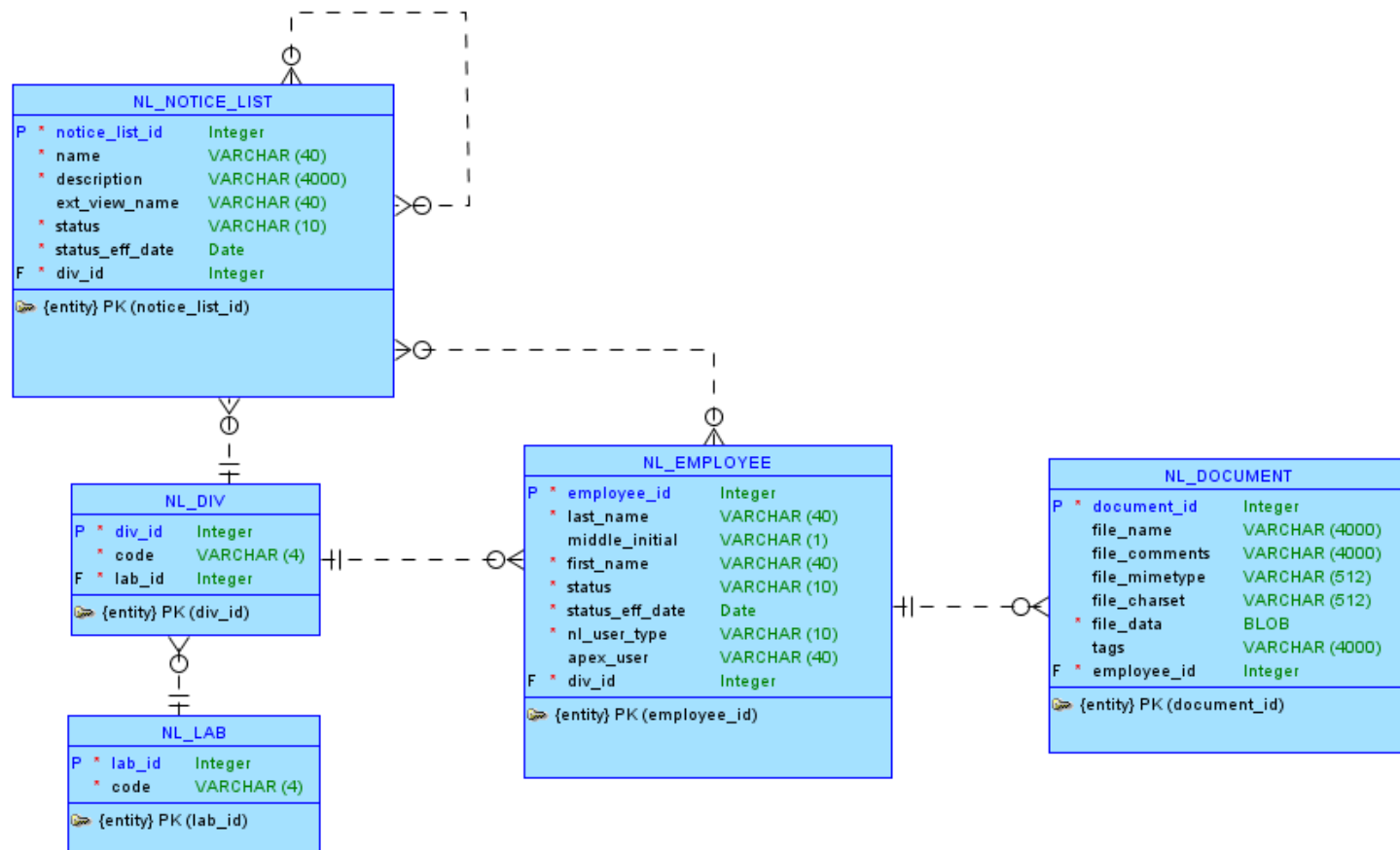# ARL Notice List Project

CS347 Final Presentation

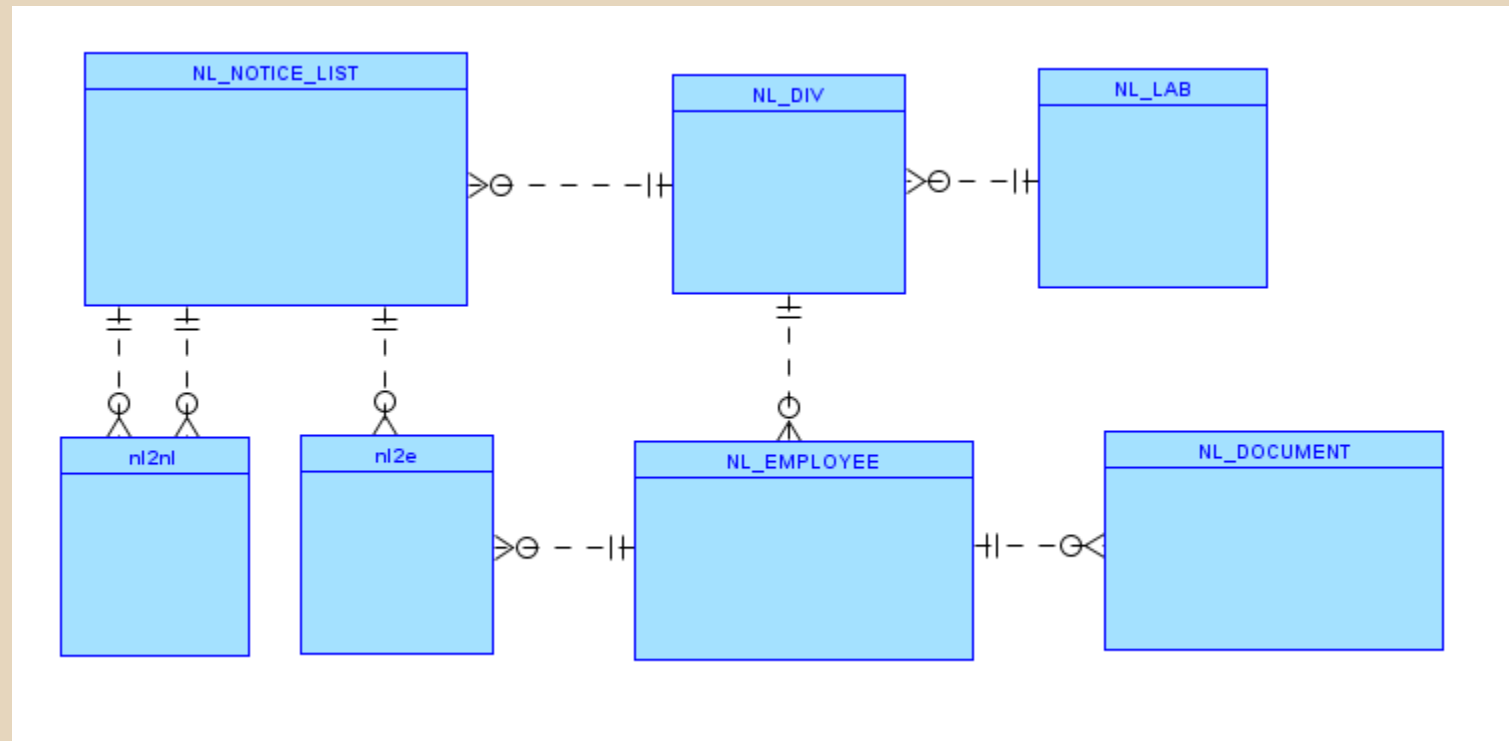Steven