1. Special Virtual Environment

No special environment. This project uses the same settings as e4_trainor_django_course.

2. Application Description

This application is a database for the fans of the Korean TV show "Phantom Singer". The fans can view and provide information about the singers who join this show. This information includes the singers' profiles, what company they belong to, what songs they released, what activity they join, and so on. The target users, including administrative users and regular users, are fans.

However, to ensure the accuracy of the information, the users will be divided into different groups with different authorizations. Admin users who can do anything to the application have all authorizations. Regular users who are in the higher-level group can edit more parts of the database.

3. Authentication and Authorization Scheme

The information about companies, song style, role type, and event category is less chance to change, so only the users in the admin group can edit these data.

The entertainers and the group they belong to may change sometimes. Therefore, only administrative users and the most reliable users who are in the lv3_user group can edit them.

When the singers release new songs or albums, admin, lv3_user, and lv2_user group and edit the information about the works.

Singers frequently attend concerts, TV shows, musicals, operas, and other kinds of events. Compared to other kinds of information, this information is not quite important, so everyone except the users in the lv0_user group can edit them.

Lv0_user is a group for those who just join this system. They can only view the data.

Username/group	password	active	staff	superuser	Group
tester	{iSchoolUI}	X	X	X	
admin	{iSchoolUI}	X	X	X	admin
lv3_user	{iSchoolUI}	X	X		lv3_user
lv2_user	{iSchoolUI}	X			lv2_user
lv1_user	{iSchoolUI}	X			lv1_user
lv0_user	{iSchoolUI}	X			lv0_user

Permission/Group	admin	lv3_user	lv2_user	lv1_user	lv0_user
Company					
View	x	x	x	x	x
Add	x				

Change	x				
Delete	x				
Style					
View	x	x	x	x	x
Add	x				
Change	x				
Delete	x				
Role					
View	x	x	x	x	x
Add	x				
Change	x				
Delete	x				
Event Category					
View	x	x	x	x	x
Add	x				
Change	x				
Delete	x				
Group					
View	x	x	x	x	x
Add	x	x			
Change	x	x			
Delete	x	x			
Entertainer					
View	x	x	x	x	x
Add	x	x			
Change	x	x			
Delete	x	x			
Entertainer Group					
View	x	x	x	x	x
Add	x	x			

Change	x	x			
Delete	x	x			
Album					
View	x	x	x	x	x
Add	x	x	x		
Change	x	x	x		
Delete	x	x	x		
Song					
View	x	x	x	x	x
Add	x	x	x		
Change	x	x	x		
Delete	x	x	x		
Create					
View	x	x	x	x	x
Add	x	x	x		
Change	x	x	x		
Delete	x	x	x		
Event					
View	x	x	x	x	x
Add	x	x	x	x	
Change	x	x	x	x	
Delete	x	x	x	x	
Activity					
View	x	x	x	x	x
Add	x	x	x	x	
Change	x	x	x	x	
Delete	x	x	x	x	

4. Other Information

Those data that only the admin user can edit won't be present in the forestage. Users can only create, edit, and delete by using admin pages.

For the Entertainer Group, this table is to record which singer belongs to what group. One singer may belong to more than one group. However, it doesn't make sense to show this table as a list. Therefore, there is no entertainer_group list in the application. Users who have the authorization to edit the information of singers can add the singer to the group from the button on the entertainer and group detail page.

The "Create" table is also designed for dealing with many-to-many problems. Users can edit it from the link on the song detail page. The link to update the "Activity" page can be found on the event detail page.