

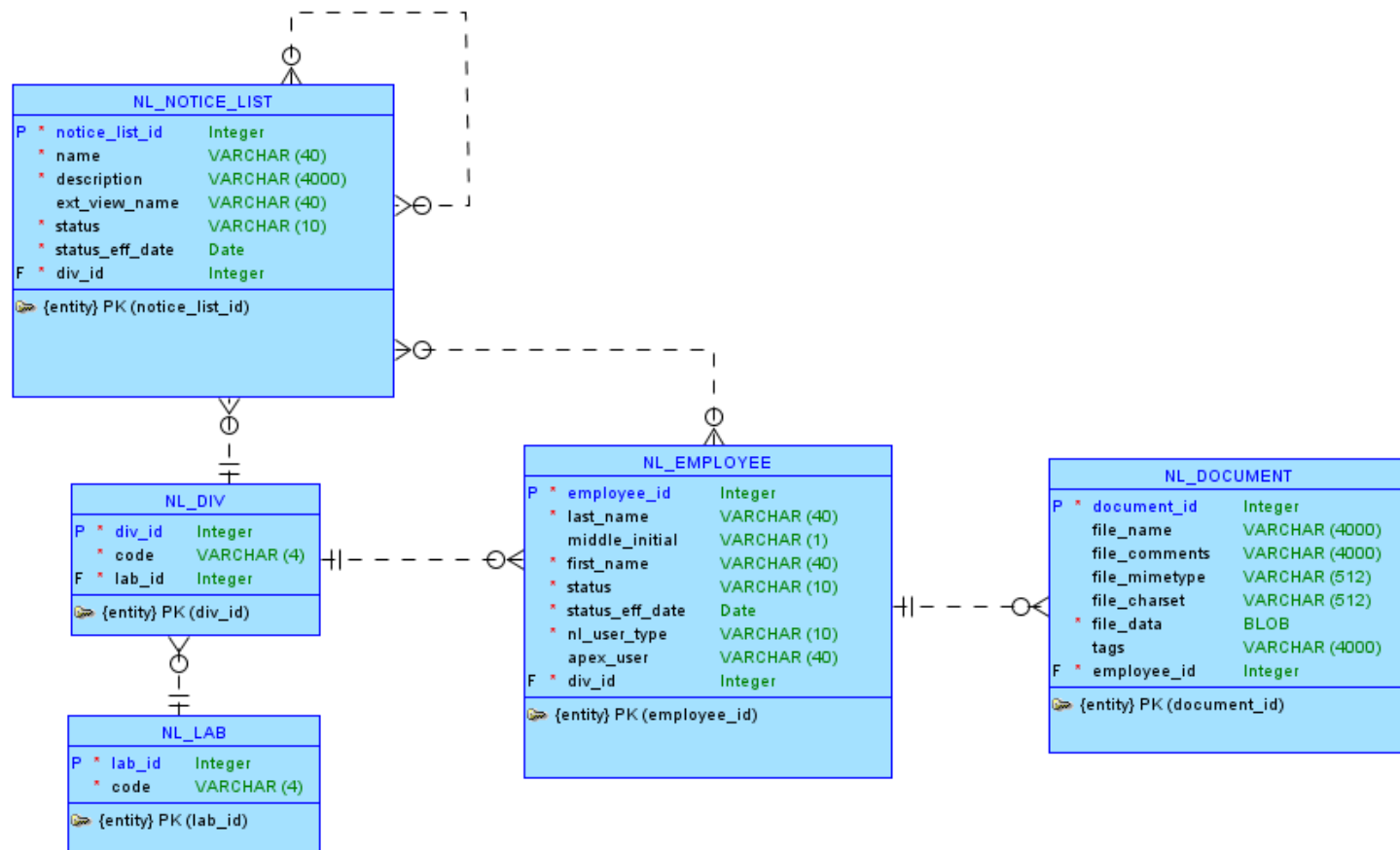
ARL Notice List Project

CS347 Final Presentation

