

## Database Users

### Actors on the Scene

1. **Database Administrators (DBAs):**

- Manage the database system, authorize access, ensure efficiency, and handle backup and recovery.

2. **Database Designers:**

- Design the database schema and structure, working with DBAs and users to meet requirements.

3. **End Users:**

- **Casual Users:** Occasionally query the database.
- **Naive Users:** Use standard queries via predefined interfaces (e.g., bank tellers).
- **Sophisticated Users:** Write complex queries and use advanced database functionalities.
- **Standalone Users:** Maintain personal or small business databases with off-the-shelf software.

4. **Application Programmers:**

- Develop software applications that interact with the database, ensuring efficient data handling.

### Workers Behind the Scene

1. **System Designers and Implementers:**

- Develop the DBMS software, including components like query processors and transaction managers.

2. **Tool Developers:**

- Create utilities for database design, performance monitoring, and management (e.g., data modeling tools).

3. **Operators and Maintenance Personnel:**

- Perform daily operations, handle system backups, and maintain hardware to ensure continuous database availability.