Ritchie, Andrew Nguyen

Conceptual Model

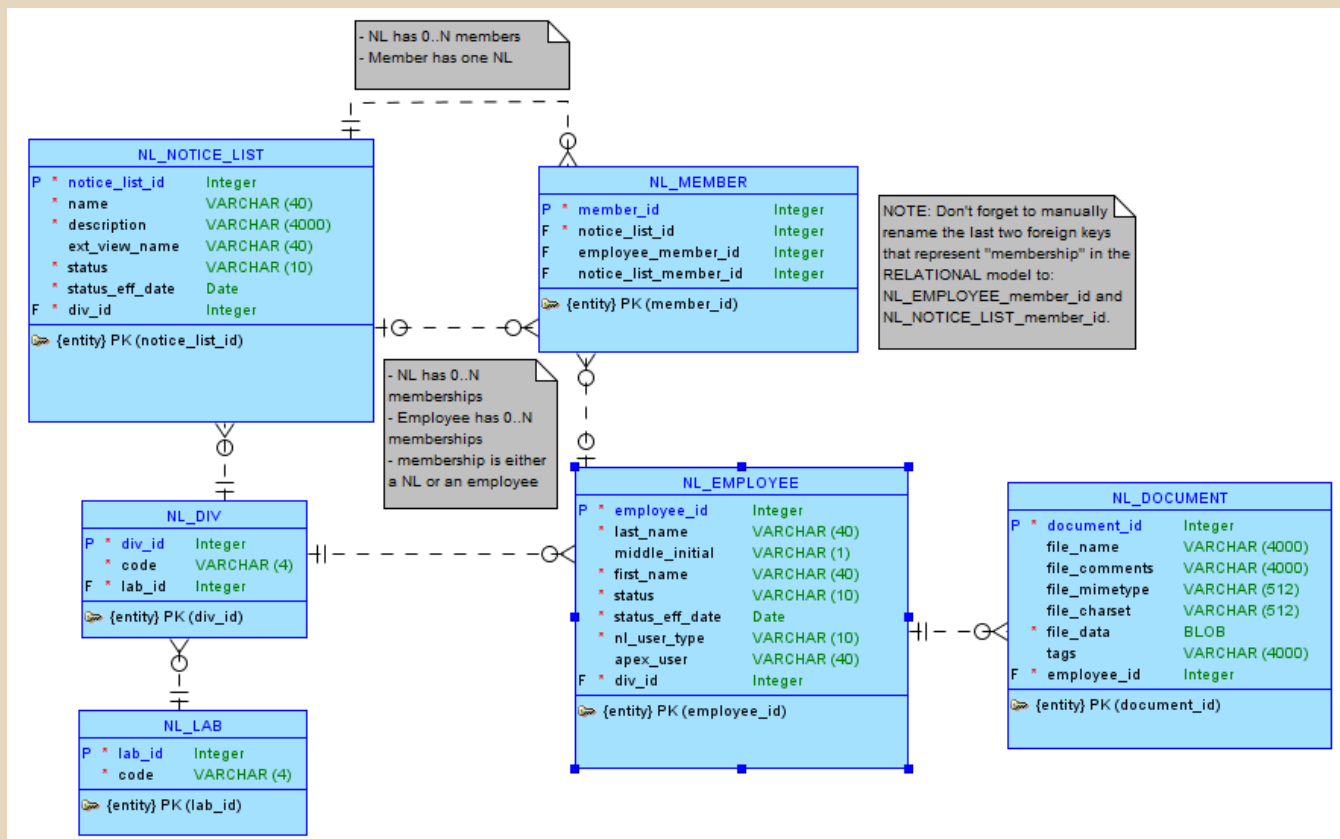- NL_EMPLOYEE, NL_DIV, NL_LAB are read-only tables