Steven Ritchie, Andrew Nguyen

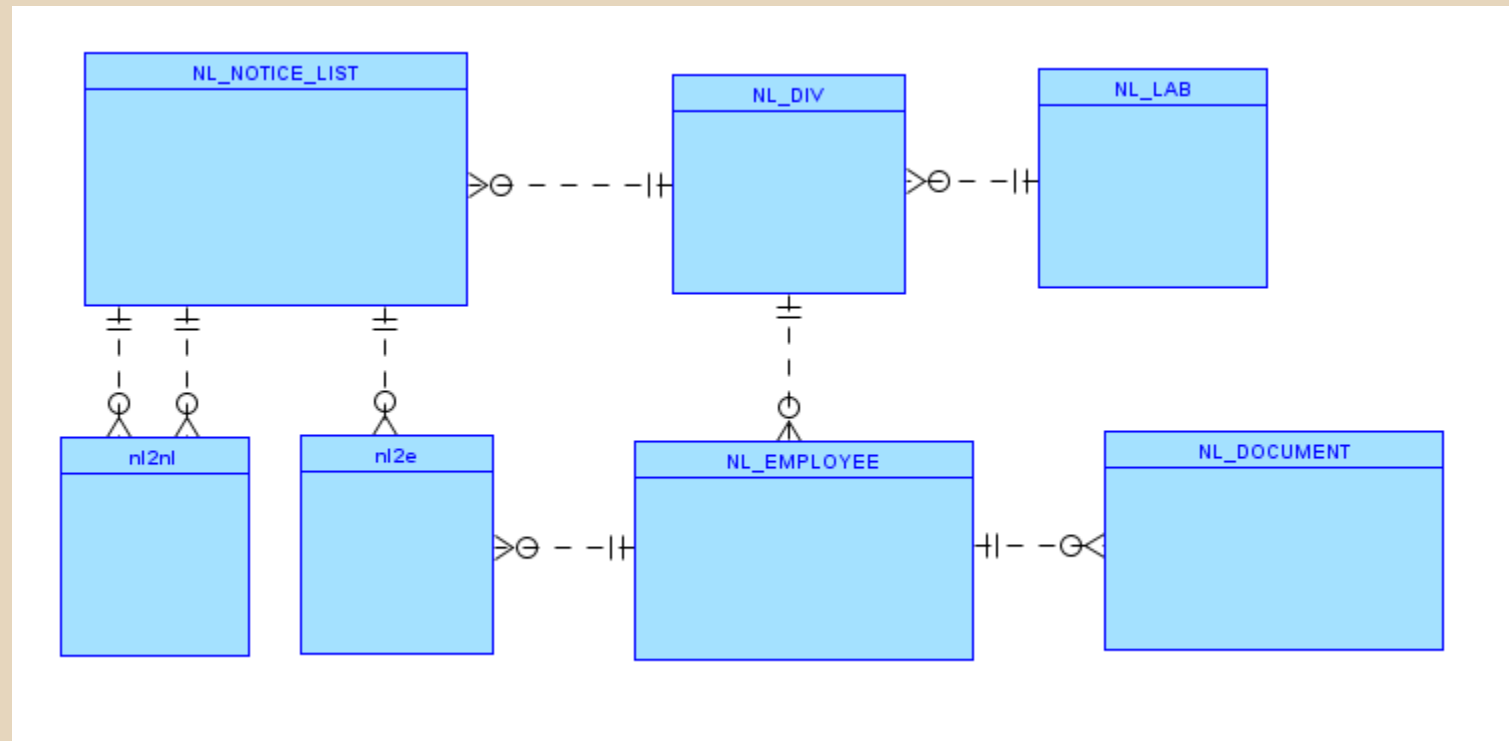
Conceptual Model

- NL_EMPLOYEE, NL_DIV, NL_LAB