Group 5

Database Implementation Doc

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Contents

Introduction

List of Updated Database Tables for First Chance Saloon Website

Database Tables

user_profile

Table 1 user_profile, This table describes each user. The primary key is id, each user has email as unique identifier, with user_status_id as foreign key which links a central status table. The password_has is secured using sha2 encryption with a 256 length key.

Field	Type	Primary	Foreign
id	int	Yes	
password_hash	Varchar(200)		
first_name	Varchar(50)		
surname	Varchar(100)		
email	Varchar(100)	(unique)	
date_of_birth	date		
gender_id	int		Yes
gender_preference_id	int		Yes
From_age	int		
To_age	int		
City_id	int		Yes
Travel_distance	int		
Relationship_type_id	Int		Yes
picture	blob		
my_bio	Varchar(1000)		
Black_listed_user	Tiny int		
Black_listed_reason	Varchar(100)		
Black_listed_date	date		
User_status_id	int		yes
is_administrator	boolean		

match_table

Table 2 match_table, This table lists the matches for a user, Primary Key for each match is id, with foreign keys(match_user_id_1, match_user_id_2, match_status_id) linking users and foreign key - communication_id identifying if there is an initial communication between matches.

Field	Type	Primary	Foreign Key
id	int	yes	
match_user_id_1	int	(composite unique)	yes
match_user_id_2	int	(composite unique)	yes
match_date	datetime		
response_date	datetime		
user_id_1_interest_level	int		
user_id_2_interest_level	int		
communication_id	int		yes
User_1_match_status_id	Int		yes
User_1_match_status_date	Datetime		

User_2_match_status_id	int		yes
User_1_match_status_date	Datetime		
system_generated_match	boolean		

user_communication

Table 3 user_communication, This table is the communications table between user, Primary Key for each communication is id, with foreign keys(from_user_id, to_user_id status_id) linking users and foreign key - black_listed_word_id identifying inappropriate communications made by users. Black listed communications will be blocked and if a predefined quota is reached by a user then their account will be suspended. When a reply to a communication is recorded, a link is established to the previous communication in order to allow the conversation thread to be maintained.

Field	**Type**	**Primary**	**foreign**
id	int	Yes	
from_user_id	int		yes
communication_datetime	datetime		
message	Varchar(140)		
status_id	int		yes
Status_date	date		
to_user_id	int		yes
replying_to_communication_id	int		yes
black_listed	boolean		
Black_listed_date	datetime		
Black_listed_word_id	int		yes

black_list_word

Table 4 black_list_words, This Table contains a list of black listed words, it is used to check if the user uses inappropriate language and block any communication where one of the words are identified. Primary Key is id which is unique to each black listed word. If a user reaches a predefined quota of inappropriate communications then their account will be suspended. In order to prevent offence to people who have access to the database table, we have encrypted the word using md5 encryption, while this is no longer considered the securest form of encryption, it serves a purpose in this instance.

Field	**Type**	**Primary**
id	int	yes
word	Varchar(100)	unique

user_interests

Table 5 user_interests, This table contains the lists of interests a user has. Primary key is user_interest_id.

Field	**Type**	**Primary**	**Foreign**
Id	Int	yes	
Interest_id	Int	Unique (composite)	Yes
User_id	Int	Unique (composite)	Yes

interests

Table 6 interests, This Table contains a master list of interests a user may have, it is used by the match table and user interests table. Primary Key is interest_id which is unique to each interest

Field	Type	Primary
Interest_id	int	yes
description	Varchar(200)	

Gender

Table 7 Gender Table, This is used by the user Profile table to identify the gender and gender preference of the User. Primary Key - id ,is an identifier for a gender type.

Field	Type	Primary
id	int	yes
Gender_name	Varchar(200)	

city

Table 8, The city Table, is unique to each user and identifies the location and location preference of match, Primary key is User_id. Geo-coordinates are recorded for each city so that distance between user locations can be calculated.

Field	Type	Primary
id	int	yes
City	Varchar(100)	unique
county	Varchar(100)	
geo_x	float	
geo_y	Float	

relationship_type

Table 9 Relationship Type, is used by the user Profile table to identify the relationship type the user seeks. Primary Key - id, is an identifier for a relationship type.

Field	Type	Primary
id	Int	yes
Relationship_type	Varchar(200)	unique

status

Table 10 Status_master Table, Primary Key - id, is an identifier for user status. The status table stores status for the user profile, match table and user communications. These are separated using a Boolean indicating which status relates to which table.

Field	Type	Primary
id	Int	yes
Status_description	Varchar(100)	
is_user_status	Boolean	
is_match_table_status	Boolean	
is_user_communication_status	Boolean	

Stored Procedures

generate_matches

This stored procedure can be called with a from and to user profile id to support processing either a single user profile or a range of profiles. When executed it carries out the following steps:

- Get a list of new or active user profiles and for each one do the following
  - Identify a list of matches based on their preferences who are within the target distance of their city
  - Exclude profiles that they have already been matched against
  - Insert any new matches into the match table, these will be flagged as auto generated.

When both users log onto the system they will be able to browse their list of matches and the auto generated matches will be listed. Each user can status a match with options such as Like, Maybe or Goodbye. If status of Goodbye is selected then this match will never be presented to the user again.