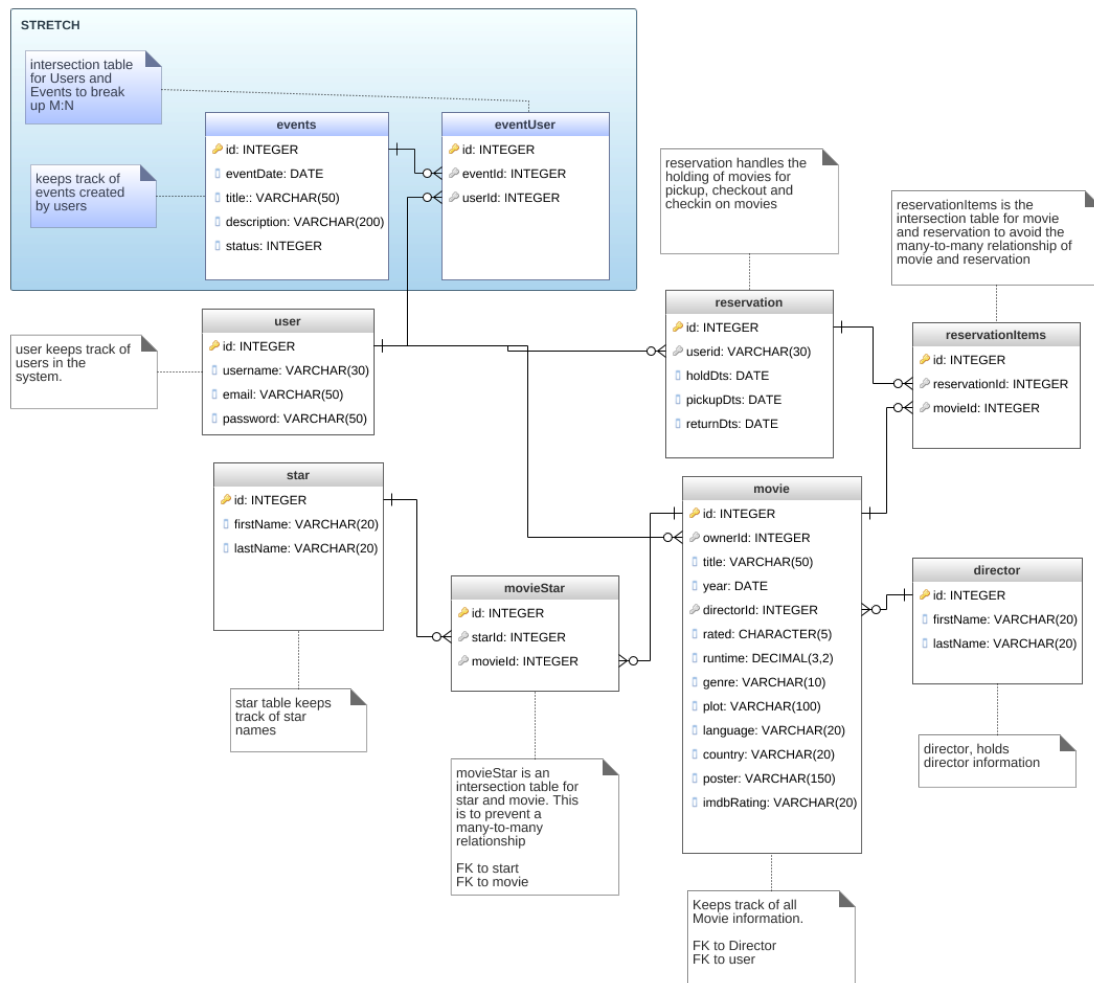# FlickShare Database Design

1. Introduction

This document explains rational behind the database choice and its function to support the FlickShare application. This includes table to support stretch features (shaded in light blue)

2. Database Design

The database selected for FlickShare is a relational database. The application can use any relational database. This application is very small, the amount of data is very minimal. Relational database will complement the front-end code which will be using hibernate base libraries. The ability to query and visualized data through joins and views will lend itself for the purpose of the FlickShare application.

Tables schemas

User Table			
Description	Track all Users of the Application		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated unique id of a user	Integer	Between 1 and 999999999
username	username displayed in UI . The user based is so small that first and last name will not be required as this is not a public. System	String	Ihate3putts
Password	Password created by user	String	p@ssw)rd32!$
Primary Key	Id		
Foreign Keys			

Tables data:

Data will be populated by each user during the registration process

Usage:

Will be user when Users log in. Will be used in the UI whenever username is required to be displayed such as the Owner of a give movie or on reports such as reservations

Reservation Table			
Description	Tracks Reservation Data		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated unique id	Integer	Between 1 and 999999999
userid	this is the id of the user that currently initiated this reservation	Integer	Between 1 and 999999999
holdDts	The date the user requested a specific movie to be held for pickup	Date	01/05/2021
pickupDts	The date the Movie was picked up by a user	Date	01/06/2021
returnDts	The date a Movie was returned by a user	Date	01/30/2021
Primary Key	Id		
Foreign Keys	userid		

Tables data:

Data is populated when a user views the details of a Movie and selects the reserve Button from the UI

Usage:

Used to keep track of request movies to be reserved for pick and active movie on loan.