are read-only tables



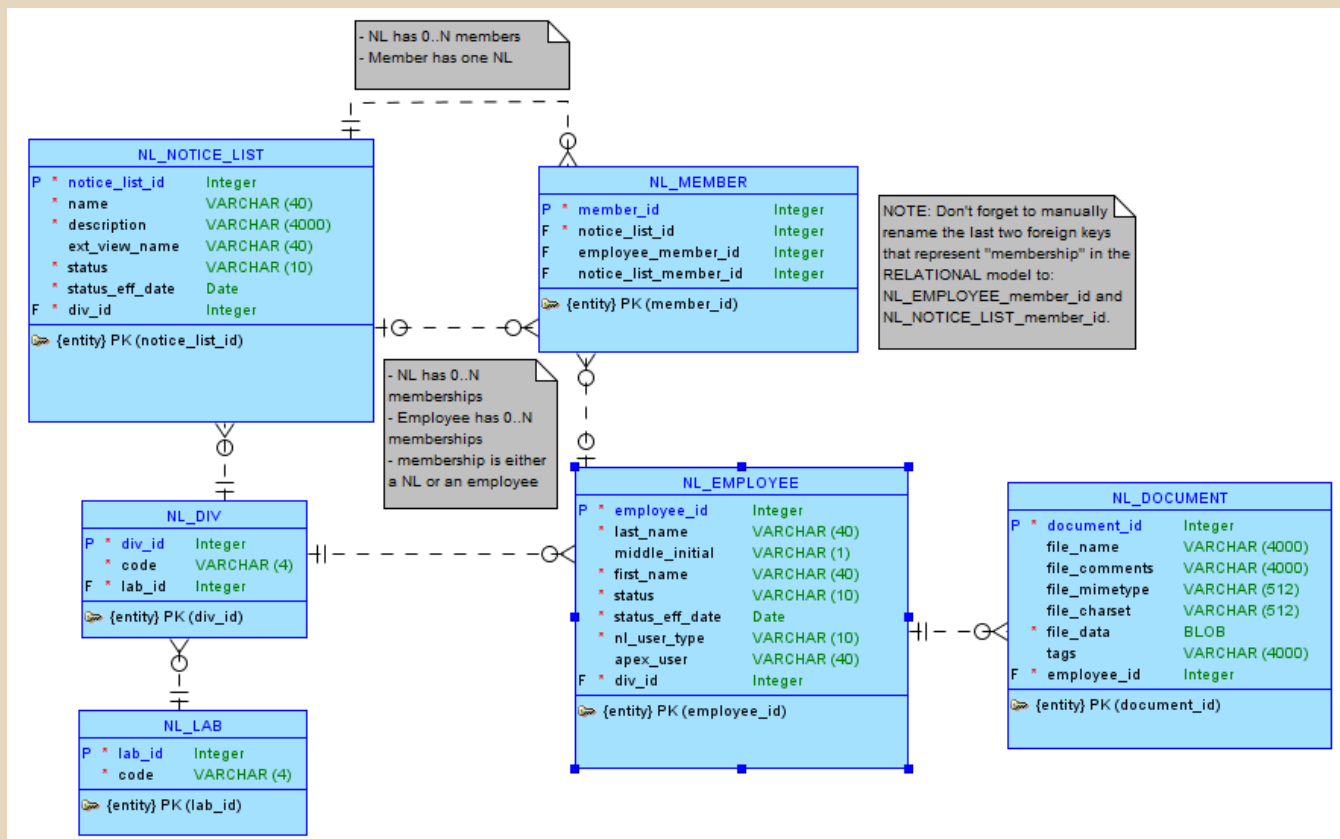
Logical Model (Intermediate)

