**DB Design for AirAid Application Project**

**Table 1: users**

This is the main table that stores critical info of all AirAid users (clients and servers)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **user\_id** | **login\_name** | **password** | **first\_name** | **last\_name** | **email** | **phone\_number** | **city** | **province** | **country** | **rating** |
| 1 | avinash007 | AirAid2016 | Avinash | Verma | avi@gmail.com | 6133046958 | Ottawa | ON | Canada | 4 |
| 2 | swar24 | Password1 | Swaroop | Srinivasab | swar@gmail.com | 6138508904 | Ottawa | ON | Canada | 3 |
| 3 | vader | realskywalker | Anakin | Skywalker | jedi@galaxy.com | 6130001111 | Ottawa | ON | Canada | 1 |

**Note: Password will be stored as MD5 hash**

**Table 2: categories**

This table will contain different categories of tasks/problems

|  |  |  |
| --- | --- | --- |
| **category\_id** | **category** | **description** |
| 1 | Household | Help with fixes around the house hold. Handy man work |
| 2 | Tutoring | Help with course work and academics |
| 3 | Auto | Help with fixing car issues or car trading |
| 4 | Travel and Accommodation | Help with Travel, accommodations and ride sharing |
| 5 | Health | Assistance with health related issues |

**Table 3: tasks**

This table will contain tasks and their respective description and info

* user\_id is a foreign key to user\_id in users table
* only users who want to take on role of a server will have an entry into this table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **task\_id** | **category\_id** | **user\_id** | **task\_name** | **description** | **latitude** | **longitude** | **task\_duration** |
| 1 | 2 | 1 | Calculus | I need help in completing by grade 10 math assignment | 45.6325 | -75.3652 | 18 |
| 2 | 1 | 2 | Dry Wall | I need help with fixing a hole in my dry wall | 46.8524 | -71.8976 | 48 |

**Note**: **task duration is in hours**

**Table 4: client\_settings**

This table contains settings of a user as a client, where he can set the category of tasks and the radius in which he wants the AI to look for suitable tasks

* user\_id is a foreign key to user\_id in users table
* only users who want to take on role of a client will have an entry into this table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **id** | **user\_id** | **category\_id** | **latitude** | **longitude** | **radius** |
| 1 | 2 | 1 | 44.6325 | -75.3652 | 30 |
| 2 | 3 | 2 | 47.8524 | -71.8976 | 15 |

**Note: radius is in km**

**Table 5: client\_bids**

This table contains the bids by clients to win the contract to execute a task set by a server

* client\_id is a foreign key to user\_id in roles table

|  |  |  |  |
| --- | --- | --- | --- |
| **id** | **client\_id** | **task\_id** | **bid** |
| 1 | 2 | 1 | 30 |
| 2 | 3 | 1 | 100 |

**Note: bid is numerical value in dollars that the client has agreed to complete a task for**

**Table 6: task\_relation**

This table links the tasks to servers and clients so we know the roles in the exchange of services

* task\_id is a foreign key to task\_id in tasks table
* server\_id is a foreign key to user\_id in users table
* client\_id is a foreign key to user\_id in roles table
* An entry gets put into this table when a server accepts a clients’ bid for a task

|  |  |  |  |
| --- | --- | --- | --- |
| **id** | **task\_id** | **server\_id** | **client\_id** |
| 1 | 1 | 1 | 2 |

**Note: This info tells us that avinash007 is the server and swar24 is the client who have agreed to execute transaction for task\_id 1**

**Table 7: messages**

This table stores and archives the chat messages between users within the AirAid application

* sender\_id is a foreign key relation to user\_id in users table
* recipient\_id is a foreign key relation to user\_id in users table
* message\_read, is a Boolean -> 0 (pending), 1 (read)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **message\_id** | **sender\_id** | **recipient\_id** | **message** | **message\_read** |
| 1 | 2 | 1 | Hey what time should I meet you to help you with the assignment | 1 |
| 2 | 1 | 2 | Hey .. how about 4 pm today. Here is my address…. | 1 |