

3/11 개발일지

1. 소셜 로그인 개발작업 진행중

▼ 인증코드를 토큰화시켜 만드는 과정

받은 인증코드를 토큰화(각 서비스에서) 하여 JWT 토큰을 받는것이 목적이다.

이를 위하여 아래와 같이 설정함.

- OAuth2TokenService.java
 - 인증코드를 받아와 각 서비스에 해당하는 엔드포인트로 요청 전송

```
package web.web1.0auth.domain;

import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.net.HttpURLConnection;
import java.net.URL;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.context.annotation.PropertySource;
import org.springframework.http.ResponseEntity;
import org.springframework.stereotype.Service;
import org.springframework.web.client.RestTemplate;
import org.springframework.web.util.UriComponentsBuilder;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpEntity;
import org.springframework.http.HttpHeaders;
import org.springframework.http.MediaType;
import org.springframework.http.ResponseEntity;
import org.springframework.stereotype.Service;
import org.springframework.web.client.RestTemplate;
import org.springframework.web.util.UriComponentsBuilder;

import com.google.api.client.util.Value;

import web.web1.0auth.token.*;
```

```

// import java.math.BigInteger;
// import java.security.SecureRandom;

@Service
// @PropertySource("classpath:application.properties")
public class OAuth2TokenService {

    private OAuth2Token tokenProvider;

    // @Value("${spring.security.oauth2.client.registration.client-id}")
    // private String clientId;

    // @Value("${spring.security.oauth2.client.registration.client-secret}")
    // private String clientSecret;

    public String oauth2MakeServiceProviderGetRequest(String serviceType) {

        System.out.println("serviceType: " + serviceType);

        if(serviceType.equals("naver")) {
            this.tokenProvider = new NaverToken();
        } else if(serviceType.equals("google")) {
            this.tokenProvider = new GoogleToken();
        } else {
            throw new IllegalArgumentException("지원하지 않는 서비스입니다.");
        }

        String clientId = this.tokenProvider.getClientId();
        String clientSecret = this.tokenProvider.getClientSecret();
        String code = this.tokenProvider.getCode();
        String redirectUri = this.tokenProvider.getRedirectUri();
        String grantType = this.tokenProvider.getGrantType();

        String url = "";

        if(this.tokenProvider instanceof NaverToken)

```

```

        url = "https://nid.naver.com/oauth2.0/au
        + clientID + "&client_secret=" + clientS
        + redirectUri + "&grant_type=" + grantTy
    } else if(this.tokenProvider instanceof Goog
        url = "https://oauth2.googleapis.com/tok
        + code + "&client_id=" + clientID + "&cl
        + clientSecret + "&grant_type=" + "autho
    }
    System.out.println(url);
    return url;

}

@Autowired
private RestTemplate restTemplate;

public String exchangeCodeForAccessToken(String
    // Token 엔드포인트 URL

    System.out.println("---exchangeCodeForAccess
    String tokenEndpoint = "https://oauth2.googl

    // 요청 본문을 구성하기 위한 UriComponentsBuilder
    String requestBody = UriComponentsBuilder.new
        .queryParams("code", decode)
        .queryParams("client_id", clientId)
        .queryParams("client_secret", clientS
        .queryParams("redirect_uri", redirect
        .queryParams("grant_type", "authoriza
        .toUriString().substring(1); // 맨 앞

    System.out.println("requestBody: " + request

    // HTTP 헤더 설정
    HttpHeaders headers = new HttpHeaders();
    headers.setContentType(MediaType.APPLICATION

```

```

        // HttpEntity 객체 생성
        HttpEntity<String> requestEntity = new HttpEntity<>();
        System.out.println(requestEntity);

        // POST 요청 보내기
        ResponseEntity<String> responseEntity = restTemplate.postForEntity(url, requestEntity, String.class);

        // 응답 본문 반환
        System.out.println(responseEntity.getBody());
        return responseEntity.getBody();
    }

    // 1. 네이버나 구글이나에 따라 네이버면 ../token/NaverToken, 구글이면 ../token/GoogleToken
    // 2. 해당 서비스에 대해 필요한 조건을 찾기. naver면
    // 2-1. client_id(),
    // 2-2. response_type(이건인증코드)
    // 2-3. redirect_uri(),
    // 2-4. state(NaverToken에 구현방식있음),
    // 3. 해당 내용을 json화 시켜서
    // https://nid.naver.com/oauth2.0/token?client_id=...&client_secret=...&grant_type=authorization_code
    //로 보냄
}

```

- 이 클래스를 실행할 핸들러(SecurityConfig 진행사항에 붙을)를 만들었다.
 - 구글에 필요한 파라미터 (code, clientId, clientSecret, redirect_url, grant_type)을 정의함

```

package web.web1.0auth.config;

import org.springframework.security.core.Authentication;
import org.springframework.security.web.authentication.AuthenticationFailureHandler;
import jakarta.servlet.ServletException;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import java.io.IOException;
import java.net.URLDecoder;
import java.nio.charset.StandardCharsets;

import web.web1.0auth.domain.OAuth2TokenService;

```

```

import web.web1.Oauth.domain.PrincipalDetails;

public class CustomAuthenticationSuccessHandler extends
    private final OAuth2TokenService oAuth2TokenService;

    public CustomAuthenticationSuccessHandler(OAuth2TokenService oAuth2TokenService) {
        this.oAuth2TokenService = oAuth2TokenService;
    }

    @Override
    public void onAuthenticationSuccess(HttpServletRequest request, HttpServletResponse response, Authentication successfulAuthentication) throws IOException {
        if (authentication.getPrincipal() instanceof PrincipalDetails principalDetails = (PrincipalDetails) authentication.getPrincipal()) {
            // Extract the service type (provider) from the principal details
            String serviceType = principalDetails.getServiceType();

            // Retrieve the authorization code from the request
            String code = request.getParameter("code");
            String decode = URLDecoder.decode(code, "UTF-8");

            if (decode != null && !decode.isEmpty()) {
                // Assuming the clientId, clientSecret, and redirectUri are known
                String clientId = "162422478014-k780";
                String clientSecret = "G0CSPX-lMnXy7";
                String redirectUri = "http://localhost:8080/callback";

                // Directly exchange the authorization code for an access token
                String accessToken = oAuth2TokenService.exchangeAuthorizationCodeForToken(
                    clientId, clientSecret, redirectUri, decode);

                // Log or process the accessToken as needed
                System.out.println("Access Token: " + accessToken);

                // Optionally, redirect the user to the callback URL
                getRedirectStrategy().sendRedirect(response, redirectUri);
            } else {
                // Fallback to the default behavior
                super.onAuthenticationSuccess(request, response, successfulAuthentication);
            }
        }
    }

```

```
        }  
    } else {  
        super.onAuthenticationSuccess(request, response);  
    }  
}  
}
```