# Fullscreen Application

Introduction:

This ruby application simulates some of the basic activities of a user on a web application like youtube and how this information is stored in the back-end.

This application uses 4 database tables to store the user activity.

1. **Users**: Userid, Name, Email, country, password
2. **Videoshops**: videoid, name, views, Pre-roll ads
3. **Preferences** : PrefID, Userid, Videoid, Likes, Dislikes
4. **Transactions** : ID, Userid, Videoid, Likes, Dislikes, skip\_ad

Walk- through:

The users table stores the basic information related to users and are uniquely identified by userid.

The videoshops table stores the information related to all the videos available in the database and uniquely identifies each row by videoid. The views attribute tracks the total number of views for a particular video and the pre-roll ads indicate if ads are enables for that video by the uploader.

Preferences table is dynamic and is updated based on the user activity in the application. This table stores a single record for every new combination userid, videoid. This table enables us to identify if a user likes/dislikes a particular video or not. This table keeps only the latest information of the user-video pair

Transactions table stores the log activity of a user. Unlike the preferences table, transactions stores the historic data and also keeps track if the user has skipped the video while watching the video for the nth time. Using this information we can track the earnings from the pre-roll ads.

Briefly, the following attributes can be tracked and analyzed from the following tables

1. Views – videoshops table
2. Likes for video – preferences (SELECT \* from Preferences where videoid= ‘xx’ and likes = true )
3. Pre-roll ads – Transactions (SELECT \* from Transactions where videoid= ‘xx’ and skip\_ad = false). This gives the information how many times an ad was not skipped before watching this video.

Other interesting analysis can be made combining all the information.