1. Translate this description into a database design. You may write or draw it out.A diagram of a wall

Description automatically generated

Entities:

1. Climber Profile:

- User ID (Primary Key)

- Username

- Email

- Climbing History

- Performance Data

2. Gym/Route Setter Profile:

- User ID (Primary Key)

- Username

- Email

- Gym Information

- Climbs Configuration

3. Interactive Climbing Wall:

- Wall ID (Primary Key)

- Wall Location

- Climbing Routes

4. Performance Data:

- Record ID (Primary Key)

- Climber ID (Foreign Key)

- Wall ID (Foreign Key)

- Route ID (Foreign Key)

- Date

- Completion Time

- Difficulty Rating

- Comments

5. Climbing Routes:

- Route ID (Primary Key)

- Wall ID (Foreign Key)

- Route Information

- Setter ID (Foreign Key)

- Route Difficulty

6. Feedback:

- Feedback ID (Primary Key)

- Gym/Route Setter ID (Foreign Key)

- Climber ID (Foreign Key)

- Feedback Content

7. Climbing Gym:

- Gym ID (Primary Key)

- Gym Name

- Location

- Gym Managers

Relationships:

- Climbers have multiple Performance Data records.

- Gyms/Route Setters configure Climbing Routes.

- Feedback can be given by Climbers to Gyms/Route Setters.

**2. We use Firestore (NoSQL) to store our application data, why do you think that is? Give a brief explanation.**

**Firestore has lot of benefits like**

* **Flexible Data Structure**: You can store data in Firestore without deciding on a fixed structure beforehand. This is handy when your data changes as you add new features.
* **Scales Well**: Firestore can grow with your application. It can handle lots of data and users, making it suitable for a climbing platform with many climbers.
* **Real-Time Updates:** It lets users interact with data in real-time, which is great for tracking climbing performance.
* **Works with Google Tools:** Since it's part of Google Cloud, it easily works with other Google tools like user authentication, analytics, and cloud functions.
* **Organized Like Documents:** Firestore's way of storing data fits nicely with this kind of app where each climber, gym, or climbing route can be thought of as a separate "document."