

Assignment Task for Technical Round

You should be able to write an import routine program to import the data (excel file-Bulk Ledger Folder) that has been shared with you, wherein you should be able to meet the following:

1. You should give an import feature in the system and the data has to be uploaded through UI and it has to get reflected (stored) in the database.
2. Try to **import data to single table first** and **distribute data to remaining tables as specified in slide 4**
3. **Check result by query** match **date wise, admission number wise and head wise transaction of all amounts** in commonfee collection, commonfeecollectionheadwise with data in **single table** and financial trans , fianacialtransdetails with that of data in **single table**. Can use **core PHP**

Financial trans and details

- Due Amount
- Concession Amount
- Scholarship Amount
- Reverse Concession Amount
- WriteOff Amount

Common fee collection and headwise

- Paid Amount
- Adjusted Amount
- Refund Amount
- Fund Transfer Amount

Please Note:

- (i) Do not use any database triggers
- (ii) Do not change the DB Structure
- (iii) Do not split the data, you should be importing the complete data provided in the excel.

UI Design

Excel File :

Choose Files

No file chosen

Import

Fee collection types (**Data not available in CSV**):

1. Academic
2. Academic Misc
3. Hostel
4. Hostel Misc
5. Transport
6. Transport Misc (Each and every branch will have all collection types) (refer slide 5)

Module id can be considered as below:

Academic – 1, Academic Misc – 11

Hostel – 2, Hostel Misc – 22

Transport – 3, Transport Misc – 33 (**data not available in CSV refer slide-6**)

Fee Types(can get data from **fee head column Q in CSV**) :

- a) Tuition fee b) Library fee c) Exam fee d) Hostel fee,
e) Transport fee , total(50-54) will come under specific collection

For Example:

- If Fname contain fine related word it come under Academic Misc
- Mess related fee will be under Hostel.
- Remaining all are academic

Tables to be created

1. Branches-faculty from csv nearly- 24
2. Feecategory-feecategory from csv - general ,Saarc NRI,NON saarc NRI need to be mapped to all branches. (3*24)
3. Feecollectiontypes- academic,academicmisc,hostel,hostelmisc,transport,transportmisc)- need to be mapped to all branches(6*24)
4. Feetypes-fee heads from csv (50-54)- need to be mapped to all branches-((50-54)*24)
5. Entrymode(due,duerev,scholarship,etc..)(12)
6. Module(academic,academicmisc,hostel,hostelmisc,transport,transportmisc)-6
7. Financialtran(parent)
8. Financialtrandetail(child)
9. Commonfeecollection(parent)
10. Commonfeecollectionheadwise(child)

Note: **Create feecollectiontypes,module and entrymode table with data available from ppt**

id	Branch name
1	School of Engineering

DB Table: 1
Branches

DB Table: 2 feecategory

id	fee_category	br_id
1	general	1

DB Table: 3 feecollectiontype

id	collectionhead	collectiondesc	br_id
1	Academic	Academic	1

DB Table: 4 feetypes

Id	fee_category	f_name	Collection_id	br_id	Seq_id	Fee_type_ledger	Fee_headtype
1	1	Tuition Fee	1	1	1	Tuition Fee	1
2	1	Exam Fee	1	1	2	Exam Fee	1
3	2	Tuition Fee	2	2	1	Tution Fee	1

fee_category = id from feecategory table

f_name = exam fee, tuition fee etc.from csv feehead column

Collection_id = id from feecollectiontype table

br_id = id from branches table (br_id is branch id)

Seq_id is a number which is same for each fname irrespective of branch (ex: tution fee =1 where ever we have tuition fee it is 1 irrespective of branch)

Fee_type_ledger is same as fname

Fee_head_type = module id from module table (1-academic,11-academic misc,2-hostel etc)

1 Braches(faculty column from excel)

br_id = 1	br_name	rc_st
3	Galgotias University	
4	School of Agriculture	
5	School of Basic & Applied Sciences	
6	School of Liberal Education	
7	School of Architecture	

2 feecategory(ppt slide-3)

id	feecategory	description	br_id
3	General	General	4
4	General	General	5
5	General	General	6
6	General	General	7
7	General	General	8
8	General	General	9
9	General	General	10
10	General	General	11
11	General	General	12

3.Feecollectiontypes (ppt slide-3)

id	Collection head	Collection Description	br_id
25	Hostel	Hostel	3
26	Hostel	Hostel	4
27	Hostel	Hostel	5
28	Hostel	Hostel	6
29	Hostel	Hostel	7
30	Hostel	Hostel	8
31	Hostel	Hostel	9
32	Hostel	Hostel	10

