1. **Table: User**

**Columns:**

user\_id (primary key),

username,

password,

role (admin, trainee, trainer),

1. **Table: Batch**

**Columns:**

batch\_id (primary key),

name,

start\_date,

end\_date

1. **Table: Course**

**Columns:**

course\_id (primary key),

name,

description,

batch\_id (foreign key referencing Batch table)

1. **Table: Trainee**

**Columns:**

trainee\_id (primary key),

full\_name,

profile\_picture,

gender,

date\_of\_birth,

email,

contact\_number,

degree\_name,

educational\_institute,

cgpa,

passing\_year,

present\_address,

user\_id (foreign key referencing User table)

1. **Table: Trainer**

**Columns:**

trainer\_id (primary key),

full\_name,

profile\_picture,

designation,

joining\_date,

years\_of\_experiewswsnce,

expertises,

contact\_number,

present\_address,

user\_id (foreign key referencing User table)

1. **Table: Assignment**

**Columns:**

assignment\_id (primary key),

title,

description,

batch\_id (foreign key referencing Course table),

trainer\_id (foreign key referencing Trainer table),

deadline

1. **Table: Submission**

**Columns:**

submission\_id (primary key),

assignment\_id (foreign key referencing Assignment table),

trainee\_id (foreign key referencing Trainee table),

submitted\_at,

file\_path,

***uploaded\_at***

1. **Table: ClassroomPost**

**Columns**:

post\_id (primary key),

batch\_id (foreign key referencing Batch table),

trainer\_id (foreign key referencing Trainer table),

content

1. **Table: ClassroomComment**

**Columns:**

comment\_id (primary key),

post\_id (foreign key referencing ClassroomPost table),

~~trainee\_id (foreign key referencing Trainee table),~~

user\_id (foreign key referencing User table)

comment

1. **Table: GroupChat**

**Columns:**

group\_chat\_id (primary key),

batch\_id (foreign key referencing Batch table)

1. **Table: ChatMessage**

**Columns:**

Message\_id (primary key),

group\_chat\_id (foreign key referencing GroupChat table),

sender\_id (foreign key referencing User table),

message,

date\_time

1. **BatchSchedule**

**Columns**:

schedule\_id (primary key),

batch\_id (foreign key referencing Batch table),

course\_id (foreign key referencing Course table),

start\_date,

end\_date

**Relationship**

**User table:**

One-to-One relationship with Trainee table (based on user\_id foreign key)

One-to-One relationship with Trainer table (based on user\_id foreign key)

One-to-Many relationship with ClassroomComment table (based on user\_id foreign key)

**Batch table:**

One-to-Many relationship with Trainee table

One-to-Many relationship with Course table

One-to-Many relationship with Assignment table

One-to-Many relationship with BatchSchedule table

One-to-One relationship with GroupChat table

**BatchSchedule table:**

Many-to-One relationship with Batch table

Many-to-One relationship with Course table

**Course table:**

Many-to-One relationship with Batch table

**Trainee table:**

Many-to-One relationship with Batch table

One-to-One relationship with User table (based on user\_id foreign key)

One-to-Many relationship with Submission table

~~One-to-Many relationship with ClassroomComment table~~

**Trainer table:**

One-to-One relationship with User table (based on user\_id foreign key)

One-to-Many relationship with Assignment table

One-to-Many relationship with ClassroomPost table

~~One-to-Many relationship with ClassroomComment table~~

**Assignment table**:

Many-to-One relationship with batch table

One-to-Many relationship with Submission table

**Submission table:**

Many-to-One relationship with Assignment table

Many-to-One relationship with Trainee table

**ClassroomPost table:**

Many-to-One relationship with Batch table

Many-to-One relationship with Trainer table

One-to-Many relationship with ClassroomComment table

**ClassroomComment table:**

Many-to-One relationship with ClassroomPost table (based on post\_id foreign key)

Many-to-One relationship with User table (based on user\_id foreign key)

~~Many-to-One relationship with Trainer table (based on trainer\_id foreign key)~~

~~Many-to-One relationship with Trainee table (based on trainee\_id foreign key)~~

**GroupChat table:**

One-to-One relationship with Batch table

One-to-Many relationship with ChatMessage table

**ChatMessage table:**

Many-to-One relationship with GroupChat table

Many-to-One relationship with User table