Logical Model (Intermediate)

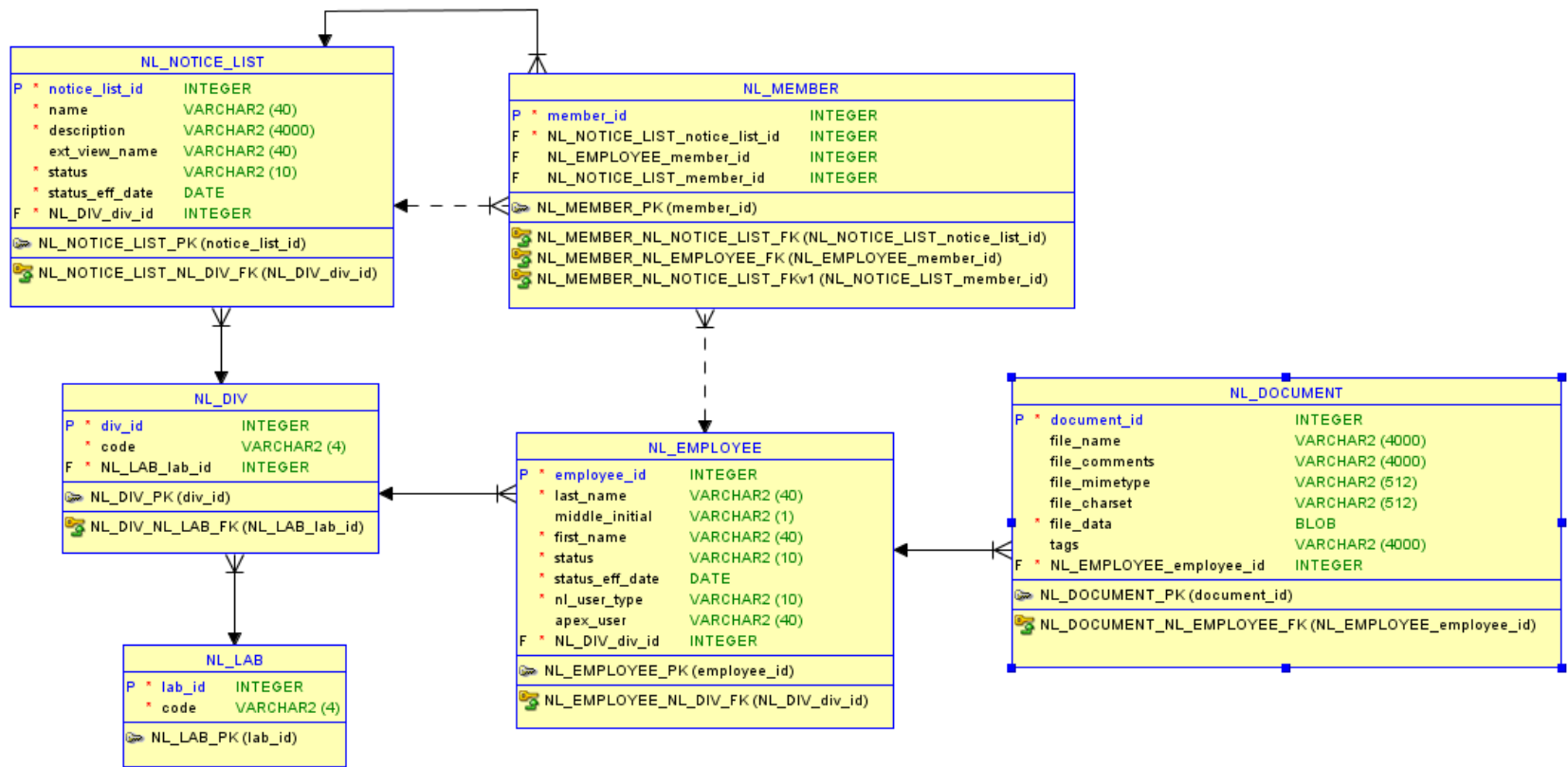- Convert the two M:N relationships into two junction tables

