CST2355 – Database Systems Group Lab Assignment 2

# Topic Proposal of Group 2

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# Introduction:

Our team's plan is to develop our Spotify database application to track the history of some attributes based on the previous work. For a music database, some of the properties might be updated over time. Our tasks are to be able to trace these changes as needed.

The core of this new version of the application and database is going to be the views created through multiple tables. They have numerous properties, and they are where we demonstrate the most importance on. The attributes which we would like to work on of tracking their history are username in Users table, playlistname in Playlists table, popularity in Songs table.

Our first step is to transfer our old database from SQL Server to Oracle database. Some new tables must be created, we need new tables to store the updated data and the new relationship as well. Then, we will create some views with joined tables to show information from the database. These views will contain the properties mentioned above. After these, some triggers need to be created to monitor and trace the update of the database. Then, we will relink the Access application and the database, the previous forms should be working at this moment. However, new forms might be needed to fit our new tasks.

A short description of the new version of our application and database will be shown below. The old tables are all remaining, but the attributes mentioned before will be moved out to new tables to store their multiple values as updated. Meanwhile, new join tables will be created to store the relationships between the new tables and the old ones where the properties are moved out.

The main tables are:

- Songs

- Artists

- Genres

- Playlists

- Users

- UserNames

- PlaylistNames

- Popularities

The necessary join tables will be:

- Artist-Song

- Genre-Song

- Playlist-Song

- User-Playlist

- User-Name

- Playlist-Name

-Song-Popularity

# Work breakdown

Front End:

- Relink the application to the new database Lei

- Set up the transferred application Lei

- Create new features for the new database Lei

Physical model:

- Transfer the database from SQL Server to Oracle Victor

- Create views to fit the new requirements Victor

- Create triggers for updates Victor

Data logistics:

- Test data complete, useful Tianjiao

- Backup created Tianjiao

- Backup instructions identified, concise, clear Tianjiao

Demo/Documentation:

- Planning and execution - 6 files Tianjiao