4 .feetypes(feehead column from excel)

id	fees_category	fname	descr	collectionid	rc_status	br_id = 1
113	NULL	Tuition Fee (Back Paper)	Tuition Fee (Back Paper)	1	0	3
136	NULL	Fine Fee	Fine Fee	1	0	3
135	NULL	Excess Fees	Excess Fees	1	0	3
134	NULL	Excess Amount	Excess Amount	1	0	3
133	NULL	Degree/Convocation/Certificate fee	Degree/Convocation/Certificate fee	1	0	3
132	NULL	Degree Fee	Degree Fee	1	0	3
131	NULL	Caution Money	Caution Money	1	0	3
130	NULL	Back Paper Fee	Back Paper Fee	1	0	3
129	NULL	Application Fee	Application Fee	1	0	3

5 . Module(ppt slide-3)

	id	module	ModuleID
	1	Academic	1
	2	AcademicMisc	11
	3	Hostel	2
	4	HostelMisc	22
	5	Transport	3
	6	TransportMISC	33

6. entrymode

Based on entry mode number(column 7 in below fig) the data gets distributed to financial trans and common fee collection

			CSV	CSV	crdr	entrymode	Adjustreceiptid	Additional
1	due	financialTran	R	DueAmount	D	0		
2	REVDUE	financialTran	W	writeoff	C	12		
3	scholarship	financialTran	U	Scholarship	C	15		type of concession= 2
4	scholarshiprev/revconsession	financialTran	V	reverseconcession	D	16		
5	consession	financialTran	T	Consession	C	15		type of concession= 1
6	RCPT	Commonfeecollection	S	paidamount	C	0		
7	REVRCP	Commonfeecollection	S	paidamount	D	0		
8	JV	Commonfeecollection	X	Adjusted Amount	C	14		
9	RevJV	Commonfeecollection	X	Adjusted Amount	D	14		
10	PMT	Commonfeecollection	Y	Refund Amount	D	1	null it is in	not null will reflect in
11	REVPMT	Commonfeecollection	Y	Refund Amount	C	1		
12	Fundtransfer	Commonfeecollection	Z	Fund Transfer Amount	positive and negative	1		

DB Table: entrymode (consider data from above figure (column 1,2,6,7))

id	Entry_modename	crdr	entrymodeno
1	due	D	0

DB Table: Financial_trans (Parent Table) Consider (due,concession,scholarship,writeoff,revconcession/scholarship)

Id	modul eid	tranid	admno	amount	crd r	tranDate	acadYear	Entry mode	voucherno	brid	Type of concession
25202 6	1	73633 1	11CET BT101 146	138000.0 0	D	01-08-2011	2011- 2012	0	576499	1	Either 1 or 2 based on entry

Type of concession is 1 for concession and 2 for scholarship and for remaining all it is null

<u>id</u>	<u>financialTranId</u>	<u>moduleId</u>	<u>amount</u>	<u>headId</u>	<u>crdr</u>	<u>brid</u>	<u>head_name</u>
656280	252026	1	128000.00	1	D	1	Tution Fee
656281	252026	1	10000.00	2	D	1	Security Fee

DB Table: Financial_transdetail (Child Table)

transid is unique random number for each transaction and headid is id of feetypes table

DB Table: Common_fee_collection (Parent Table)

<u>id</u>	<u>moduleId</u>	<u>transId</u>	<u>admno</u>	<u>rollno</u>	<u>amount</u>	<u>brId</u>	<u>academicYear</u>	<u>financialYear</u>
534873	1	668214	20GCFC10300 09	3171T020C UGCFC101N 003	97000.00	1	2016-2017	2016-2017

displayReceiptNo	Entrymode	Paid Date	inactive
2020-2021/AIE/C13/2169	0	28-08-2020	Either 0/1 based on entry and rev entry respectively

DB Table: Common_fee_collection_headwise (Child Table)

<u>id</u>	<u>moduleId</u>	<u>receiptId</u>	<u>headId</u>	headName	brid	amount
1086394	1	534873	1	Tution Fee	1	87000.00
1086395	1	534873	2	Exam Fee	1	10000.00

Consider these amounts:

paid(for rcpt inactive=0,revrcpt inactive=1)

Adjustable
(for Jv inactive=0,revjv inactive=1),

refund(pmt inactive=0,revpmt inactive =1)

Fundtransfer
(inactive =null)



Thankyou !!!
Wish you all the best !!!