**Schema Overview By Ian Cook; Maria Kabeer and Parmeet Arora**

The schema is designed to manage data related to crowdfunding campaigns, their categories, subcategories, and the contacts associated with them. It consists of four main tables:

1. **Contacts**
2. **Category**
3. **Subcategory**
4. **Campaign**

Each table has a primary key (PK), which uniquely identifies each record within the table, and some tables also have foreign keys (FK), which create relationships between different tables.

**Tables and Their Fields**

**1. Contacts**

* **contact\_id (PK)**: A unique identifier for each contact. It is a primary key, meaning it uniquely identifies each record in the Contacts table.
* **first\_name (VARCHAR)**: The first name of the contact.
* **last\_name (VARCHAR)**: The last name of the contact.
* **email (VARCHAR)**: The email address of the contact.

**Purpose**: This table stores information about individuals or entities (contacts) that may be associated with a campaign.

**2. Category**

* **category\_id (PK)**: A unique identifier for each category. It is a primary key.
* **category (VARCHAR)**: The name of the category.

**Purpose**: This table stores the different categories to which a campaign can belong, such as "Technology," "Art," "Music," etc.

**3. Subcategory**

* **subcategory\_id (PK)**: A unique identifier for each subcategory. It is a primary key.
* **subcategory (VARCHAR)**: The name of the subcategory.

**Purpose**: This table stores subcategories that are more specific than the general categories. For example, within the "Technology" category, subcategories might include "Gadgets," "Software," etc.

**4. Campaign**

* **cf\_id (PK)**: A unique identifier for each crowdfunding campaign. It is the primary key.
* **contact\_id (FK)**: A foreign key that links the campaign to a contact in the Contacts table. It identifies the person or entity responsible for the campaign.
* **company\_name (VARCHAR)**: The name of the company or individual running the campaign.
* **description (VARCHAR)**: A brief description of the campaign.
* **goal (DOUBLE)**: The financial goal of the campaign, representing the amount of money the campaign aims to raise.
* **pledged (DOUBLE)**: The amount of money that has been pledged to the campaign so far.
* **outcome (VARCHAR)**: The result or status of the campaign (e.g., "successful," "failed").
* **backers\_count (INT)**: The number of backers who have supported the campaign.
* **country (VARCHAR)**: The country in which the campaign is being run.
* **currency (VARCHAR)**: The currency in which the campaign's goal and pledges are denominated.
* **launched\_date (DATE)**: The date on which the campaign was launched.
* **end\_date (DATE)**: The date on which the campaign is scheduled to end.
* **category\_id (FK)**: A foreign key that links the campaign to a category in the Category table, indicating the type of campaign.
* **subcategory\_id (FK)**: A foreign key that links the campaign to a subcategory in the Subcategory table, providing more specific classification.

**Purpose**: The Campaign table stores detailed information about each crowdfunding campaign, including its financial goals, outcomes, and associated categories. It ties together the contacts, categories, and subcategories through foreign keys.

**Relationships Between Tables**

* **One-to-Many Relationship**:
  + **Contacts to Campaigns**: A single contact can be associated with multiple campaigns. This is established through the contact\_id foreign key in the Campaign table.
  + **Category to Campaigns**: A single category can include multiple campaigns. This is established through the category\_id foreign key in the Campaign table.
  + **Subcategory to Campaigns**: A single subcategory can include multiple campaigns. This is established through the subcategory\_id foreign key in the Campaign table.

**Usage Scenarios**

* **Campaign Management**: The schema allows for managing and tracking different crowdfunding campaigns, including their financial progress and outcomes.
* **Categorization and Analysis**: By linking campaigns to specific categories and subcategories, the schema enables easy categorization and analysis of different types of campaigns.
* **Contact Tracking**: The schema also provides a way to manage and track the individuals or entities associated with each campaign.

This structure is suitable for applications involving the management of crowdfunding campaigns, enabling comprehensive tracking, categorization, and reporting of campaign-related data.