- Convert the two M:N relationships into two junction tables

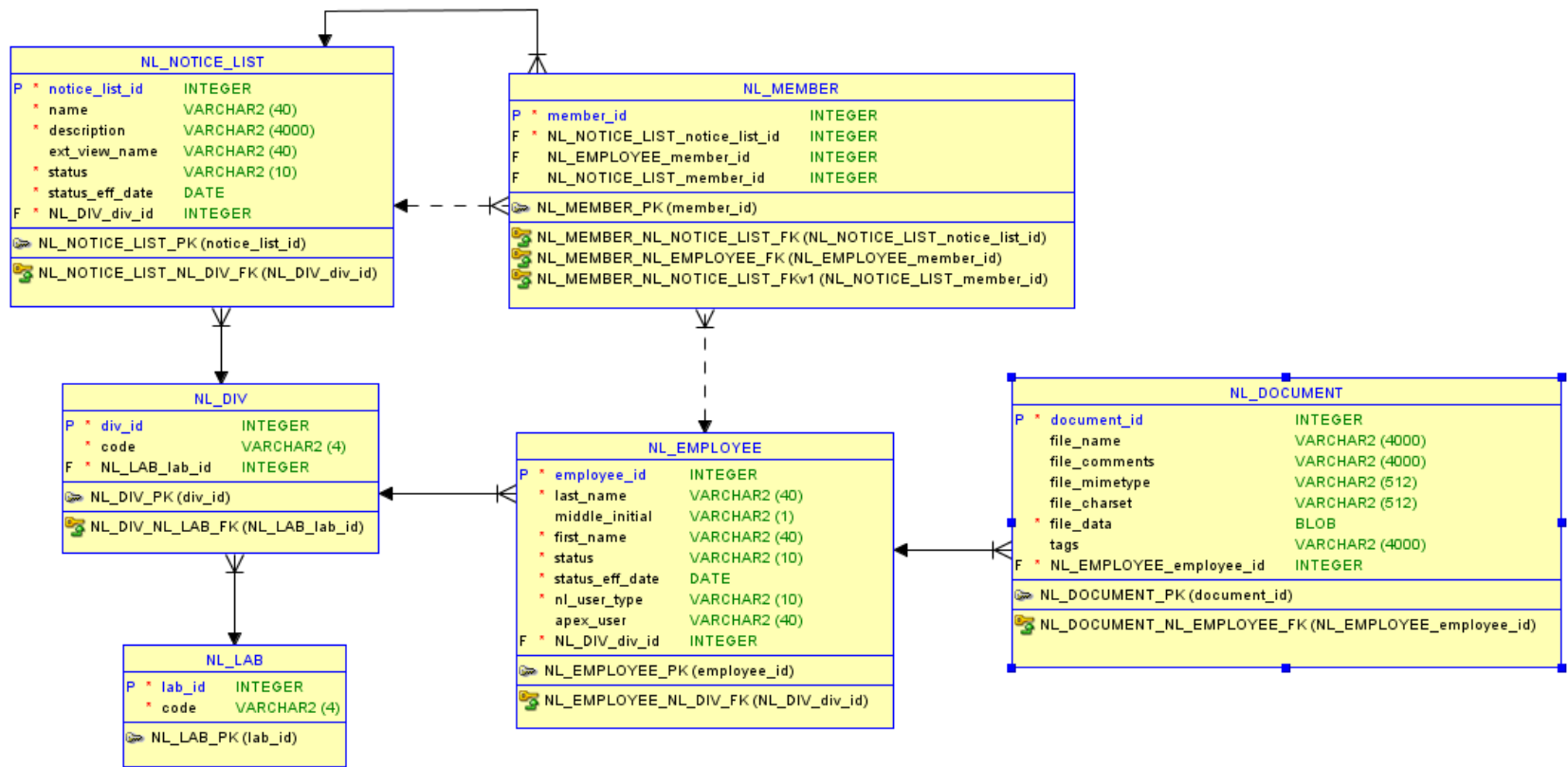


Logical Model (Final)

- To match the schema given by ARL, the **NL_MEMBER** junction table combines what was two junction tables (previous slide) into one table where EITHER **employee_member_id** OR **notice_list_member_id** is used.



Logical Model Relational



APEX Application

- URL
- ACCOUNTS
 - ADMIN
 - user: nladmin, pwd: nladmin
 - STANDARD
 - user: nlstandard, pwd: nlstandard
 - BASIC
 - user: nlbasic, pwd: nlbasic
 - NONE
 - user: nlnone, pwd: nlnone

Login Page

- Uses APEX authentication and links APEX users to NL_EMPLOYEES



Log In

Username

Password

Log In

Notice List Tab

- ADMIN only, manage notice lists

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ARL Notice List Manager

Log Out

Home

Developer

Welcome, **Elon Musk**, lab **ADS**. You are logged in as NLADMIN and have **ADMIN** access rights to this application.

