KB금융그룹 | 국민의 평생 금융파트너

2025년 상반기 K-디지털 트레이닝

백엔드 준비

[KB] IT's Your Life

KB 국민은행

백엔드 준비

- apiserver 프로젝트를 다음 위치로 복사
  - C:₩KB_Fullstack₩09_Spring+Vue₩scoula₩backend

  - settings.gradle에서 프로젝트 명 수정

    rootProject.name = "backend"

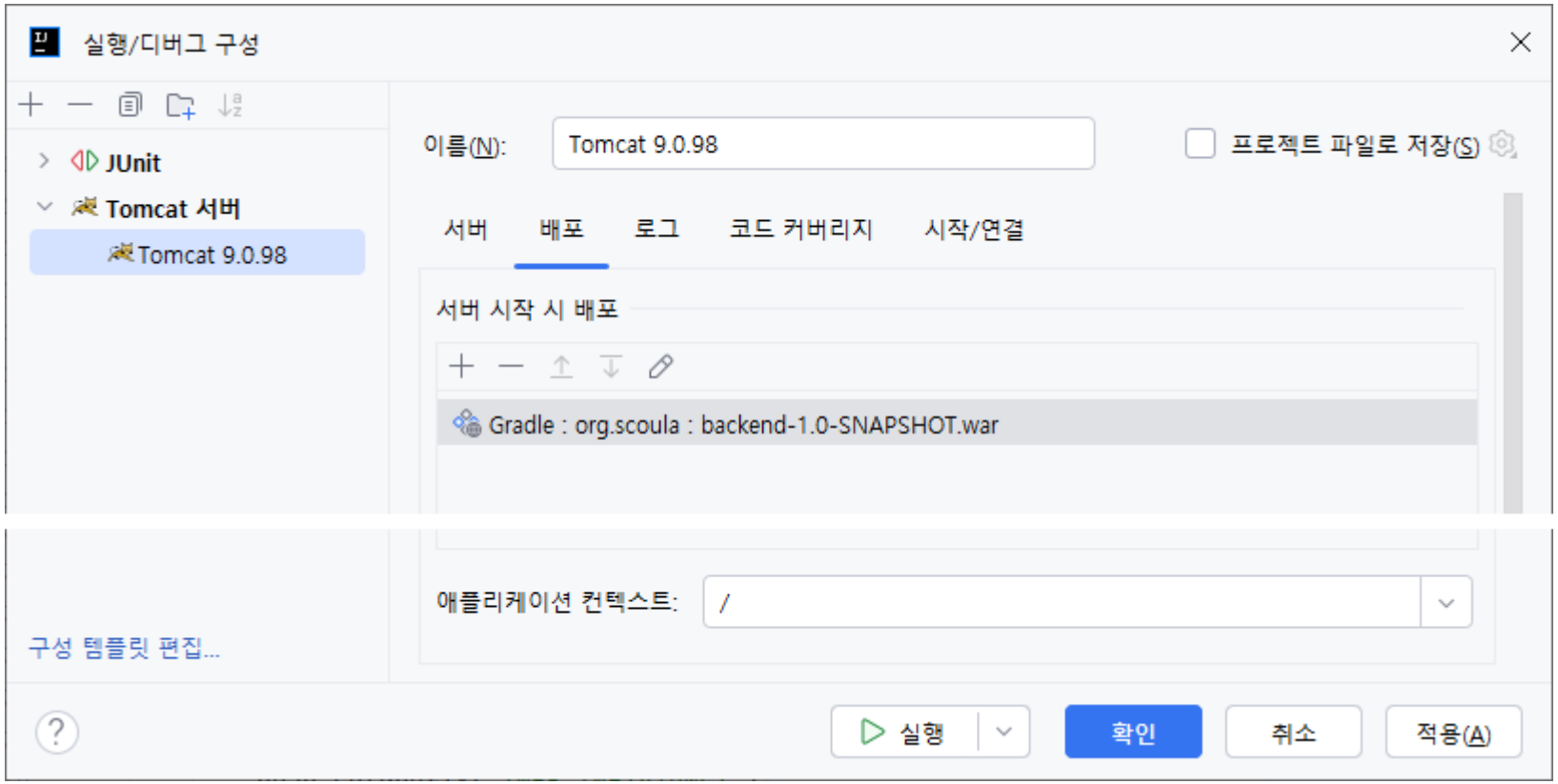
  - build.gradle에 swagger 의존성 추가

```
// swagger
implementation 'io.springfox:springfox-swagger2:2.9.2'
implementation 'io.springfox:springfox-swagger-ui:2.9.2'
```