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
  https://apex.oracle.com/pls/apex/f?p=90854:LOGIN_DESKTOP:106205508786492:::::
- ○ 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

ARL Notice List Manager

Log In

Username | hladmin

Password |

Log In

Notice List Tab

- ADMIN only, manage notice lists

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

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

Documents Tab

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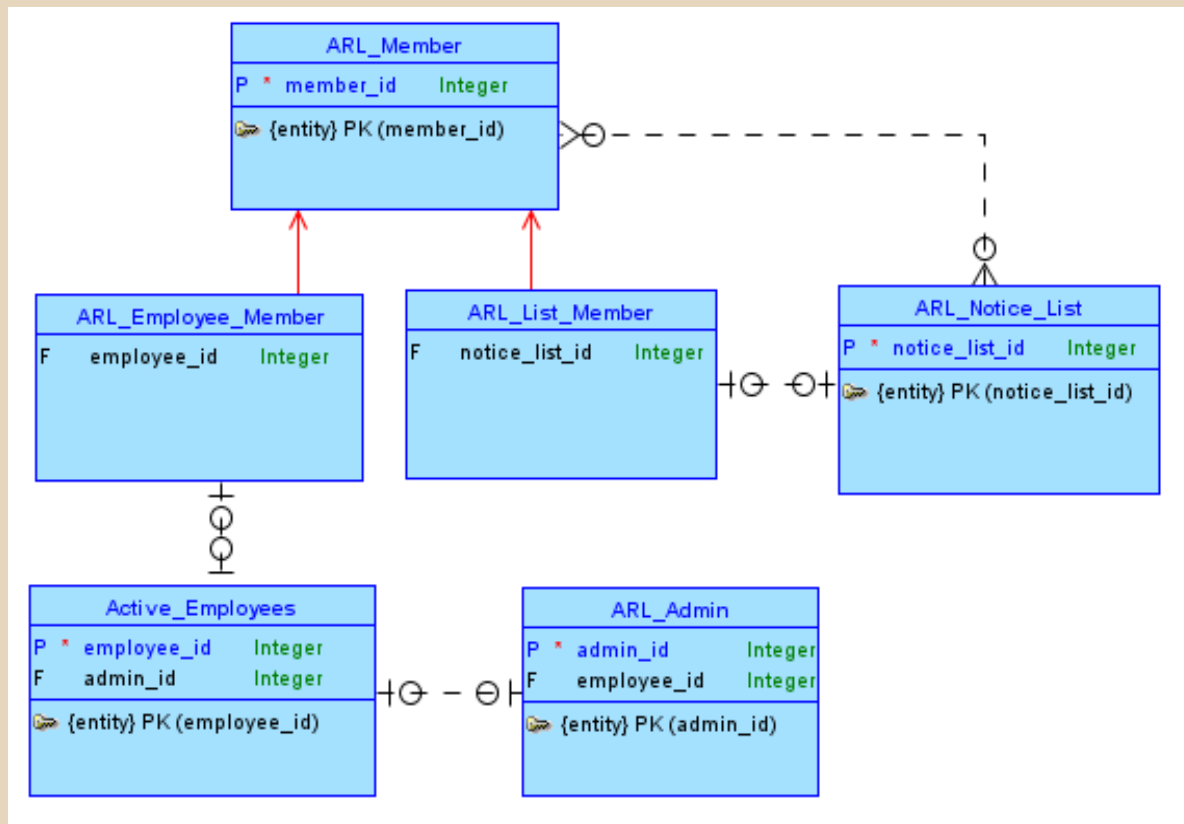
Known Bugs

