### **DirectLine DB Analysis**

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# Step 1: Identify Entities, Attributes, and Primary Keys

Entity	Attributes	Primary Key
users	Contact_id, first_name, last_name, password, group, business_code, id, notifid, taskid	id
tasks	problem, date_time, descriptions, group, points, previous_tasks, <i>notifid,</i> id	id
notifications	todo, completed, points, rewards_claimed	id
contactlist	group, first_name, business_code, phone_num, id	id

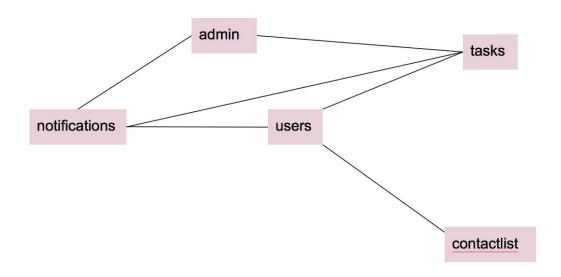
admin	submitted_tasks, completed_tasks, award_points, notifid Taskid, id	id

## **Step 2: Define Relationships Between the Entities**

Entity 1	Entity 2	How Related? (2 sentences)	Relationship Type (1:1, 1:N, M:N)
user	contactlist	Each user has 1 contact list     The same contact list can be used by many     users	1:N
user	notifications	<ol> <li>Each user can have many notifications</li> <li>A notification can only go to one user</li> </ol>	1:N
users	tasks	Each user can have multiple tasks     A task can only be assigned to one user	1:N

notifications	tasks	Each task will use 1 notification     Each notification will only list 1 task	1:N
notifications	admin	<ol> <li>Each admin can send many notifications</li> <li>Each notification will only list 1 task</li> </ol>	1:N
admin	tasks	Each admin can assign many tasks     Each task will only list 1 admin	1:N
user	admin	No relationship	
notification	contactlist	No relationship	
admin	contactlist	No relationship	
tasks	contactlist	No relationship	

Step 3: Draw your Entity-Relationship Diagram (Hand-drawn is okay!!!)



#### Step 4: Specify Tables, Fields, and Data Types

Fill out a chart for each table to be included in the database. YOU MAY NEED MORE TABLES THAN THERE ARE HERE. The ones here are just to get you started. Mark the primary key with a double asterisk (\*\*). Mark any foreign keys with the letters "fk" in parentheses, (fk).

Name of 1st Table: users

Field Name	Data Type
contactid	Text
first_names	Text
last_names	Text
passwords	Text
groups	Text
business_codes	Text
id	integer
notifid (fk)	integer

taskid (fk)	integer
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#### Name of 2<sup>nd</sup> Table: tasks

Field Name	Data Type
id	integer
problems	text
dates	text
descriptions	text
userid (fk)	integer
points	integer
previous_tasks	text
Notifid (fk)	integer

#### Name of 3rd Table: notifications

Field Name	Data Type
id	integer
assigned_tasks	text
completed	text
points	integer
rewards_claimed	text

Name of 4th Table: contactlist

Field Name	Data Type
id	integer
group	text
first_names	text
last_names	text
phone_nums	text

#### Name of 5th Table: admin

Field Name	Data Type
id	integer
submitted_tasks	text
completed_tasks	text
award_points	integer
Notifid (fk)	text
Taskid (fk)	text