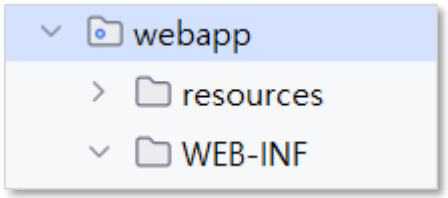
→ Gradle Sync

백엔드 준비

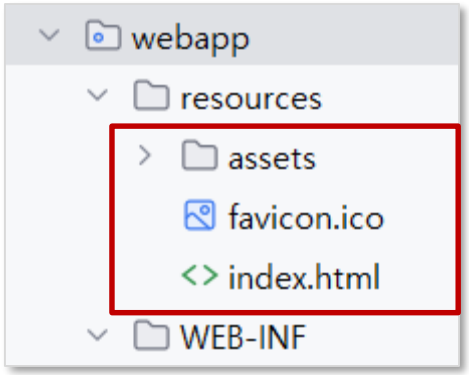
실행 구성


실행/디버그 구성
JUnit
Tomcat 서버
Tomcat 9.0.98
이름(N): Tomcat 9.0.98
프로젝트 파일로 저장(S)
서버
배포
로그
코드 커버리지
시작/연결
서버 시작 시 배포
Gradle : org.scoula : backend-1.0-SNAPSHOT.war
애플리케이션 컨텍스트: /
구성 템플릿 편집...
실행
확인
취소
적용(A)

webapp의 하위에 있는 모든 jsp 파일 삭제



- webapp/resources
  - 프론트엔드에서 npm run build를 실행하면 배포되는 곳



프론트엔드 build 결과물

백엔드 준비

기본 설정

- /를 요구했을 때 /resources/index.html을 리턴
- 프론트엔드에서 기존 정적 파일은 /assets/**로 기술되어 있음
  - 실제 배치는 /resources/assets/**
  - /assets/**를 요구했을 때 /resources/assets/** 경로로 해석하도록 설정
  - /assets/**는 스프링 처리에서 제외해야 함(resources에 대한 동일한 처리)

- 새로 고침했을 때 해당 url은 백엔드에 없음
  - 404에러 발생
  - CommonExceptionAdvice에서 index.html로 포워딩

  - CommonExceptionAdvice, ApiExceptionAdvice 적용 순서 지정
    - @Order(순번)

config.ServletConfig.java

```
public class ServletConfig  implements WebMvcConfigurer {
    @Override
    public void addViewControllers(ViewControllerRegistry registry) {
        registry.addViewController("/")
                .setViewName("forward:/resources/index.html");
    }

    @Override
    public void addResourceHandlers(ResourceHandlerRegistry registry) {
        registry.addResourceHandler("/resources/**")
                .addResourceLocations("/resources/");

        registry.addResourceHandler("/assets/**")
                .addResourceLocations("/resources/assets/");
    }
…
}
```

- void configureViewResolvers(ViewResolverRegistry registry) 삭제

CommonExceptionAdvice.java

```
package org.scoula.exception;

import lombok.extern.log4j.Log4j2;
import org.springframework.core.annotation.Order;
import org.springframework.web.bind.annotation.ControllerAdvice;
import org.springframework.web.bind.annotation.ExceptionHandler;
import org.springframework.web.servlet.NoHandlerFoundException;

@ControllerAdvice
@Log4j2
@Order(1)
public class CommonExceptionAdvice {

    @ExceptionHandler(NoHandlerFoundException.class)
    public String handle404(NoHandlerFoundException ex) {
        return "/resources/index.html";
    }
}
```

