**LAB 1**

This lab you will create a spring boot application from scratch. This will help you practice more and get a better grip of designing a n-tier web application. You should implement the following:

1. Make a domain model using the domain model.

**public class Post {  
  
 long id;  
 String title;  
 String content;  
 String author;  
  
}**

1. Make a repository with a fake database (*using an ArrayList*). This database will hold the Posts.
2. Make a service layer that will inject the repository.
3. Make a RestController that will inject the service and respond to the following requests.
   1. GET localhost:8080/posts/ 🡪 This should retrieve all the posts in the database.
   2. GET localhost:8080/posts/1 🡪 This should retrieve the post with id = 1.
   3. POST localhost:8080/posts/ 🡪 This should create and save a new post.

*Note:*

* *1 is just an example, the actual path should ask for ‘id’*
* *Make sure all your data are passed with Dtos*
* *Follow the n-tier architecture*

**Optional**

* 1. DELETE ocalhost:8080/posts/1 🡪 This should delete the post where id = 1.
  2. UPDATE localhost:8080/posts/1 🡪 This should update the post where id = 1.
  3. Apply the ModelMapper when you are passing your dtos
  4. Create a filter endpoint that will retrieve all Posts made by an ‘author’ (query parameter) – You may apply any standard if it is structured and manageable.
  5. Make a filter that will retrieve all the posts that contains a ‘text’ in the ‘author’ name. For example, if you search “de” it should get all Posts made by any author with the text “de” in the author’s name.

Make sure you execute these requests using postman.