Relational Databases Group Project

Group 3 (Ryan, Lena, Dan, Louis, Arya)

Add Player
o   Adds new entries to the players table, includes options (in a sub form) to add a new game to the database at the same time, and in yet another sub form under that, to add a new genre, if so desired. Additionally, two more first-level sub forms allow new entries to be inserted into the game platform table and the status table, if the required entries do not already exist.
o   This handles all of the create statements for the player table.

Add User
o   Adds new entries to the users table, includes options (in multiple sub forms) to add one or more streaming entries per user, and under each streaming sub form, another sub form to enter a new streaming platform, if the desired platform doesn't already exist.
o   This handles all of the create statements for user, streaming, and streaming platforms tables. It could be modified if support was added for multiple phone and email addresses by simply adding them as subforms as well.

Add Event
o   Adds new entries to the events table, as well as options, in sub forms, to add new entries to the event type and locations table, if the need arises.
o   This handles the create statements for the event and locations tables. Any modifications to these could be added as subforms.

Add Attendee
o   Adds new entries to the attendees table, as well as an option to add new entries to the status table, if required.
o   This handles the create statements for both the attendees and status tables, any modifications to either of these tables could be added as subforms.

Universal Read / Update / Delete
o   We plan to have a single page to handle all of the updating, deleting, and some of the reading (we will have the reports as required in addition to this page).
o   A dropdown combo box allows the user to select which table they would like to update. On selection, a table will populate on the left side of the screen with the most relevant information visible for each entry (e.g. for users, only username, first name, and last name will be displayed). The user may then select a row to view its full details on the right side of the screen, or by selecting the update option on the row, view a full form, pre-populated with the information in the entry, enabling them to edit any column as they desire. Finally, a delete button will allow the user to delete any entry they wish from this page.
o   This page handles the Read, Update, and Delete for all of the tables. It is written in such a way that any tables added to the database will automatically appear in the drop down list, immediately allowing access to modify, view, and delete from them.

Report Rationale
o   The current / past members report does not need it's own separate page, as the universal read/update/delete page will handle viewing of all users currently entered in the database, present and past.
o   Events by date are provided in the appropriate report, with options for upcoming, past, all, or events that are coming up within the next 10 days.
o   Event attendance is provided in the appropriate report, with events being listed by type and date, and, when selected, displaying all attendees registered for that event.
o   Events by members is provided in the appropriate report, with events selected by which user attended, and optionally by start or end date, or both.

EER Rationale
- o The "User" table satisfies all of the requirements given in the business requirements document. Email and phone number are limited to one entry each as the club would likely only ever require a single form of contact info. This could be expanded in the future if need be with a junction table and a separate phone and/or email table. The streaming information for each user is contained in a separate table, which acts as a detailed junction table between "Users" and "StreamPlatforms". This allows for multiple streaming platforms per user, as well as the addition of more streaming platforms in the future while keeping data 1NF.
- o The "Player" table satisfies all the requirements for which games each user plays, and acts as a detailed junction table between "User" and "Game". Status for these is included in a separate table, to allow for expansion. This table also includes play location, as required.
- o The "Attendee" table contains information on everything the user has or is planning to attend, including a reference to the actual event (in "Event"), and a simple Boolean for local or remote attendance.
- o The "Event" table contains all the required information about an event, and references a "Location" table that contains all previously and currently used locations, allowing for expansion as necessary. The users that attended the event may be found in the "Attendees" table, or shown in a report. The status of each attendee is a reference to an external table, allowing for expansion, as is streaming information.
- o The "Games" table provides all required information about each game, including a reference to an external table for the genre of the game, to allow for expansion. Single or multiplayer is stored as a Boolean, as this will not be required to expand.

All CyberGrizzlies members are listed below. The database creators are Ryan Gee, Dan Zaina, Arya Filsoofi, Louis (Yi-Hsun) Lee, and Llena (Y-Ting) Lai, but are not entered in the database, as it was not listed in the project requirements.

