

Conception d'une base de données pour un blog

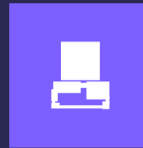
Online BlogDatabase

Created by: Mounir Maimouni

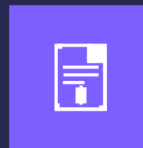




System Entity Identification



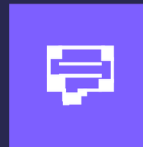
User



Article



Category



Comment

Attributes for Each Entity

User

- id_user
- name
- email

Article

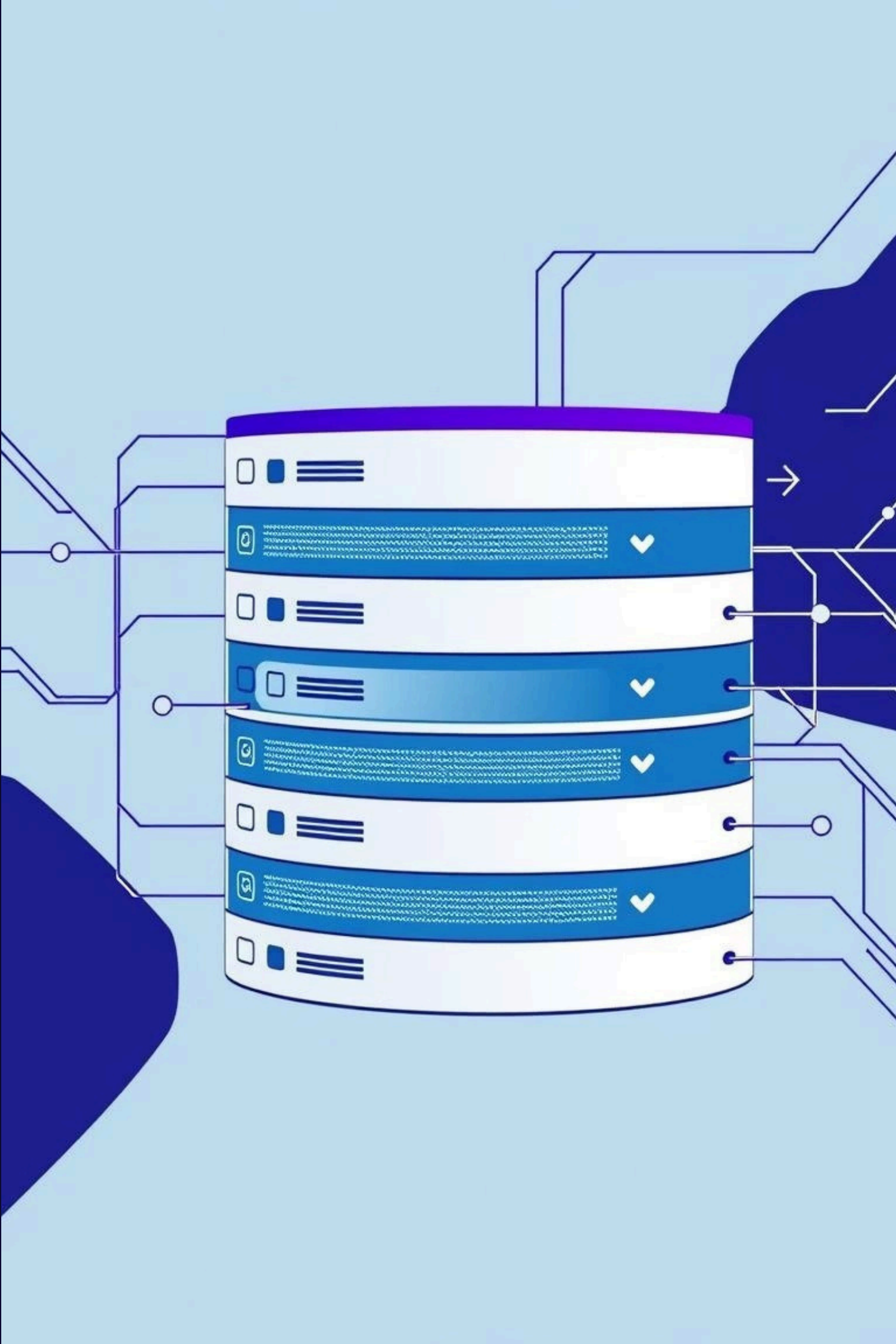
- id_article
- title
- content
- publication_date
- status

