### Universidad Distrital Francisco José de Caldas

## Facultad de Ingeniería

# Ingeniería de Sistemas



### **Fundamentos de Bases de Datos**

Reporte proyecto

Yaxel Steven Morales Suarez-20212020060

**Carlos Andres Sierra Virguez** 

Bogotá – Colombia mayo 2024

#### STAKEHOLDERS:

#### Stakeholders:

End Users:Our key stakeholders are all those individuals who are committed to improving their health and wellness through regular exercise. These users are looking for a personalized and practical solution to help them achieve their fitness goals, providing them with the tools and support they need to stay motivated and focused on their path to a healthier lifestyle.

Developers and administrators of the "Fitia" app: This group is in charge of designing, developing, maintaining, and optimizing the "Fitia" platform. Their main objective is to ensure that the app works efficiently, securely, and attractively for users, constantly incorporating new features and improvements based on the needs and feedback from the community.

Support and customer service staff: Our support and customer service team is dedicated to providing an exceptional user experience, offering fast and effective assistance with any query, problem, or suggestion related to the app. Their mission is to ensure user satisfaction and trust, building strong and lasting relationships with our community.

Business Model: "Fitia" presents itself as a comprehensive platform designed to offer its users a unique and personalized fitness experience. The app combines exercise routines tailored to individual needs, real-time progress tracking, and valuable health and wellness tips. All of this is offered through a monthly subscription that provides unlimited access to all of the app's premium features, ensuring a complete and enriching experience for users.

### ONTOL

The ontology of the gym database defines the entities and their relationships. Clients have attributes such as client\_id, client\_name, gender, age, height, weight, physical\_condition, training\_goal, and training\_availability. Trainers have attributes including trainer\_id, trainer\_name, gender, and specialty. Activities are characterized by activity\_id, activity\_name, and duration. Trainings consist of training\_id, client\_id, trainer\_id, activity\_id, and date, with client\_id referencing Clients, trainer\_id referencing Trainers, and activity\_id referencing Activities. Memberships include membership\_id, membership\_name, price, and duration. Payments are identified by payment\_id, client\_id, membership\_id, payment\_date, and amount, with client\_id referencing Clients and membership\_id referencing Memberships. Schedules comprise schedule\_id, trainer\_id, activity\_id, day\_of\_week, start\_time, and end\_time, with trainer\_id referencing Trainers and activity\_id referencing Activities. Finally, Training Logs contain log\_id, training\_id, action, and action\_date, with training\_id referencing Trainings.