**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.

1. Make another version of your api using a ‘customized header’ that will retrieve another version of the **Post** domain model, as the following:
2. Apply the ModelMapper when you are passing your dtos
3. 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.

**public class PostV2 {  
  
 long id;  
 String title;  
 String content;**

**String author;  
  
}**

Make sure you execute these requests using postman.