Category

- id_category
- category_name

Comment

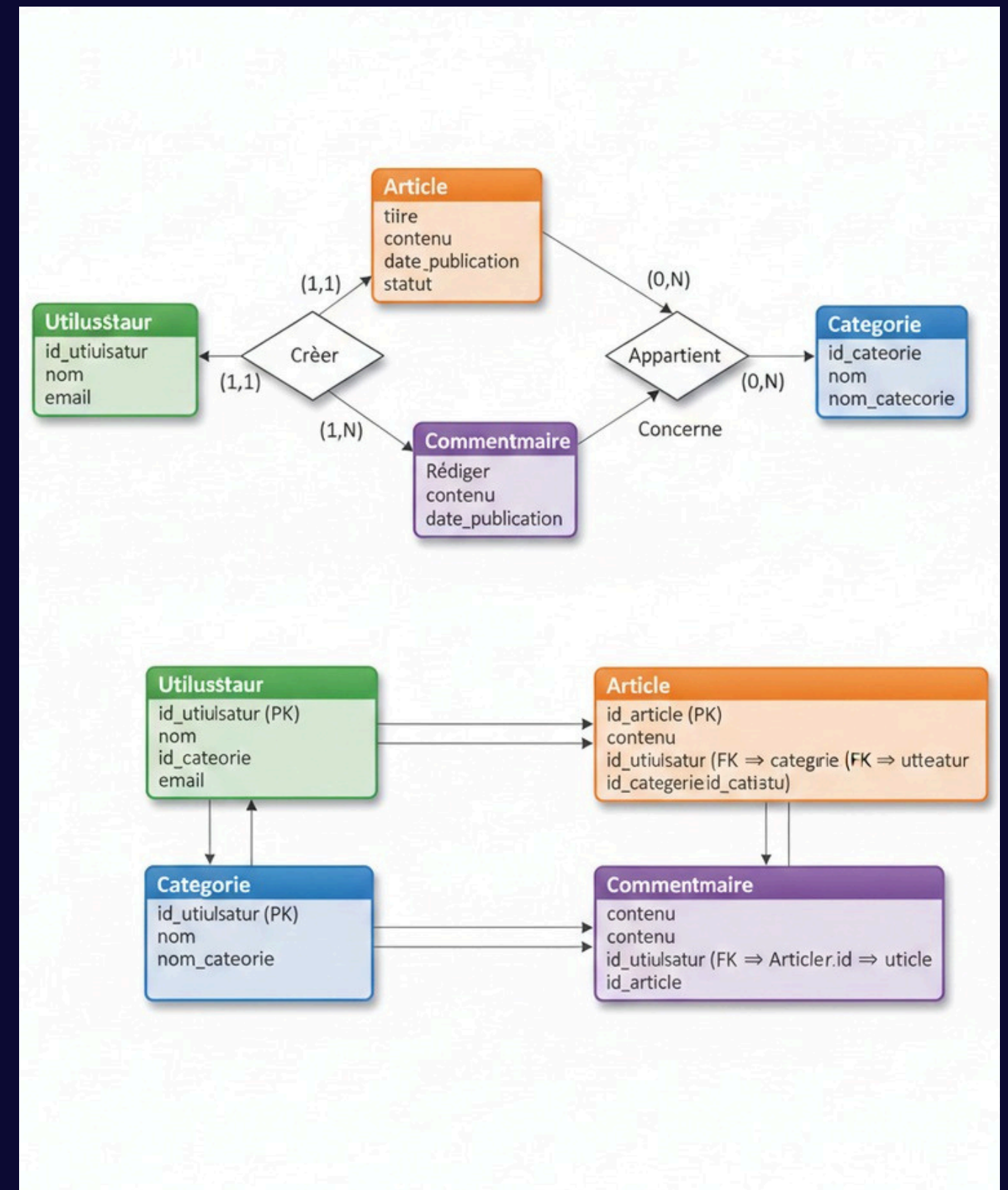
- id_comment
- content
- publication_date



Entity Relationships and Cardinalities

- A user can create one or more articles (1,N)
- An article is written by a single user (1,1)
- An article belongs to a single category (1,1)
- A category can contain several articles (0,N)
- A user can write several comments (0,N)
- A comment is written by a single user (1,1)
- An article can receive several comments (0,N)
- A comment concerns a single article (1,1)