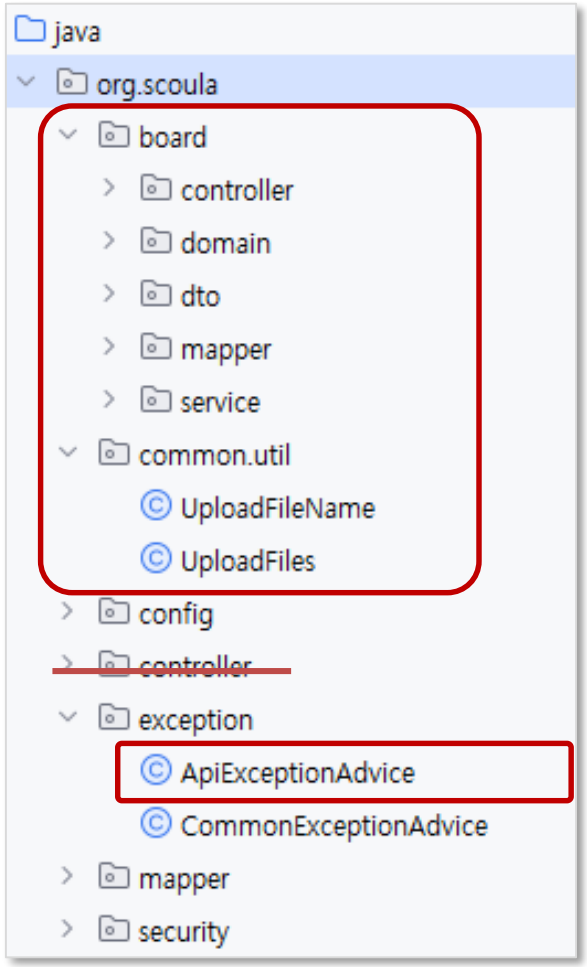
ApiExceptionAdvice.java

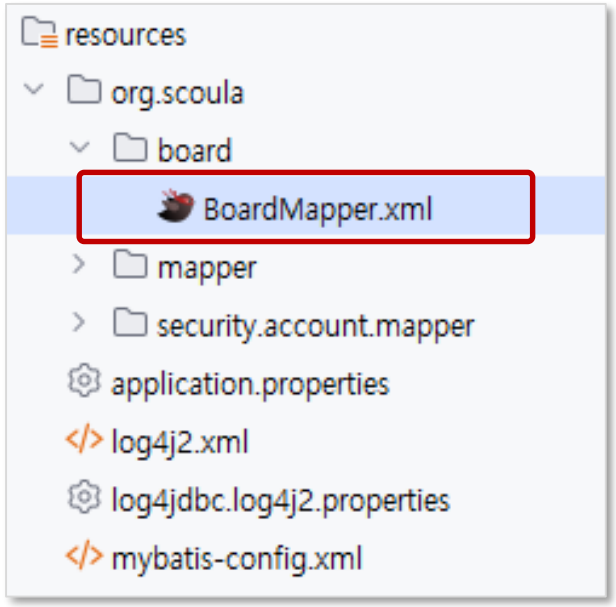
```
package org.scoula.exception;

import org.springframework.core.annotation.Order;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.ExceptionHandler;
import org.springframework.web.bind.annotation.RestControllerAdvice;

import java.util.NoSuchElementException;

@RestControllerAdvice
@Order(2)
public class ApiExceptionAdvice {
…
}
```

백엔드 준비

게시판(board) api 준비

- boardapi 프로젝트에서 org.scoula.board 패키지, common 패키지 복사
- exception.ApiExceptionAdvice.java, BoardMapper.xml 복사

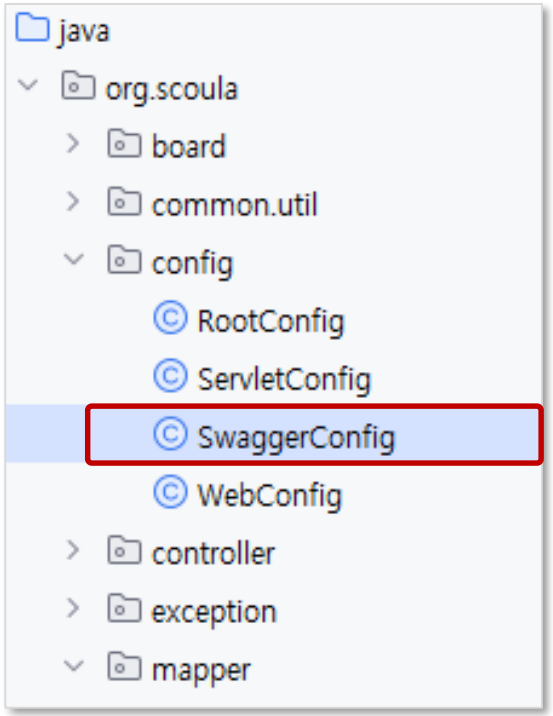




게시판(board) api 준비

SwaggerConfig.java 복사

- JWT 인증 처리 추가



config.SwaggerConfig.java

```
public class SwaggerConfig {
    …
    @Bean
    public Docket api() {
        return new Docket(DocumentationType.SWAGGER_2)
                // JWT 인증
                .securityContexts(List.of(this.securityContext())) // SecurityContext 설정
                .securitySchemes(List.of(this.apiKey())) // ApiKey 설정
                .select()
                .apis(RequestHandlerSelectors.withClassAnnotation(RestController.class))
                .paths(PathSelectors.any())
                .build()
                .apiInfo(apiInfo());
    }
```

