

Project PO Reimbursement Request - ERDs

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initial table	For first time going through this	
TICKET	any repeating groups or columns?	
id	duplicate rows?	each row would be unique, but a lot of data is similar, an employee has many tickets
fName	all values atomic?	each column has only one actual value though some coulumnns can change (ie Status)
lName	each row has unigue ID?	yes, the ticket ID
employeeId		
title		
type		
status		
amount		
description		
myTimeStamp		
isMgr		

```
add(new Ticket(0, "William", "Me", 0, "Sample Title1A", sampleType, sampleStatus, 123, "Sample description 1A", null));
add(new Ticket(1, "Bill", "Me", 0, "Sample Title1B", sampleType, sampleStatus, 456, "Sample description 1B", null));
add(new Ticket(2, "Billy", "Me", 0, "Sample Title1C", sampleType, sampleStatus, 789, "Sample description 1C", null));
add(new Ticket(3, "Will", "Me", 1, "Sample Title2", sampleType, sampleStatus, 643, "Sample description 2", null));
add(new Ticket(4, "Willy", "Me", 2, "Sample Title3", sampleType, sampleStatus, 787, "Sample description 3", null));
```

moving to 1NF

moving to 1NF

Employee Table	Ticket Table	Status Table	this would minimize repeating the ticket data but depending on time available will include this as separate table
id	id	id	
fName	title	status	
lName	type	myTimeStamp	
employeeId	amount		
isMgr boolean	description		
	myTimeStamp		
dealing w/ manager separate table	vs.	manager status field in employee table	
id		decide later!	
employeeId		can have mgr table or column in employee table but not both as	
Dept		both would not deter accidental inconsistency	

moving to 2NF

There are no composite fields and by default this is 2NF

Employee Table	Ticket Table	Status Table	this would minimize repeating the ticket data but depending on time available will include this as separate table
id	id	id	
fName	title	status	
lName	type	myTimeStamp	
employeeId	amount		
isMgr boolean	description		
Are id and employeeID redundant?	myTimeStamp		
		Manager Table	can have mgr table or column in employee table but not both as both would not deter accidental inconsistency
		id	
		employeeId	
		Dept	

moving to 3NF

Employee Table	Ticket Table	Status Table	this would minimize repeating the ticket data but depending on time available will include this as separate table
id	id	id	
fName	title	status	
lName	type	myTimeStamp	
employeeId	amount		
isMgr boolean	description		
	myTimeStamp		
isMgr might indicate a transitive dependency because it depends on employeeID which will depend on id but is that really a transitive dependency since the two ID fields are redundant?		Manager Table	can have mgr table or column in employee table but not both as both would not deter accidental inconsistency
		id	
		employeeId	
		Dept	

dealing w/ manager
separate table vs. manager status field in employee table
It really depends on how much time I think I will need to adapt my Java coding to 4 tables instead of 3!

So,

3NF, Final Tables

Employee Table	Manager Table	Ticket Table	Status Table
id	id	id	id
fName	employeeId	title	status
lName	Dept	type	myTimeStamp
employeeId		amount	
isMgr boolean		description	
	Relation employeeId to employeeID	myTimeStamp	Relation: id to id