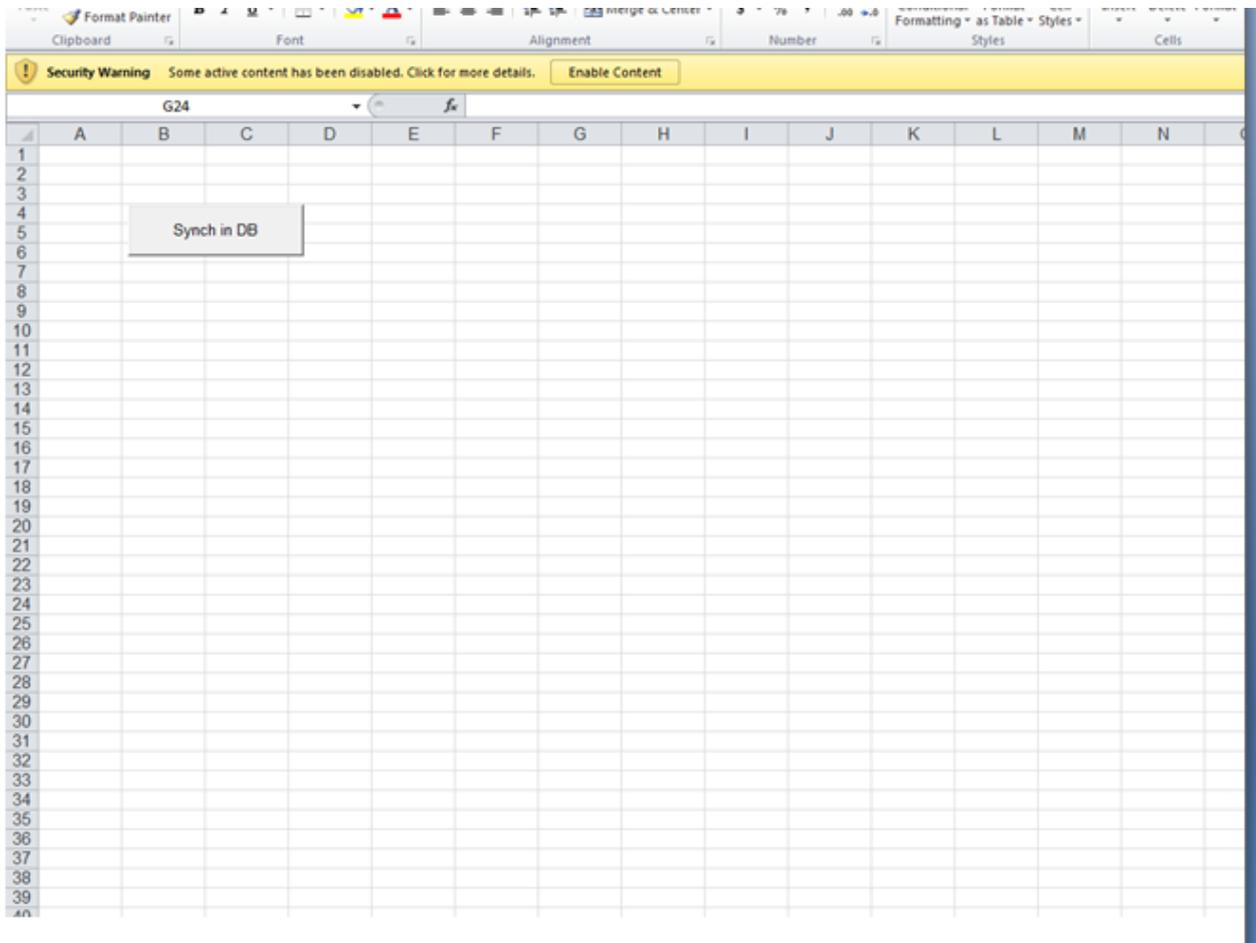
Step2 : Create a .xlsm file IFRS tool.xlsm that have buttonSync to DB.This file contains VBA code on button click event for refreshing,calling java webservice to dump data from ifrs main.xlsx(exported from IFRS Code creation Sharepoint list) in Mysql

Database table .

