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Fresher(Upto 2 years)
=====================
1. SpringBoot
            a. SpringCore basics
            b. SpringJDBC
            c. SpringORM
            d. SpringDataJPa
            e. SpringMVC
            f. SpringAOP

2+ years of Experience
        1. SpringBoot
        2. SpringRest and Microservices
        3. Design patterns and basics of Cloud

DataJpa Pending topics
======================
1. Working with Embeded Database
2. Working with Postgresql Database
3. Working with Mulitple database
4. Association
5. SpringMail
```

Embeded :: By default it would be a part of software.

Embeded Database :: When running the application(In JRE it would available)
                            Once the application stops then Database Memory would be taken away from JRE.

For POC(Proof of Concept) by default SpringBoot supports a database called "H2".

Working with EmbededDatabase[Default port is the port which is used for running applications]
==
==========
    Create a dependancy with H2,Lombok,Datajpa,SpringWeb

1. To work with Embeded Database we need to use the following dependancy in pom.xml file

```xml
<dependency>
     <groupId>com.h2database</groupId>
     <artifactId>h2</artifactId>
     <scope>runtime</scope>
</dependency>
```

2. application.properites
```
#Details about H2 database
spring.datasource.driverClassName=org.h2.Driver
spring.datasource.url=jdbc:h2:mem:ineurondb
spring.datasource.username=sa
spring.datasource.password=

#Displaying the query details on console
spring.jpa.show-sql=true
spring.jpa.hibernate.ddl-auto=update
spring.jpa.properties.hibernate.format_sql=true
```

```
#Dialect information of h2 database
spring.jpa.database-platform=org.hibernate.dialect.H2Dialect

#enabling the H2 console
spring.h2.console.enabled=true

#Server port to host our application and same port will be used for H2-Database
also
server.port=4444

3. Model(Student)[id,name,email,address]
4. in.ineuron.restcontroller
          [Endpoints
                  a. POST    => /register
                  b. GET     => /student/findAll,
                  c. GET     => /student/find/{id} ,
                  d. PUT     => /register
                  e. DELETE => /student/{id}
          ]

5. run the application and test the h2 database in the following url
          http://localhost:4444/h2-console

                        refer:: SpringRest-H2-Database-App
```

Working with PostgreSQL[Portno:: 5432]
=======================
  Download and install postgresql from the following link
          https://www.enterprisedb.com/downloads/postgres-postgresql-downloads

1. Create a project with the following starter files
          datajpa,web,postgresql driver
pom.xml
=======
<dependency>
      <groupId>org.postgresql</groupId>
      <artifactId>postgresql</artifactId>
      <scope>runtime</scope>
</dependency>

2. Create application.properties

#Driver url,username,password
spring.datasource.dbcp2.driver-class-name= org.postgresql.Driver
spring.datasource.url=jdbc:postgresql://localhost:5432/ineuronDb
spring.datasource.username=postgres
spring.datasource.password=root123

Hibernate Properties
# The SQL dialect makes Hibernate generate better SQL for the chosen database
spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.PostgreSQLDialect
spring.jpa.show-sql=true
spring.jpa.properties.hibernate.format_sql=true

Hibernate ddl auto (create, create-drop, validate, update)
spring.jpa.hibernate.ddl-auto = update

```
#Server port to host our application and same port will be used for H2-Database
also
server.port=4444
```

3. To open postgresql just pgadmin4 and type password of the dbadmin to open.

4. Run the application and test in postman client

refer:: SpringRest-PostgreSQL-App