Redis Geospatial

- Store, query, and operate on geospatial data using Redis
- Uses a sorted set to store geospatial data (latitude and longitude coordinates) and offers a variety of commands to work with this data efficiently
- Consists of Unique Name, Latitude and Longitude

Redis Geospatial - Key features

- **Storing Geospatial Data**: You can store geospatial data using the **GEOADD** command, which adds one or more elements **(latitude, longitude, and a member name)** to a specified key. Members in this context could represent anything with a geographical location, such as **cities, venues, or devices**.
- **Querying by Radius**: The **GEORADIUS** and **GEORADIUSBYMEMBER** commands allow you to query items within a specified radius from a given point or from the location of another member in the dataset, respectively.
- **Distance Between Two Points**: The **GEODIST** command calculates the distance between two members in your geospatial set, with support for various units of measurement (meters, kilometers, miles, and feet).
- **Getting Latitude and Longitude**: The **GEOPOS** command returns the longitude and latitude of one or more members in the geospatial set.

Redis Geospatial - Use cases

- **Proximity Searches**: Find items near a specific location, such as businesses near a user's current location.
- **Location-based Alerts**: Notify users when they enter or leave a predefined geographical area.
- **Spatial Analysis**: Analyze geographical patterns and distributions for planning and decision-making.