Techs to learn:

1. Springboot
2. Hibernate
3. spring data jpa
4. postgre SQL
5. http
6. restful api

annotations:

* repository
* service
* controller
* entity
* component

حاشیه‌نگاری در جاوا بیشتر برای اهداف زیر استفاده می‌شود :

* راهنمایی کامپایلر
* راهنمایی در زمان ایجاد فایل اجرایی
* راهنمایی در زمان اجرای فایل اجرایی

**project process**:

* model
* DTO
* mapper
* DAO (repository)
* service
* business logic
* endpoint

STEP BY STEP:

1. Task crud(Create, read, update, delete): send and receive data
2. Task DTO: mapping entity to DTO and vice versa.
3. Add status and priority Enums to Task entity.
4. Error handeling
5. Load single task by ID
6. Sorting tasks by priority
7. Filtering tasks(?)
8. Category entity + crud
9. User entity
10. Implementing security
    1. “signup”: password should get hashed
    2. “login”: hashed passwords should be equal
    3. “logout”: session get destroyed
11. Restricting category CUD access only to ‘admin’
12. Implementing subtasks(task tree relationship)

MODEL:

|  |  |  |
| --- | --- | --- |
| Task | Category | User |
| * Id * Title * Description * Status * Priority * Category(rel?) * User(rel?) | * Id * Title * Description * Task(rel?) | * Id * Username * Password * Email * Task(rel?) |