Blog MCD and MLD



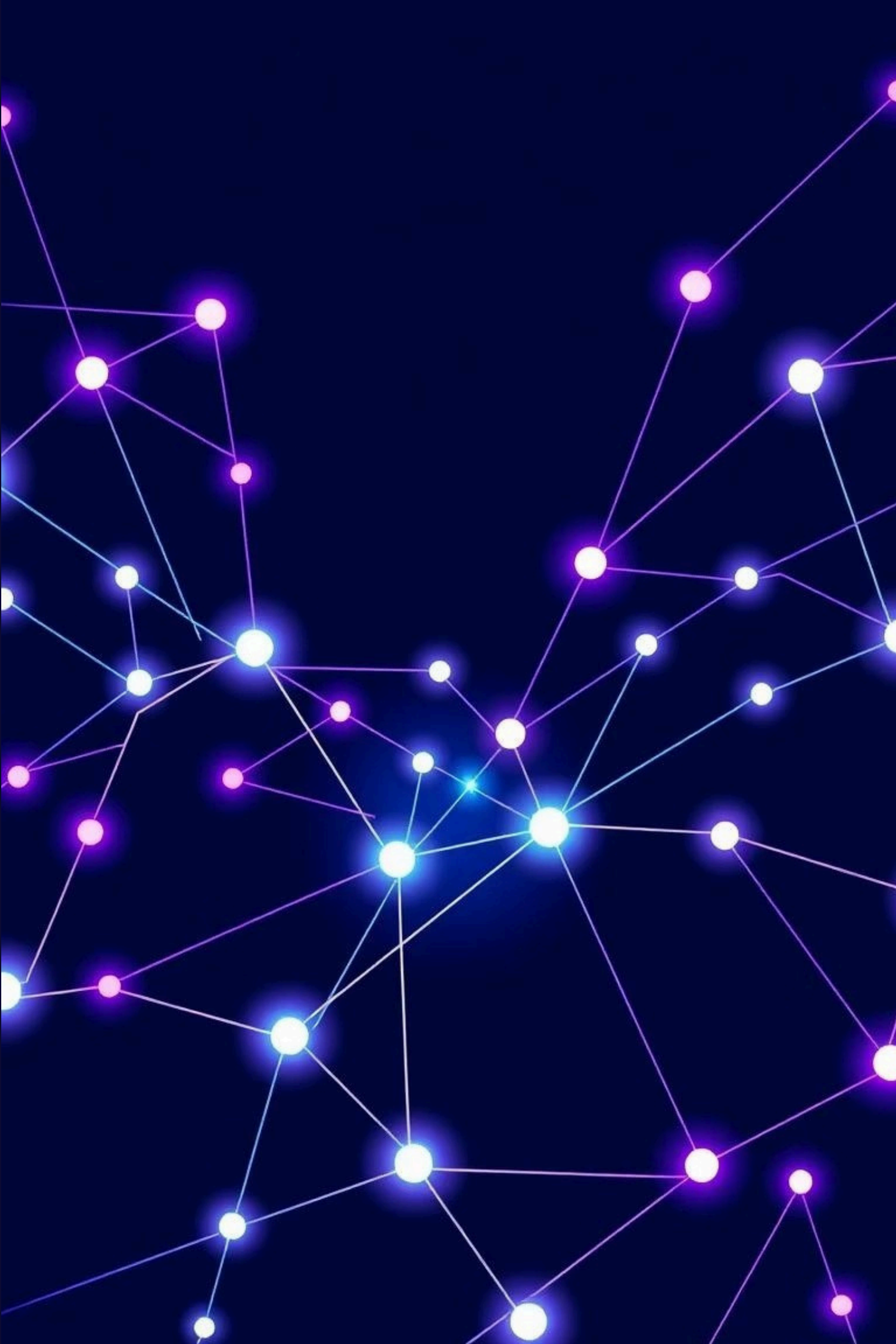
SQL Database Creation Script

```
-- Table: Users
CREATE TABLE Users (
  id_user INT PRIMARY KEY AUTO_INCREMENT,
  name VARCHAR(255) NOT NULL,
  email VARCHAR(255) UNIQUE NOT NULL
);

-- Table: Categories
CREATE TABLE Categories (
  id_category INT PRIMARY KEY AUTO_INCREMENT,
  category_name VARCHAR(255) UNIQUE NOT NULL
);

-- Table: Articles
CREATE TABLE Articles (
  id_article INT PRIMARY KEY AUTO_INCREMENT,
  title VARCHAR(255) NOT NULL,
  content TEXT NOT NULL,
  publication_date DATETIME DEFAULT CURRENT_TIMESTAMP,
  status ENUM('published', 'draft') DEFAULT 'draft',
  id_user INT NOT NULL,
  id_category INT NOT NULL,
  FOREIGN KEY (id_user) REFERENCES Users(id_user),
  FOREIGN KEY (id_category) REFERENCES Categories(id_category)
);

-- Table: Comments
CREATE TABLE Comments (
  id_comment INT PRIMARY KEY AUTO_INCREMENT,
  content TEXT NOT NULL,
  publication_date DATETIME DEFAULT CURRENT_TIMESTAMP,
  id_user INT NOT NULL,
  id_article INT NOT NULL,
  FOREIGN KEY (id_user) REFERENCES Users(id_user),
  FOREIGN KEY (id_article) REFERENCES Articles(id_article)
);
```

Thank You