# Database Design Information and Explanation

Entities and Attributes  
  
1. Client Entity (Independent):  
Attributes:  
C\_ID (Primary Key)  
C\_NAME  
business  
phone  
email  
address  
  
2. Campaign Entity (Derived from Client):  
Attributes:  
CA\_ID (Primary Key)  
CA\_NAME  
C\_ID (Foreign Key referencing Client.C\_ID)  
Derived Nature:  
A campaign cannot exist without a client, making it a derived entity of Client.  
  
3. Live Announcement (LA) Entity (Derived from Campaign):  
Attributes:  
LA\_ID (Primary Key)  
la\_request\_time  
La\_Name  
La\_info  
start\_date  
end\_date  
days  
CA\_ID (Foreign Key referencing Campaign.CA\_ID)  
Derived Nature:  
A live announcement is directly tied to a campaign, making it dependent on the Campaign entity.  
  
4. Interview Entity (Derived from Campaign):  
Attributes:  
IN\_ID (Primary Key)  
IN\_NAME  
IN\_TIME  
IN\_DATE  
IN\_INFO  
CA\_ID (Foreign Key referencing Campaign.CA\_ID)  
Derived Nature:  
An interview is directly tied to a campaign, making it a dependent/derived entity of Campaign.  
  
5. Giveaways Entity (Derived from Campaign):  
Attributes:  
G\_ID (Primary Key)  
G\_NAME  
G\_TIME  
G\_INFO  
G\_DATE  
CA\_ID (Foreign Key referencing Campaign.CA\_ID)  
Derived Nature:  
A giveaway is directly tied to a campaign, making it a derived entity of Campaign.  
  
Relationships  
  
1. Client to Campaign (1:N):  
A client can have multiple campaigns.  
Campaign inherits C\_ID as a foreign key to associate it with Client.  
  
2. Campaign to LA/Interview/Giveaways (1:N):  
Each campaign can have multiple associated LAs, Interviews, and Giveaways.  
LA, Interview, and Giveaways inherit CA\_ID as foreign keys to establish their dependency on Campaign.  
  
Justification for Derived Entities  
  
Campaign as a Derived Entity:  
A campaign depends on the existence of a client. A client can exist without a campaign, but a campaign cannot exist independently of a client.  
  
LA, Interview, and Giveaways as Derived Entities:  
These entities depend on the Campaign entity for their existence. An LA, Interview, or Giveaway cannot exist without being associated with a campaign.  
  
Entities and Attributes  
  
1. Admin Sales Entity  
Attributes:  
SA\_ID (Primary Key)  
name  
email  
phone  
last\_login  
password  
  
2. Admin Production Entity  
Attributes:  
PA\_ID (Primary Key)  
name  
email  
phone  
last\_login  
password  
  
3. Request Entity (Communication between Admin Sales and Admin Production)  
Attributes:  
Request\_ID (Primary Key)  
SA\_ID (Foreign Key referencing Admin Sales.SA\_ID)  
PA\_ID (Foreign Key referencing Admin Production.PA\_ID)  
Request\_time  
Request\_info  
  
4. Log Entity (Dashboard Entries by Production Admin)  
Attributes:  
Log\_ID (Primary Key)  
Log\_Type (LA, Interview, or Giveaway)  
start\_date  
end\_date  
time  
days  
Campaign\_ID (Foreign Key referencing Campaign.CA\_ID)  
Entity\_ID (Foreign Key referencing LA.LA\_ID, Interview.IN\_ID, or Giveaway.G\_ID)  
log\_text  
created\_by (PA\_ID referencing Admin Production.PA\_ID)  
  
5. RJ Entity (Radio Jockey)  
Attributes:  
RJ\_ID (Primary Key)  
name  
email  
password  
last\_login  
  
6. Task Update Entity (Task Completion by RJ)  
Attributes:  
Task\_ID (Primary Key)  
Log\_ID (Foreign Key referencing Log.Log\_ID)  
RJ\_ID (Foreign Key referencing RJ.RJ\_ID)  
update\_time  
status (e.g., Completed, Pending, Concern Raised)  
comments (Optional, for concerns)  
  
7. Super Admin Entity  
Attributes:  
SuperAdmin\_ID (Primary Key)  
name  
email  
password  
  
Relationships  
  
1. Admin Sales and Client (1:N)  
An Admin Sales can view and edit any client's campaigns.  
Attributes in the relationship: Login\_ID, edit\_name.  
  
2. Admin Production and Client (1:N):  
An Admin Production can view all campaigns for a client and update logs.  
  
3. Admin Sales and Admin Production (M:N):  
The relationship is represented by the Request entity.  
Captures communication details with attributes like Request\_time and Request\_info.  
  
4. Production Admin and Logs (1:N):  
Production Admin creates logs (Log entity) for campaigns.  
  
5. RJ and Logs (1:N):  
RJs interact with logs to complete or raise concerns about tasks.  
RJ updates are captured in the Task Update entity.  
  
6. Super Admin and All Entities:  
Super Admin has a direct relationship with all entities and can access all attributes.  
  
Functionalities to Represent in ER Diagram  
  
Log Management by Admin Production:  
Production Admin creates logs for LA, Interview, and Giveaways.  
Each log is time-based (12 am–12 am), associated with a Campaign, and stores specific data (start\_date, end\_date, days, log\_text).  
  
RJ Dashboard and Updates:  
RJs view time-based tasks from logs.  
Tasks have checkboxes for completion.  
Updates are stored in Task Update, including update\_time, status, and optional comments.  
  
Concern Raising by RJ:  
RJs can raise concerns for tasks.  
Concerns are stored in Task Update with comments, visible to both Admin Sales and Admin Production.  
  
Communication Between Admins:  
Requests between Admin Sales and Admin Production are managed via the Request entity.  
Includes details like Request\_ID, Request\_time, and Request\_info.  
  
Super Admin Privileges:  
Super Admin has access to all entities and attributes, allowing management, monitoring, and updates.  
  
Visualizing the Diagram  
The ER diagram would show:  
- Admin Sales linked to Client with a 1:N relationship (view and edit campaigns).  
- Admin Production linked to Client with a 1:N relationship (view and create logs).  
- Campaign as a derived entity of Client.  
- LA, Interview, and Giveaways as derived entities of Campaign.  
- Log as an entity linked to Campaign and referenced by LA, Interview, and Giveaways.  
- RJ linked to Log for task updates.  
- Request linking Admin Sales and Admin Production with a M:N relationship.