ReservationItems Table			
Description	Intersection Table between Reservation and Movie		
Attribute	Description	Type	Examples of values
Id	Auto generated unique id	Integer	Between 1 and 999999999
reservationid	Ties back to reservation table	Integer	Between 1 and 999999999
movieid	Ties back to movie table	Integer	Between 1 and 999999999
Primary Key	Id		
Foreign Keys	reservationid, movieid		

Tables data:

Data is populated when movies are selected to be reserved and a reservation record is created

Usage:

Intersection table to break up the many-to-many relationship between movie and reservation

Movie Table			
Description	Hold Movie information		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated unique id or OmdbId for movies that are retrieved from the internet TXXXXX – imdbid LXXXXX – Locally generated	Number	T11293459 or Between L1 and L999999999
ownerid	Ties back to user table	Number	Between 1 and 999999999
directorid	Ties back to director Information	Number	Between 1 and 999999999
title	Title of the movie	String	Star Wars
year	Year the movie came out	Number	Between 1900 and 2XXX
rate	Movie rating	String	R,PG-13,G
runtime	Length of movie	Number	160,190.5
genre	Type of movie	String	Drama, Action
plot	Description of the movies story	String	Darth Vader returns as with the Light side of the force
language	Available languages	String	English, Spanish
country	County of Origin	String	USA
poster	URL to Movie Poster	String	http://someurl/movie.jpg
imdbRating	Score given by reviewers	Number	4.5, 3, 5
Primary Key	Id		
Foreign Keys	directorid, owerid		

Tables data:
Data is populated when users are setting up the movies, they want to make available for others to borrow. The user search for Movie from internet APIs and import data into this table. If Movie is unknow, the user will enter this data manually

Usage:
Used   by   users   to   lookup   movie   to   reserve   and   borrow

Director Table			
Description	Director information		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated unique id of a Director	Integer	Between 1 and 999999999
firstName	Director's first name	String	Steven
lastName	Director's last name	String	Spielberg
Primary Key	Id		
Foreign Keys			

Tables data:

Data is populated when users are setting up the movies, they want to make available for others to borrow. The user search for Movie from internet APIs and import data into this table. If Movie is unknown, the user will enter this data manually

Usage:

Used to display Director information when viewing Movie details

Star Table			
Description	Director information		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated PK	Integer	1 to 999999999
firstName	Star's first name	String	Mike
lastName	Star's last name	String	Madsen
Primary Key	Id		
Foreign Keys			

Tables data:

Data is populated when users are setting up the movies, they want to make available for others to borrow. The user search for Movie from internet APIs and import data into this table. If Movie is unknown, the user will enter this data manually

Usage:

Used to display Star information when viewing Movie details

movieStar Table			
Description	Intersection Table between Star and Movie		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated PK	Integer	1 to 999999999
startid	Ties back to star table	Integer	1 to 999999999
movieid	Ties back to movie	Integer	1to 999999999
Primary Key	Id		
Foreign Keys	starid, movieid		

Tables data:

Data is populated when users are setting up the movies, they want to make available for others to borrow. The user search for Movie from internet APIs and import data into this table. If Movie is unknown, the user will enter this data manually

Usage:

Intersection table to break up the many-to-many relationship between movie and star

eventUser Table			
Description	Intersection Table between Users and Events		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated PK	Integer	1 to 999999999
userId	Ties back to user	Integer	1 to 999999999
event	Ties back to event	Integer	1 to 999999999
Primary Key	Id		
Foreign Keys	userid, eventid		

Tables data:

Data is populated when users create an event, like a watch party that they want to host.

Usage:

Intersection table to break up the many-to-many relationship between event and user

event Table			
Description	Keeps track of events created by users		
Attribute	**Description**	**Type**	**Examples of values**
Id	Auto generated unique id	Integer	Between 1 and 999999999
eventDate	Date event is to be held	String	12/12/2021
title	Short description of Event	String	Birthday Movie
description	Long description of event	String	This is to celebrate Henry's bday
status	Indicates State of event	Integer	1 = pending, 2 = completed, 3 = cancelled
Primary Key	Id		
Foreign Keys			

Tables data: Data is populated when users create an event, like a watch party that they want to host.

Usage: Users create an event through the UI. The UI form will prompt for the values required for the table.