Conception of the DataBase

Entities :

1. User:

- Attributes: ID, Last name, First name, E-mail address, Password, Role (Admin or Collaborator), Authentication ID (foreign key to Authentication\_Admin or Authentication\_Collaborator)

2. Project :

- Attributes: ID, Project name, Description, Administrator ID (foreign key to User)

3. Collaborator:

- Attributes: ID, Project ID (foreign key to Project), User ID (foreign key to User)

4. Event:

- Attributes: ID, Project ID (foreign key to Project), Title, Description, Date, Time, Administrator ID (foreign key to User)

5. Unavailable (Unavailable) :

- Attributes: ID, Collaborator ID (foreign key to Collaborator), Start date, End date

6. Authentication\_Admin (Admin Authentication) :

- Attributes: ID, User ID (foreign key to User), Email, Password

7. Collaborator\_Authentication (Collaborator Authentication):

- Attributes: ID, Collaborator ID (foreign key to Collaborator), Username, Password

Relationships :

1. A User can be associated with several Projects.

- 1:N relationship between User and Project.

2. A Project is managed by a single User (Admin).

- 1:N relationship between User (Admin) and Project.

3. A Project can have several Collaborators.

- 1:N relationship between Project and Collaborator.

4. A Collaborator can participate in only one Project.

- 1:N relationship between Collaborator and Project.

5. A Project can have several Events.

- 1:N relationship between Project and Event.

6. An Event is created by a User (Admin).

- 1:N relationship between User (Admin) and Event.

7. A Collaborator can have several Unavailabilities.

- 1:N relationship between Collaborator and Unavailable.

8. 1:1 relationship between User and Admin\_Authentication for Admin Authentication.

9. 1:1 relationship between Collaborator and Collaborator\_Authentication for Collaborator Authentication.