Phase 1 Database Project (ICOM5016 / CIIC4060)

Group Name: "404 Error: Power Not Found"

Group Members and emails:

- Jared Y. López González jared.lopez@upr.edu
- Ruth M. Huaman Allccahuaman ruth.huaman@upr.edu
- José J. Vázquez Pérez jose.vazquez38@upr.edu

Diagrams

ER Diagram

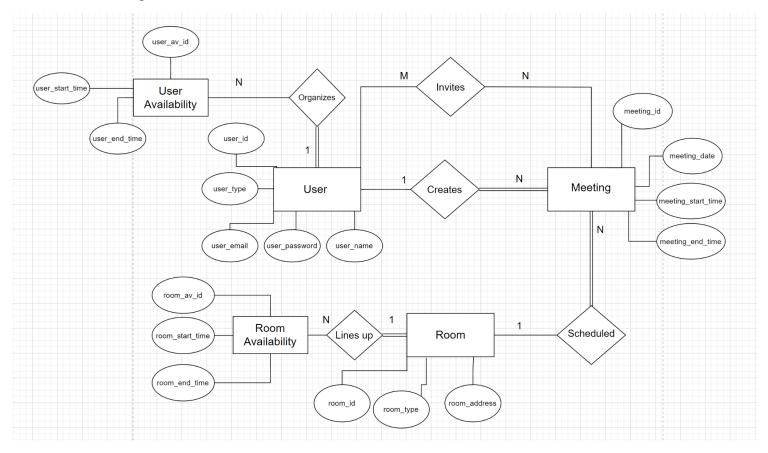
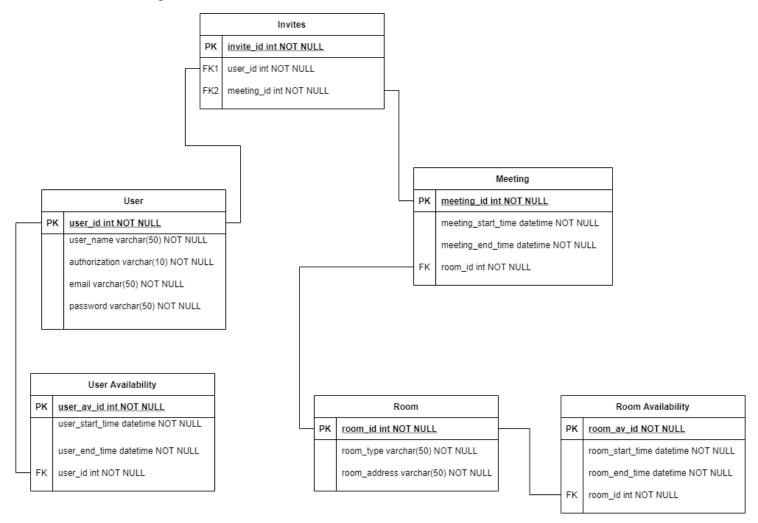


Table Diagram



Entities

User

- **user_id:** is the primary key used to distinguish between each user.
- user_name: is a composite attribute
- authorization: the type of user can be:
 - Admin
 - Staff
 - Profesor
 - student
- user email: is a multivalued attribute
- **user_password:** is an atomic attribute chosen by the user to allow access to its corresponding account.

Room

- **room_id:** is the primary key used to distinguish between each room.
- room_type: the type of user can be
 - Laboratory
 - o Classroom
 - Auditorium
- room_address: is a composite attribute, the location of the room

Meeting

- **meeting_id:** is the primary key used to distinguish between each meeting.
- meeting date: is an atomic attribute
- meeting_start_time: is an atomic attribute
- meeting_end_time: is an atomic attribute
- room id (FK): foreign key to table room

User Availability

- user_av_id: is the primary key used to distinguish between each user availability
- user_start_time: is an atomic attribute,
- user_end_time: is an atomic attribute
- user id (FK): foreign key to table user

Room Availability

- room_av_id: is the primary key used to distinguish between each room availability
- room start time: is an atomic attribute
- room_end_time: is an atomic attribute
- room_id (FK): foreign key to table room

Invites

- user_id (FK1): foreign key to table user
- meeting_id (FK2): foreign key to table meeting

Relationships

User - Invites

• It is a one-to-many relationship because a user can make many invitations but a specific invitation can only be made by one user.

User - User Availability

• It is a one-to-many relationship because a user can make many schedules, but a specific schedule can only be made by one user.

Meeting - Invites

• It is a many-to-one relationship because each single meeting may have many invites referencing it, and/or many invites can reference a single meeting.

Meeting - Room

• It is a many-to-one relationship because there may be many meetings but a meeting will only have one room.

Room - Room Availability

• It is a one-to-many relationship because a meeting can be held in many rooms but only in one room can a meeting be held.