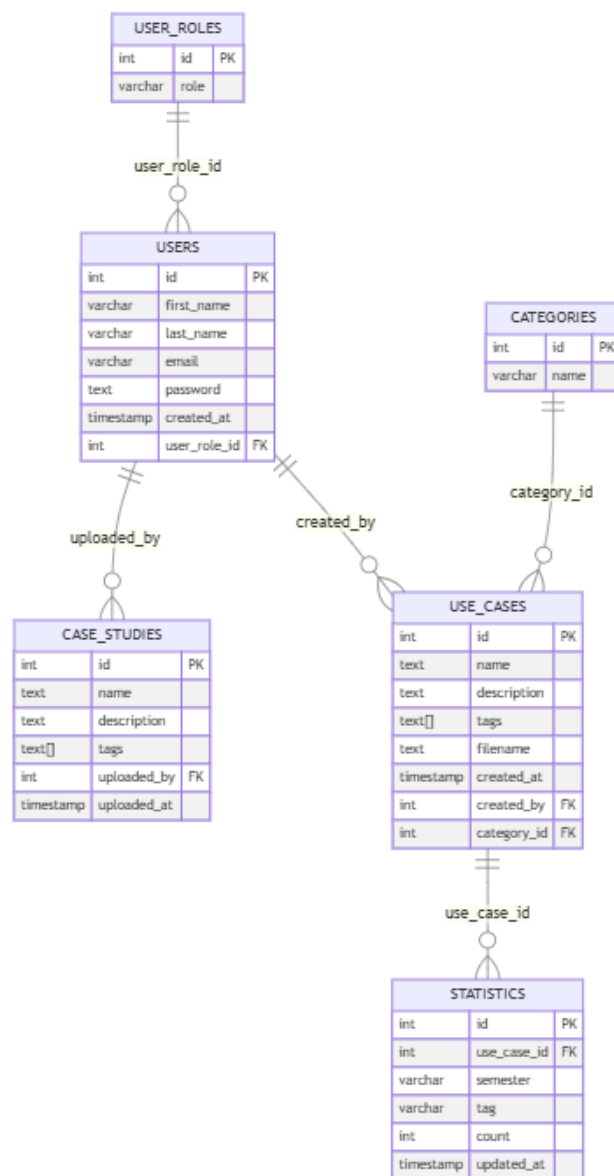


ERD – MOP – WebDev- Ishika Mandal (s223973381)

ERD Visualization



Mermaid Code

erDiagram

```
USERS {  
    int id PK  
    varchar first_name  
    varchar last_name  
    varchar email  
    text password  
    timestamp created_at  
    int user_role_id FK  
}
```

```
USER_ROLES {  
    int id PK  
    varchar role  
}
```

```
CASE_STUDIES {  
    int id PK  
    text name  
    text description  
    text[] tags  
    int uploaded_by FK  
    timestamp uploaded_at  
}
```

```
USE_CASES {  
    int id PK  
    text name  
    text description  
    text[] tags  
    text filename
```

```
timestamp created_at
int created_by FK
int category_id FK
}
```

```
CATEGORIES {
  int id PK
  varchar name
}
```

```
STATISTICS {
  int id PK
  int use_case_id FK
  varchar semester
  varchar tag
  int count
  timestamp updated_at
}
```

%% Relationships

```
USERS ||--o{ CASE_STUDIES : "uploaded_by"
USERS ||--o{ USE_CASES : "created_by"
USER_ROLES ||--o{ USERS : "user_role_id"
USE_CASES ||--o{ STATISTICS : "use_case_id"
CATEGORIES ||--o{ USE_CASES : "category_id"
```

Database Schema Overview

Entities & Relationships:

- **USERS:** Core user management with role-based access
- **USER_ROLES:** Defines user permissions and access levels
- **CASE_STUDIES:** Repository of case study documents uploaded by users
- **USE_CASES:** Categorized use case definitions with file attachments

- **CATEGORIES:** Classification system for organizing use cases
- **STATISTICS:** Usage tracking and analytics by semester and tags

Key Features:

- Role-based user management system
- Tag-based content organization
- File management for use cases
- Analytics and usage tracking
- Temporal data with timestamps