** Common Backend Languages **

Frameworks

Python	—	DJango
Ruby	—	Ruby & Rails
Java	—	Spring
JavaScript (TS)	—	Express, Hono, NestJS
(Node, Bun, Dino)		

* Backend's should rely on dedicated Databases
  ↳ for performance and scalability

** Databases **

- System that stores, organizes and manages data.
- Optimized for speed, security and scalibility.

* Types of DB:-

1) Relational:
   - Stores data in structured tables
   - Uses SQL (structured Query Language)
   Eg:- MySQL, Postgres

   UseCase:-
   - Highly structured data.
   - Relationship b/w entities are important

2) Non-Relational (NoSQL):
   - More flexible, unstructured/semi-structured data handling
   - Sub-types
     ↳ Document Based — Mongo DB
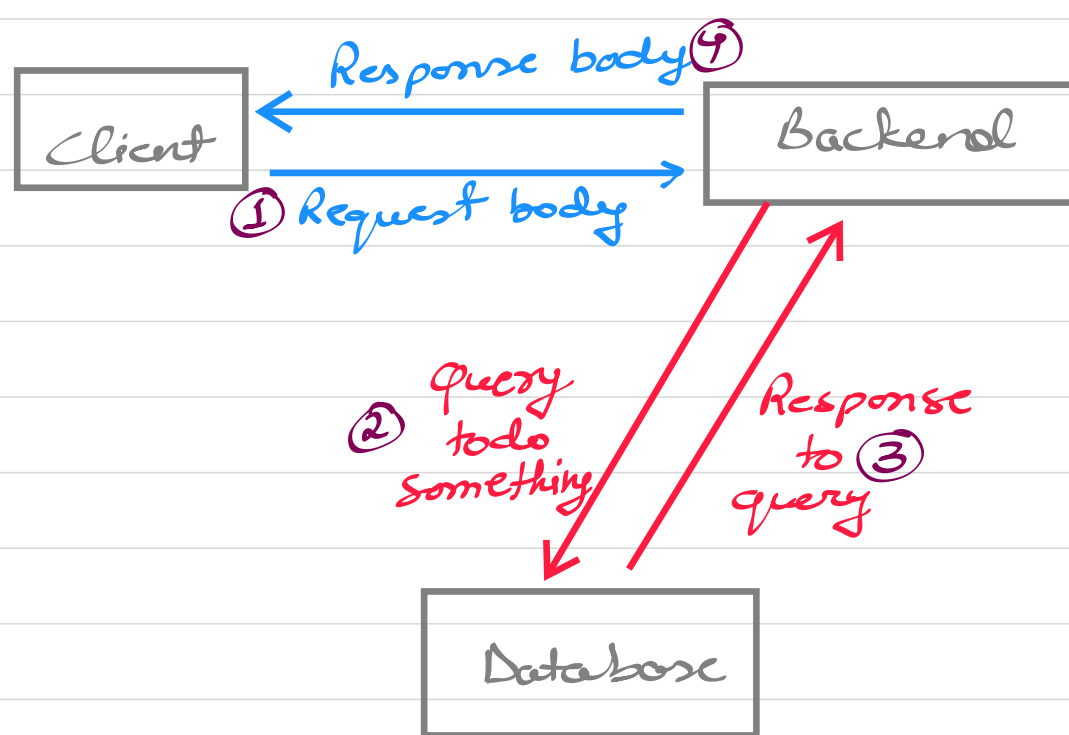   - Stores data in JSON like documents.
     ↳ Key-Value Pairs — Redis
       - Stores data in KV pairs

   UseCase:
   - Handling large volumes of data, Real time Analytics, flexible data modles

Current flow:-

** Backend ⇄ Database **

Backend can talk with databases using:
1) Raw SQL or NoSQL queries
2) Using ORM (Object Relational Mappers)

* ORM :-
  - Simplifies Queries into syntax of our pro-
    -gramming language of choice

for SQL databases	for NoSQL
- Prisma	- Mongoose
- Drizzle	
- Sequelize	