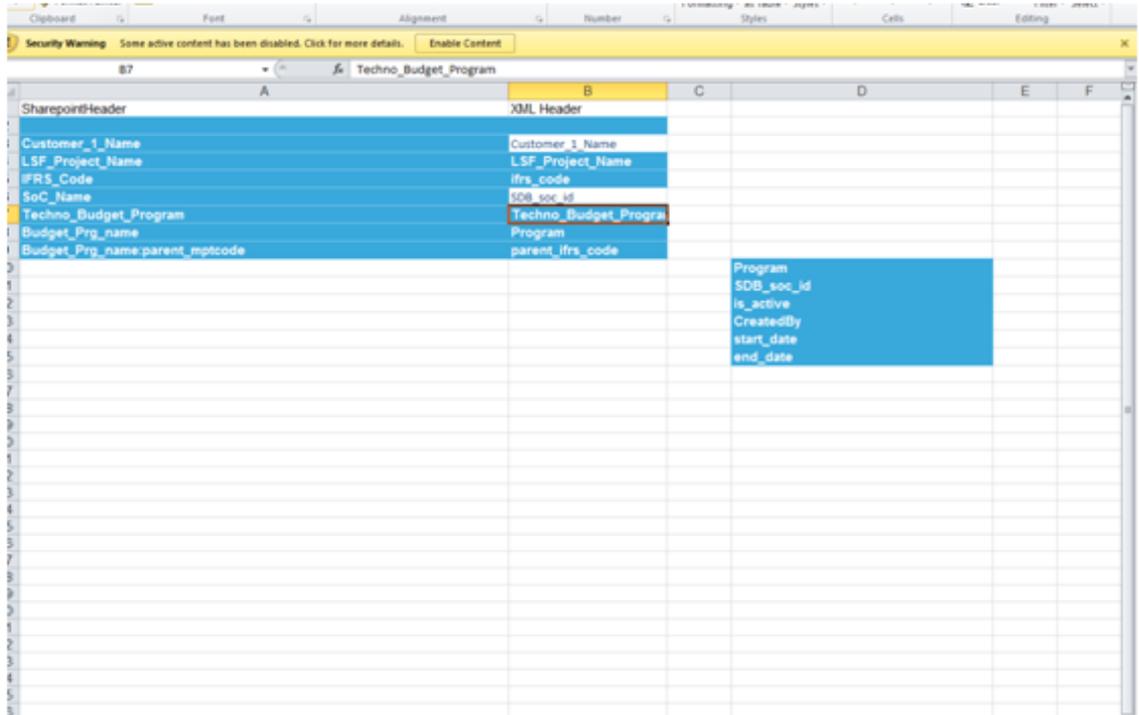
Step3 :In above step refreshing of ifrs main.xlsx refer to updatingthis file so as to contains same item as in IFRS Code creation list.

Step4 :As user clicks on Sync to DB button first itrefreshes ifrs main.xlsx then dump the data to MySQL Database table.

### 4.3.1 IFRS tool.xlsm for Dumping IFRS Code into MySQL Database table

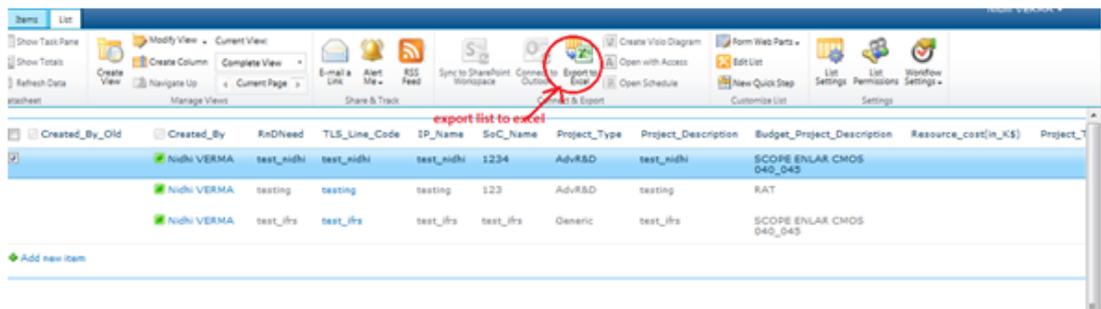


### 4.3.2 Sharepoint Header and XML Header Mapping



Sharepoint headers denotes field value in sharepoint list after completion of IFRS code creation workflow .To pass some of these field to database proper formatting of XML is done using this headers mapping.

### 4.3.3 QA IFRS code creation list in SharePoint





# Chapter 5

## Conclusion and Future Scope

### 5.1 Conclusion

Using SharePoint 2010 we able to create a Approval workflow System in which approval mails are send to both the approvers .Then using this links in mail approvers may approve or reject the request made by customer for IFRS Code creation.This system is reduces the people interaction in Business process.Makes the decision process executed in consistent manner.Now both side functionality between SharePoint 2010 server and MySql Workbench server is formed i.e. now we can populate data from and publish back to Mysql

### 5.2 Future Scope

By Integration of SharePoint 2010 and MySql Workbench we can manage space on SharePoint server, we can access large data from MySQL database on SharePoint sites even it's not store on server.In future sites with lots of records can be maintain on SharePoint as we have now mechanism for storing data to Database and on other side we can fetch same data from Database on SharePoint site.We can create Database dependent site on SharePoint 2010.

# References

- [1] Thomas Rizzo. *Professional SharePoint 2010 Development*.
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