config.SwaggerConfig.java

```
    // JWT SecurityContext 구성
    private SecurityContext securityContext() {
        return SecurityContext.builder()
                .securityReferences(defaultAuth())
                .build();
    }

    private List<SecurityReference> defaultAuth() {
        AuthorizationScope authorizationScope = new AuthorizationScope("global", "accessEverything");
        AuthorizationScope[] authorizationScopes = new AuthorizationScope[1];
        authorizationScopes[0] = authorizationScope;
        return List.of(new SecurityReference("Authorization", authorizationScopes));
    }

    // ApiKey 정의
    private ApiKey apiKey() {
        return new ApiKey("Authorization", "Authorization", "header");
    }
}
```

config.ServletConfig.java

```
public class ServletConfig  implements WebMvcConfigurer {
    …
    @Override
    public void addResourceHandlers(ResourceHandlerRegistry registry) {
        …
        // Swagger UI 리소스를 위한 핸들러 설정
        registry.addResourceHandler("/swagger-ui.html")
                .addResourceLocations("classpath:/META-INF/resources/");

        // Swagger WebJar 리소스 설정
        registry.addResourceHandler("/webjars/**")
                .addResourceLocations("classpath:/META-INF/resources/webjars/");

        // Swagger 리소스 설정
        registry.addResourceHandler("/swagger-resources/**")
                .addResourceLocations("classpath:/META-INF/resources/");

        registry.addResourceHandler("/v2/api-docs")
                .addResourceLocations("classpath:/META-INF/resources/");
    }
```

config.WebConfig.java

```
public class WebConfig extends AbstractAnnotationConfigDispatcherServletInitializer {
    …

    @Override
    protected Class<?>[] getServletConfigClasses() {
        return new Class[] { ServletConfig.class, SwaggerConfig.class };
    }
```

resoruces::/mybatis-config.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE configuration
        PUBLIC "-//mybatis.org//DTD Config 3.0//EN"
        "http://mybatis.org/dtd/mybatis-3-config.dtd">

<configuration>
    <settings>
        <setting name="mapUnderscoreToCamelCase" value="true" />
    </settings>

    <typeAliases>
        <package name="org.scoula.security.account.domain" />
        <package name="org.scoula.board.domain" />
    </typeAliases>

</configuration>
```

config.RootConfig.java

```
@Configuration
@PropertySource({"classpath:/application.properties"})
@MapperScan(basePackages  = {"org.scoula.board.mapper"})
@ComponentScan(basePackages = {"org.scoula.board.service"})
@Log4j2
@EnableTransactionManagement
public class RootConfig {
    …
}
```

config.ServletConfig.java

