

Database

Agenda

In this session, we will cover:

- User data
- Need of storing user data
- Where to store user data
- How backend uses stored data for serving requests?

User Data

- When a user accesses an application, it essential to store user related data.
- Application uses this stored data in future for further processing.
- User-related data can be:
 - Login Credentials
 - User Information
 - User Activity on the Application

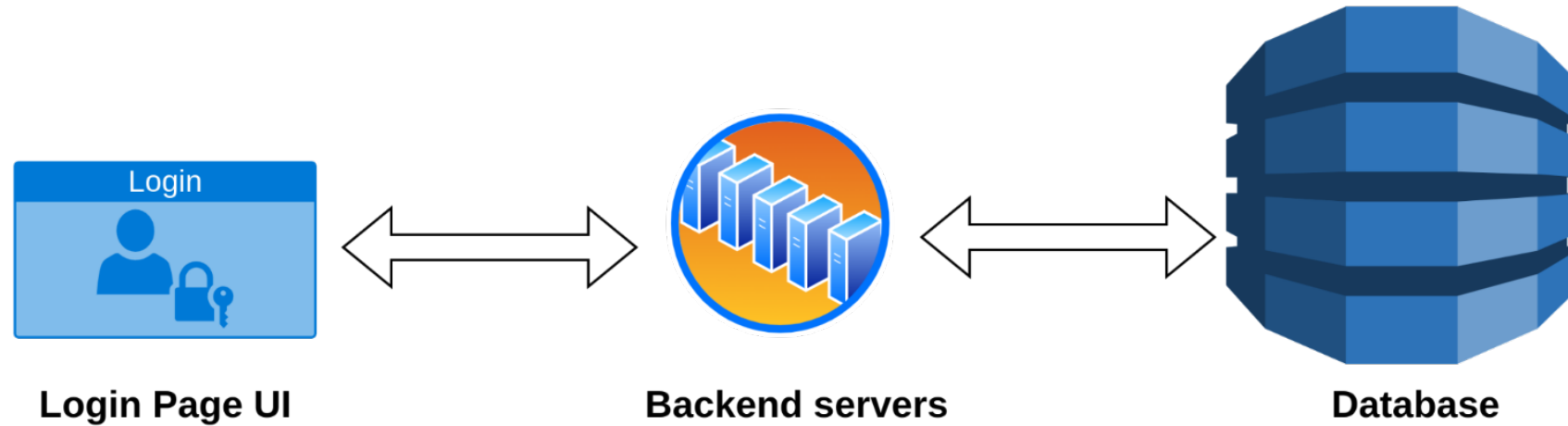
Need for storing User Data

- Storing business-critical information.
- Improving user experience- storing the user activity and providing suggestions based on that.
- Can be used for providing access to the system.

Where to store the data?

- **Database** is the place where we store the user data. It is persistent and reliable so that our stored data is in safe hands.
- Backend layer makes use of database for performing various operations on the data:
 - Creating Data
 - Updating Data
 - Searching Data
 - Deleting Data
 - Analyzing Data

Where to store the data?



How backend uses stored data for serving requests?

- Backend interacts with database and fetch/persist the data from/to database for serving various requests.
- Backend is considered as the processing engine for the stored data and returns the processed data to the frontend for showing the result to the end user.

Databases Available

There are various databases which are available:

- MySQL
- Redis
- MongoDB
- DynamoDB
- Cassandra
- GraphDB

Summary

A brief recap:

- Database is required to store user data.
- Backend interacts with the database to read or update data.