*SELECT * FROM user;*

```
1 • SELECT * FROM user;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: IA

UserID	UserName	FirstName	MiddleName	LastName	StartDate	ActiveStatus	PayStatus	Email	Phone	ChatStatus	DiscordTag
1	Feelsofly	Arya	Stark	Filsoofi	2016-08-04	1	0	arya.filsoofi@gmail.com	123-456-7890	1	AF#3557
2	DanZee	Dan	Luigi	Zee	2017-12-12	0	0	dan.a.to.zee@hotmail.com	235-735-1746	0	Sixty#8056
3	Bond	Nicholas	James	Bond	2019-04-01	1	1	lemon-bond@notaspy.ca	007-007-0007	1	lemonBond#2711
4	LouiseIV	Louis	Eduardo	Lee	2018-01-31	0	1	MacsRule@Gmail.com	231-643-7321	1	Louis#5197
5	xXLenaXx	Lena	La	Lai	2016-12-31	1	0	LlIllena@sympatico.ca	234-543-9210	1	Lena#0438
6	Skiph	Ryan	Benjamin	Gee	2019-05-09	0	0	abcdefgee@Gmail.com	520-356-4325	1	Skiph#5110
7	LMFAO	Mohammed	Muhammad	Muhammed	2015-11-11	0	1	TheOtherMuhammed@Mohammad.com	127-234-6345	0	
8	Putin	Vladimir	Ivan	Slavinski	2017-09-08	1	1	real.Slav@slavsRUs.rus	111-111-1111	0	Slav#4322
9	Skywalker	Kyle	Brett	Morgan	2018-02-21	0	1	whiteDude@hotmail.com	632-534-7693	1	
10	$Money$	Jeff	Amazon	Bezos	2019-01-01	1	1	richerThanU@amazon.com	098-765-4321	0	
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Cyber Grizzlies Players Database

Arya Filsoofi, Ryan Gee, Lena Lai, Louis Lee, Dan Zaina

March 11, 2019

Events

EventID	INT8 (auto) PK
EventName	VARCHAR(64)
TypeID	INT8 FK
EventDateTime	DATETIME
LocationID	INT8 FK
EventDescription	VARCHAR(256)

EventsType

TypeID	INT8 (auto) PK
TypeName	VARCHAR(32)

Locations

LocationID	INT8 (auto) PK
LocationName	VARCHAR(32)
LocationAddress	VARCHAR(64)

Users

UserID	INT8 (auto) PK
UserName	VARCHAR(24)
FirstName	VARCHAR(24)
MiddleName	VARCHAR(24)
LastName	VARCHAR(24)
StartDate	DATETIME
ActiveStatus	BOOL
PayStatus	BOOL
Email	VARCHAR(64)
Phone(cell)	VARCHAR(13)
ChatStatus	BOOL

Players

PlayerID	INT8 (auto) PK
UserID	INT8 FK
GameID	INT8 FK
StatusID	INT8 FK
LocationID	INT8 FK
PlatformID	INT8 FK

Status

StatusID	INT8 (auto) PK
StatusName	VARCHAR(12)

Attendees

AttendeeID	INT8 (auto) PK
UserID	INT8 FK
EventID	INT8 FK
StatusID	INT8 FK
LocationID	INT8 FK
PlatformID	INT8 FK

Games

GameID	INT8 (auto) PK
GameName	VARCHAR(24)
Single/Multi	BOOL
GenreID	INT8 FK

Genre

GenreID	INT8 (auto) PK
GenreName	VARCHAR(24)

Game Platform

PlatformID	INT8 (auto) PK
PlatformName	VARCHAR(12)

Streaming

StreamID	INT8 (auto) PK
UserID	INT8 FK
StreamPlatformID	INT8 FK
StreamLink	VARCHAR(100)

Stream Platform

StreamPlatformID	INT8 (auto) PK
StreamPlatformName	VARCHAR(12)

PRIMARY KEY

FOREIGN KEY

TO MANY

TO ONE