COMS20700 Databases: Coursework #3

Report

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Abstract

This report represents an outline of the Databases third coursework. The aim of this coursework is to design and implement, in a group of four, a database for an online multiplayer social gaming network similar to the Game Centre on iOS. Section 1 includes a brief summary of our approach. In Section 2 we mention what decisions and assumptions regarding the specification we have made. We then continue with detailing what the system we implemented can do (in Section 3), by going through the SQL statements requested by the client. Section 4 discusses conclusions as well as future improvements, while Sections 5 and 6 include References and Appendices.

1 Introduction

2 Design and Implementation

Schema

Database dump

3 Results and Evaluation

Question 1

Question 2

Question 3

Question 4

Question 5

Question 6

Question 7

Question 8

Question 9

Question 10

4 Conclusions

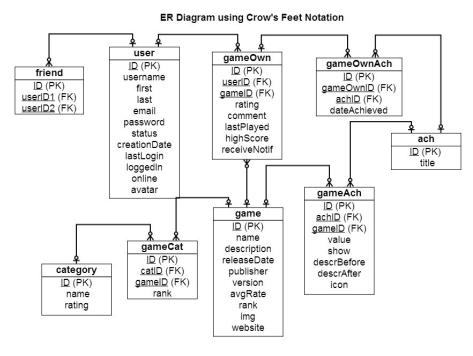
5 References

In addition to the lecture slides, we have used the following resources in order to fully understand the concepts used in this assignment and to be able to easily work with PostgreSQL:

- 1. http://en.wikipedia.org/wiki/Game_Center
- 2. http://www.postgresql.org/docs
- 3. http://www.tutorialspoint.com/postgresql
- 4. Database Systems: A Practical Approach to Design, Implementation and Management by T. Connolly & C. Begg

6 Appendices

Appendix A: ER Diagram



Appendix B: Data Types

Attribute name	Data type	Description	Attribute name	Data type	Description
friend			category		
id	serial*	1000000	id	serial	and the source of
userld1	integer	Not null	name	varchar	255, Not null
userld2	integer	Not null	rating	integer	
user			gameCat		
id	serial		id	serial	CONT. PROPERTY.
username	varchar	50, Not null	catld	integer	Not null
first	varchar	25, Not null	gameld	integer	Not null
last	varchar	25, Not null	rank	integer	
email	varchar	50, Not null	game		
password	varchar	50, Not null	id	serial	
status	text		name	varchar	255
creationDate	date	Not null	description	text	
lastLogin	timestamp	With time zone	releaseDate	date	Not null
loggedin	boolean	Not null	publisher	varchar	255, Not null
online	boolean	Not null	version	integer	
avatar	varchar	255	avgRate	integer	
gameOwn			rank	integer	
id	serial		img	varchar	255
userld	integer		website	varchar	255
gameld	integer			gameAch	3,000
rating	integer		id	serial	
comment	text	1.50 × 100 × 100 × 100 × 100	achld	integer	Not null
lastPlayed	timestamp	With time zone	gameld	integer	Not null
highScore	double precision	Not null, default 0	value	integer	Not null
receiveNotif	boolean	Not null, default true	show	boolean	Not null
gameOwnAch			descrBefore	text	
id	serial	0.9.00	descrAfter	text	Manager 1
gameOwnId	integer	Not null	icon	varchar	255
achld	integer	Not null	ach		
dateAchieved	timestamp	With time zone	id	serial	
Taran and and	v		title	varchar	50. Notnull

^{*} Serial = autoincrementing integer

Appendix C: Mark Allocation

Name	Allocated Mark	Signature
Liban Abdulkadir	0.25	L.A
Ana Dumitraş	0.25	A.D
Andra Irimia	0.25	A.I
Ioan Troană	0.25	I.T