```
@EnableWebMvc
@ComponentScan(basePackages = {
        "org.scoula.controller",
        "org.scoula.exception",
        "org.scoula.board.controller"
})
public class ServletConfig  implements WebMvcConfigurer {
    …
}
```

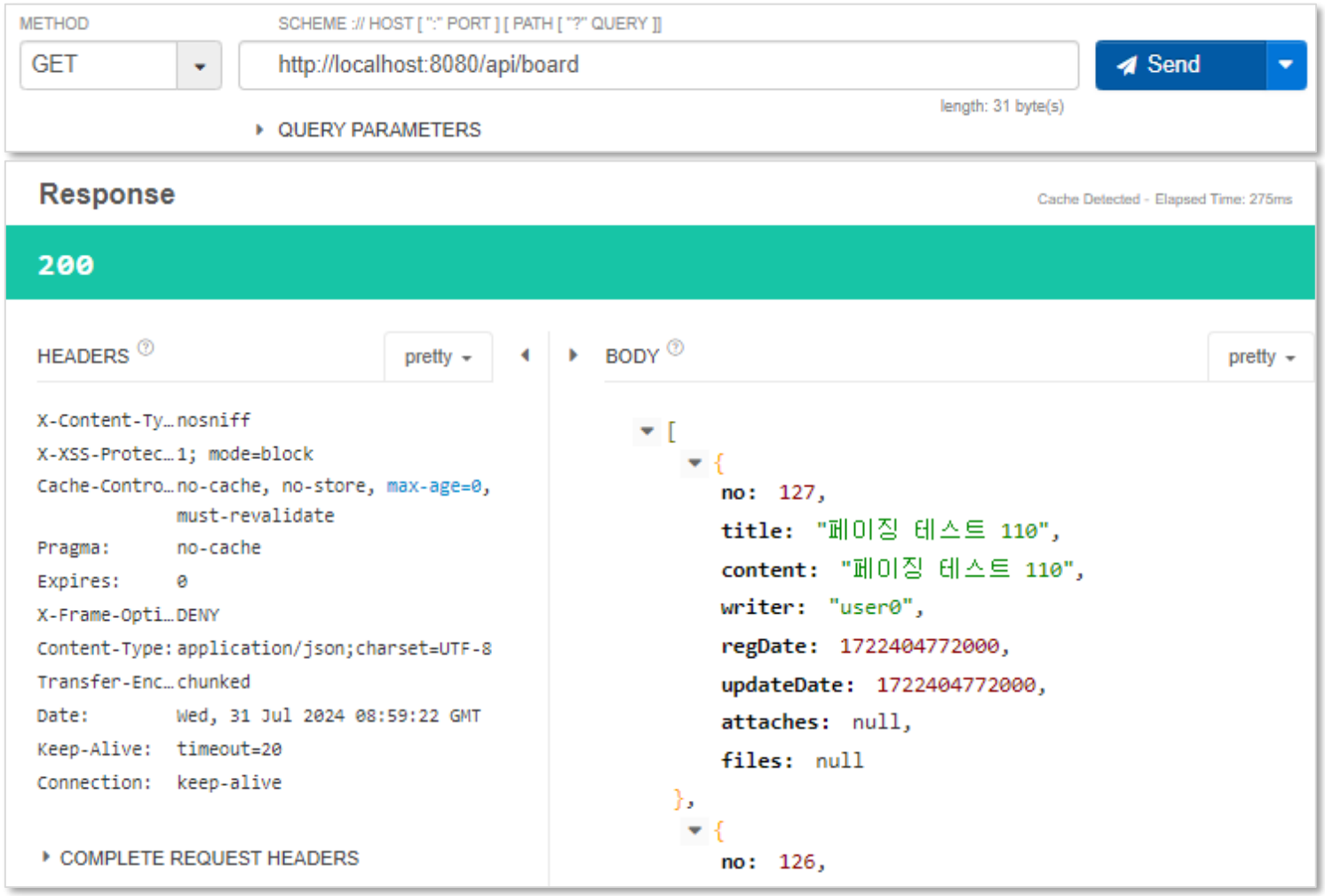
security.config.SecurityConfig.java

```
public class SecurityConfig extends WebSecurityConfigurerAdapter {
  …
    // 접근 제한 무시 경로 설정 - resource
    @Override
    public void configure(WebSecurity web) throws Exception {
        web.ignoring().antMatchers("/assets/**", "/*", "/api/member/**",
                // Swagger 관련 url은 보안에서 제외
                "/swagger-ui.html", "/webjars/**", "/swagger-resources/**", "/v2/api-docs"
        );
    }
```

security.config.SecurityConfig.java

```
    @Override
    public void configure(HttpSecurity http) throws Exception {
        …

        http
            .authorizeRequests()
            .antMatchers(HttpMethod.OPTIONS).permitAll()
             // 일단 모든 접근 허용
            .anyRequest().permitAll();

        http.httpBasic().disable()   // 기본 HTTP 인증 비활성화
            .csrf().disable()        // CSRF 비활성화
            .formLogin().disable()  // formLogin 비활성화    관련 필터 해제
            .sessionManagement().sessionCreationPolicy(SessionCreationPolicy.STATELESS); // 세션 생성 모드 설정
    }
    …
}
```

백엔드 준비


METHOD
SCHEME :// HOST [":" PORT] [PATH ["?" QUERY]]
GET
http://localhost:8080/api/board
Send
length: 31 byte(s)
QUERY PARAMETERS
Response
Cache Detected - Elapsed Time: 275ms
200
HEADERS
pretty
X-Content-Ty… nosniff
X-XSS-Protec… 1; mode=block
Cache-Contro… no-cache, no-store, max-age=0, must-revalidate
Pragma: no-cache
Expires: 0
X-Frame-Opti… DENY
Content-Type: application/json;charset=UTF-8
Transfer-Enc… chunked
Date: Wed, 31 Jul 2024 08:59:22 GMT
Keep-Alive: timeout=20
Connection: keep-alive
COMPLETE REQUEST HEADERS
BODY
pretty
[
{
no: 127,
title: "페이징 테스트 110",
content: "페이징 테스트 110",
writer: "user0",
regDate: 1722404772000,
updateDate: 1722404772000,
attaches: null,
files: null
},
{
no: 126,