

Remote Directory Server.

Redis is an open source(BSD licensed) in-memory remote data structure store(database) that offers high performance, replication, and a unique data model.

Redis provides data structures such as strings, hashes, lists, sets, sorted sets with range queries, bitmaps, hyperloglogs, geospatial indexes, and streams.

Redis is Used for

1. In-Memory Database
2. Cache
3. Message Broker

### Redis Cache

to store repeatedly accessed data in memory so that the user can feel the better performance of the application.

Do we need to download redis server

Main Annotation

@EnableCaching

@Cacheable

@CachePut

@CacheEvict

- Add dependency in pom.xml

```
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-cache</artifactId>
  <version>2.4.3</version>
</dependency>
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-data-redis</artifactId>
  <version>2.4.3</version>
</dependency>
```

1. Inside application property

```
spring.cache.type=redis  
spring.cache.redis.cache-null-values=true  
#spring.cache.redis.time-to-live=40000
```

1. Add annotation `@EnableCaching` at starter class in main
2. Add annotation on service layer