Notice Lists

Membership

User Actions

Documents

Notice Lists

🔍

Go

Actions

Create Notice List

	Name	Description	Ext View Name	Lab code	Div Code	Status	Status Eff Date	Created
✎	ITS List 3	its	-	ITS	MISS	ACTIVE	29-APR-15	29-APR-15
✎	ITS List	its	-	ITS	MISS	ACTIVE	29-APR-15	29-APR-15
✎	ADS List	ads	-	ADS	ACC	ACTIVE	29-APR-15	29-APR-15
✎	asdf	asdfsadf	-	ADS	ACC	ACTIVE	29-APR-15	29-APR-15
✎	ATL List	atl	-	ATL	ATL	ACTIVE	29-APR-15	29-APR-15
✎	ITS List 2	its	-	ITS	ITS	ACTIVE	29-APR-15	29-APR-15
✎	SGL List	sgl	-	SGL	SAT	ACTIVE	29-APR-15	29-APR-15

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Members Tab

- Manage memberships
- Filter by last name
- Filter by list name
- ADMINS can control any list
- STANDARD users can only control lists in their lab
- Tree view of list membership
- Multiselect vis shuttle controls

The screenshot displays the 'ARL Notice List Manager' web application. The interface includes a dark sidebar with navigation links for 'Home' and 'Developer'. The main content area is titled 'Membership' and features a welcome message for 'Elon Musk, lab ADS'. Below this, there are tabs for 'Notice Lists', 'Membership' (selected), 'User Actions', and 'Documents'. Two buttons, 'Commit Notice List Changes' and 'Commit Employee Changes', are visible. The interface is divided into two main sections: 'Employee Members' and 'Notice List Members'. Each section has a list of members on the left and a corresponding list on the right, with shuttle controls (arrows) between them. The 'Employee Members' section shows a list of employees with their status and lab, and the 'Notice List Members' section shows a list of notice lists with their status and lab. At the bottom, there is a 'Membership Tree' section showing a hierarchical view of the membership data.

ARL Notice List Manager

Welcome, **Elon Musk**, lab **ADS**. You are logged in as **NLADMIN** and have **ADMIN** access rights to this application.

Notice Lists Membership User Actions Documents

Membership

Commit Notice List Changes Commit Employee Changes

Select Notice List ADS List lab:ADS

Filter by Lab

Filter by Employee Last Name

Employees

Duncan, Tim P -- ACTIVE -- lab:ATL
Durant, Kevin L -- ACTIVE -- lab:ADS
Einstein, Albert P -- ACTIVE -- lab:ATL
Harden, James -- ACTIVE -- lab:ITS
Musk, Elon -- ACTIVE -- lab:ADS

Employee Members

Filter by Notice List Name

Notice Lists

ITS List -- ACTIVE -- lab:ITS
ITS List 3 -- ACTIVE -- lab:ITS
SGL List -- ACTIVE -- lab:SGL

ITS List 2 -- ACTIVE -- lab:ITS

Notice List Members

Membership Tree

- ITS List 2
 - TimDuncan
 - AlbertEinstein
 - JamesHarden
 - ElonMusk
 - MichaelJordan

User Action Tab

- Remove user from all lists
- Clone user membership to another user
- ADMINS can manage any user, STANDARD can only manage users in their lab

ARL Notice List Manager

Log Out

Home

Developer

Welcome, **Elon Musk**, lab **ADS**. You are logged in as NLADMIN and have **ADMIN** access rights to this application.

Notice Lists

Membership

User Actions

Documents

User Actions

Select Employee Durant, Kevin L

Q

Go

Actions

Remove From All

Clone Memberships

Member Id	NI Notice List Notice List Id	NI Employee Member Id	NI Notice List Member Id	Created	Created By	Row Version Number	Updated	Updated By
621	180	125	-	29-APR-15	NLADMIN	1	29-APR-15	NLADMIN
512	240	125	-	29-APR-15	NLADMIN	1	29-APR-15	NLADMIN

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Documents Tab

- ADMIN/STANDARD/BASIC users can upload documents associated to their NL_EMPLOYEE row

The screenshot displays the ARL Notice List Manager application. The left sidebar contains a menu with 'Home' and 'Developer' options. The main content area shows a welcome message for 'Elon Musk' and a navigation bar with 'Notice Lists', 'Membership', 'User Actions', and 'Documents' (the active tab). Below the navigation bar is a 'Documents' section with a search bar, 'Go' button, 'Actions' dropdown, and an 'Upload Document' button. A table lists documents, including 'stewie.jpg' with a 'Download' link. The footer shows '1 - 1'.