- 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 commiting 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.
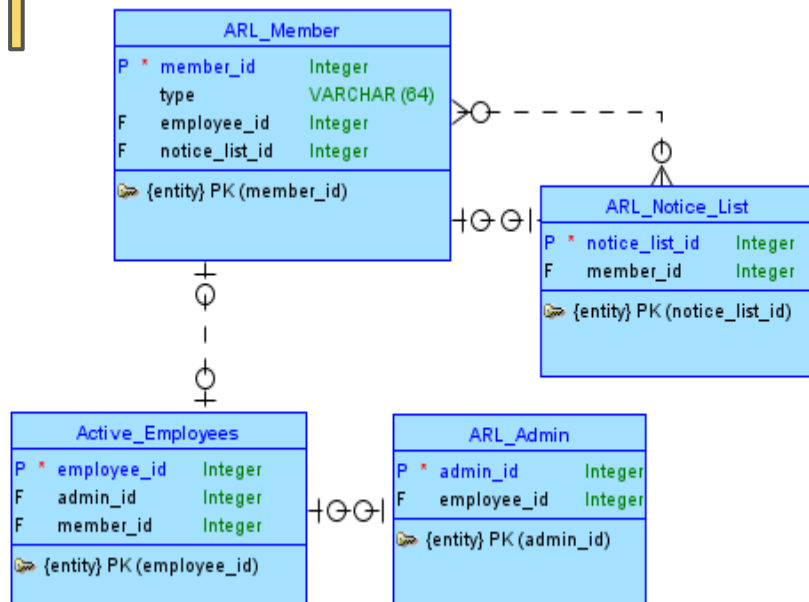
BACKUP SLIDES

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)
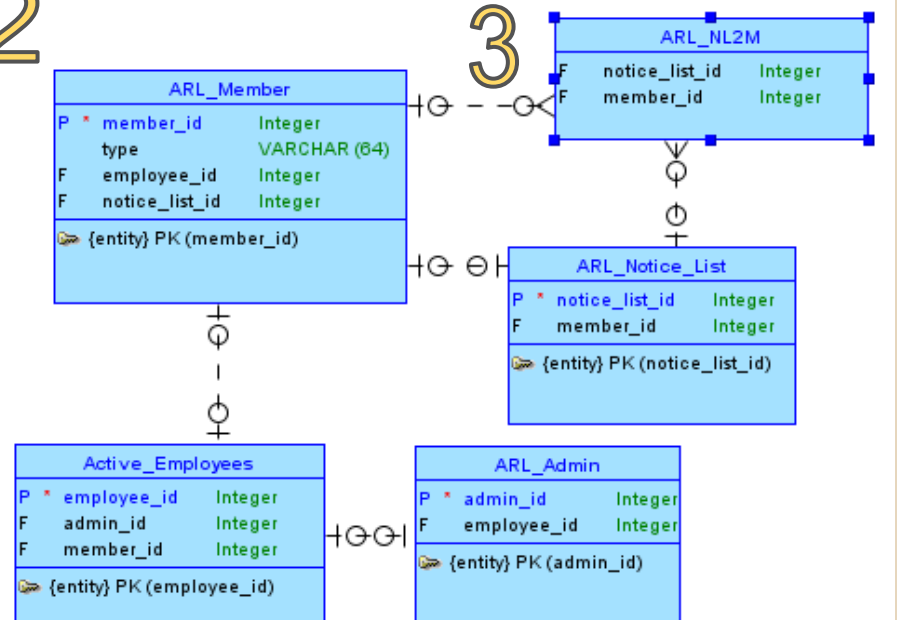
Logical Model B

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.)