**Group 5**

Database Implementation Doc

Mary Cronin - 0510661

Adrian O Sullivan- 16230124

Deirdre Shanahan- 16230256

Cornelius Broderick – 9119124

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# 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.