ARL Notice List Manager Log Out

Welcome, **Elon Musk**, lab **ADS**. You are logged in as NLADMIN and have **ADMIN** access rights to this application.

Notice Lists Membership User Actions **Documents**

Documents

	stewie.jpg	family guy	Download	image/jpeg	-	-	28-APR-15
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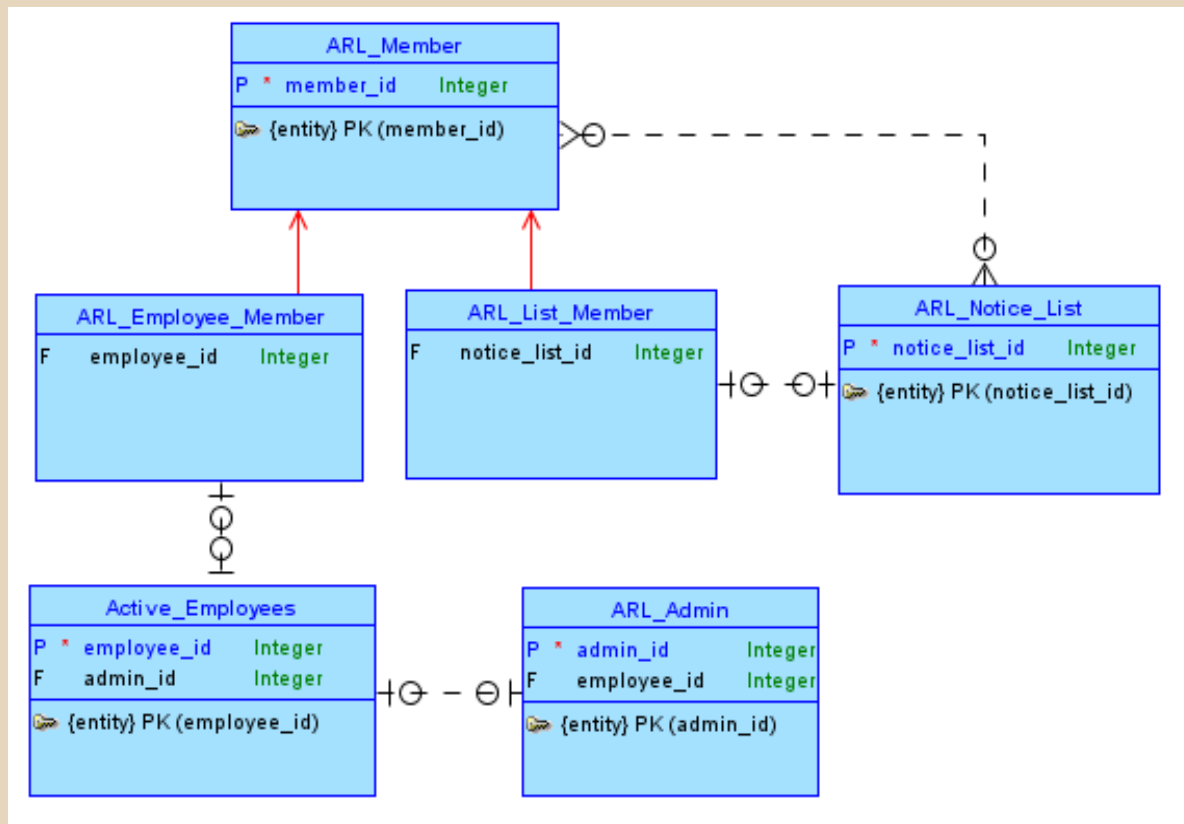
Known Bugs

- MAJOR: Committing either of the shuttles clears the selection for the other shuttle. This appears to be an APEX issue as both of the submit processes are conditional on the specific button. Somehow during the commit, the page refresh is committing the other shuttles selection when it's in the intermediate step of just loading the full list of members (before the members are moved to the right side of the shuttle)
- MINOR: Cloning memberships doesn't filter out already existing memberships so you can get duplicate memberships
- MINOR: Region display selector does not properly draw column names for all tabs when SHOW_ALL option is turned off. It will only show column names for the currently selected tab
- MINOR: Tree control is 'legacy' and doesn't support cascading LOVs. The only way to update it is to submit the page.
- MAJOR: Cascading LOVs can't reliably update the shuttle because the shuttle requires a secondary process to sort members into the right and left hand sides.

