

BEAT HOP GROUP 400

CSF TEAM #3

Entity-relationship diagram:



Relations:

Level - GameRun: One to manyUser - GameRun: One to many

• Form - User: One to one

Normalization:

- 1. Our scheme is in the first normal form because every field is atomic (variables are inseparable) and each table has a primary key and the values depend on this key
- 2. Every table is in the second normal form, because no functional dependencies exist in the diagram. In other words if we eliminate an attribute from a table that isn't the primary key, it will not affect other tables.
- 3. It's in the third normal form, because no transitive dependencies exist in the diagram. This defines that every attribute only depends on the primary key. A problem that we had while creating the diagram was that the table form had idUser as a foreign key, in that case everything depended on the 2 keys and not the primary one. With the change made, we deleted this dependency and normalized our diagram.
- 4. All the keys have a primary key to differentiate each record. Only the table user has a UNIQUE restriction, so multiple accounts can be created with the same mail.

Data inserted from the web to our database:

• Form Table: Data inserted from the create account of our website.

idForm	answer1	answer2	answer3	
224	Yes	Yes	Some of them	
234	No	Some of them	Yes	
244	No	Some of them	Some of them	
254	Yes	No	Yes	
274	Yes	Yes	Yes	
284	No	Some of them	No	
294	Yes	Yes	Yes	
304	Yes	Yes	Yes	
314	No	Some of them	Some of them	
324	Yes	No	Some of them	
334	Yes	Some of them	Some of them	
344	No	No	No	
354	Yes	Yes	Yes	
364	Yes	Yes	Yes	
374	Yes	Yes	Yes	
384	Yes	No	No	

• Use 384

idUser	name	lastName	email	password	userType	age	gender	idForm
84	Marco	Torres	marcotorres258@gmail.com	123123	Player	19	М	224
94	Alvaro	García	alvarogarcia@gmail.com	123123	Player	19	М	234
104	Salo	Dabbha	salodabbha@gmail.com	123123	Player	20	М	244
114	Diego	Araque	diegoaraque@gmail.com	123123	Player	20	М	254
134	Sandra	Castro	sandracastro@gmail.com	123123	PAS Admin	22	F	274
144	Paul	Fernandez	paulfernandez@hotmail.com	60360924	Player	18	М	284
154	Pablo	Hernandez	pablohernandez@yahoo.com	n983-ryhus	PAS Admin	25	0	294
164	Jorge	DeSousa	JorgeSousa@hotmail.com	936ey02yh	PAS Admin	30	М	304
174	Cristina	Vazquez	cristinavazquez@gmail.com	893yf97db	Player	27	F	314
184	Ana	Herrero	anaherrero@gmail.com	08ghdpadb-d	Player	19	F	324
194	Sergio	Villalobos	sergiovillalobos@hotmail.com	bdiybeiyb72	Player	22	М	334
204	Cristiano	Ronaldo	cr7@gmail.com	cr7-bchebc	Player	37	М	344
214	Javier	villanueva	javiVilla@hotmail.com	nb8370d	Player	21	0	354
224	Iker	Torres	ikersin@hotmail.com	98duuda	PAS Admin	27	М	364
244	Diego	Fernandez	diego234@gmail.com	ibbdyibe291e	Player	21	М	384
254	Luis	Ocampo	lucho@icloud.com	inodun212e	Player	21	0	394

• Level Table: Data created in the game and actualized in the API. Because heroku's free version didn't give us super user permits to use triggers. But trigger scripts are included in our DB/Scripts path.

idLevel	levelName	avgScore	totalDeaths	totalTries	amountGameRuns
4	Mountains	68.8889	28	7	9
14	The City	33	67	12	10
24	North Pole	32.8571	47	8	7

GameRun Table: Data created in the game and inserted through the API

idGameRun	idUser	idLevel	score	deaths	tries
694	324	4	60	4	1
704	324	4	70	3	1
714	324	4	100	0	1
724	324	4	50	5	1
734	324	4	80	2	1
744	324	14	10	9	1
754	324	14	10	9	1
764	324	14	60	4	1
774	324	14	30	7	2
784	324	14	20	8	2
794	324	24	20	8	2
804	324	24	20	8	1
814	324	24	40	6	1
824	324	24	10	9	1
834	324	24	30	7	1
844	134	4	80	2	0