

Database Design in 3NF

Users(id, first_name, last_name, email, password, account_type, active)

Dances(id, name, choreographer, *ds_id*, *ld_id*, song_file_path, cue_file_path, active)

DS(id, name, year, semester, active)

Groups(id, name, *ds_id*)

GroupOptions(id, *group_id*, *options_id*)

Options(id, name, type, default, *group_id*)

OptionsForOptions(id, name, *options_id*)

Fixtures(id, number, is_channel, *fixture_type_id*, *group_id*)

FixtureTypes(id, name, active)

Underlines:

Solid underlined fields are primary keys;

Italic fields are foreign keys;

Database Design Notes:

1. All tables use id as the primary key because the application will be developed in Django which defaults all models to have an auto incrementing id field as the primary key.
2. All of the id fields are auto-incrementing, unique, non-null primary keys.
3. All of the active fields are tinyints which act as if they are booleans which can only be 0 or 1.
4. Fixtures.is_channel is a tinyint which acts as a boolean to determine whether the number field should represent a channel or a fixture.
5. Users.account_type, DS.semester and Options.type are TINYINTs which represent distinct categories that are outlined in the Data Dictionary.