BACKUP SLIDES

Conceptual Model B

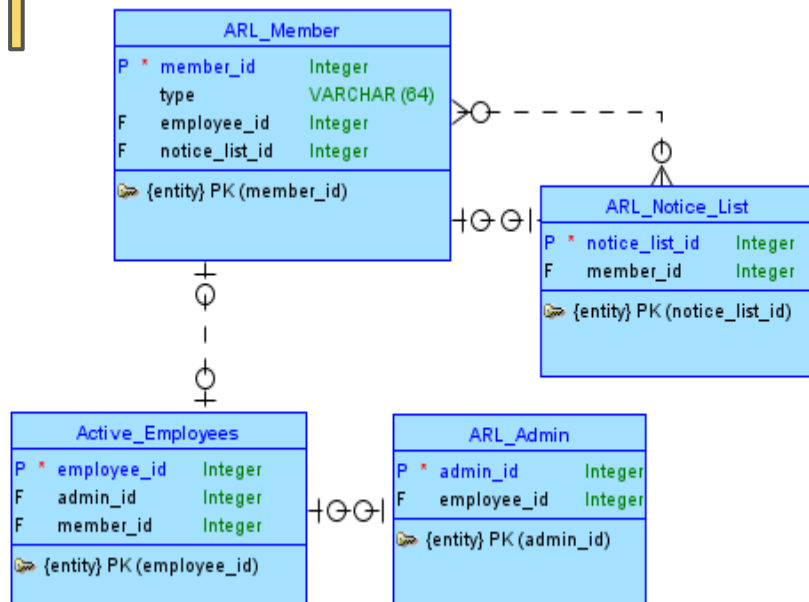
- Use inheritance to model “member” hierarchy
- Downside is it creates a new member table that is unnecessary and can be simplified down to the same thing as logical model A (explained in next slide)



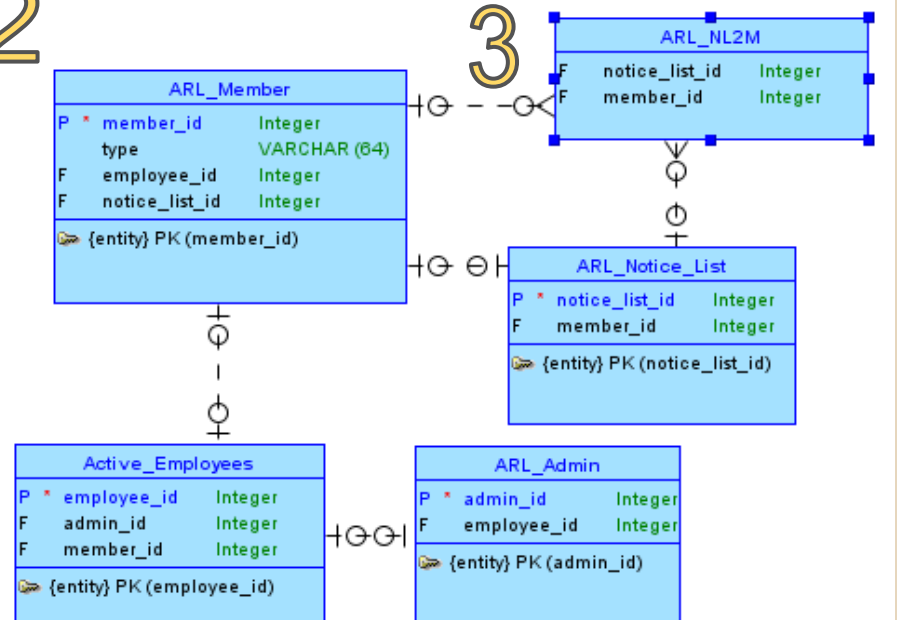
Logical Model B

1. Collapse the member hierarchy
2. Add junction table for M:N relationship
3. Notice that ARL_Member can be coalesced into ARL_NL2M and **type** can be made implicit by using employee_id OR notice_list_id. This change brings us back to logical model A. (It doesn't seem like there are any downsides to doing this UNLESS we need to have views into the junction table to guarantee that the right id attribute is filled in.)

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2



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