

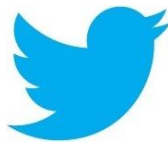
# twitter API @7조

07 황 호

08 이준승

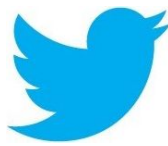
10 신현경

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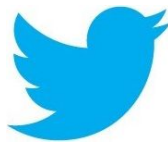
# Twitter란?



- **SNS** (Social Network Service)
  - 블로그의 인터페이스, 친구 맺기, 메신저 기능 제공
- 한 번에 쓸 수 있는 글자수는 최대 140자
- **‘팔로(follow)’**를 중심으로 소통
  - 관심 있는 상대를 뒤따르는 독특한 기능
  - 팔로어(follower)로 등록
- 웹 직접 접속, SMS, 스마트폰 등으로 글 읽고 쓰고 퍼트리기 가능
  - 빠른 확산속도
- <http://twitter.com>
- ‘@아이디’로 사용자 주소 표시
- 기업에서는 홍보, 고객 불만 접수 등에 이용
  - 미국 대선에서 ‘버락 오바마’의 twitter를 이용한 홍보

# 소셜 API – REST API

(Representational State Transfer API)



- 어떤 서비스에서 지속적인 연결이 없는 상태에서 데이터를 주고 받는 방식
  - 데이터를 주고 받는 동안은 연결상태
- 실제 데이터가 움직이는 API
- 구현의 어려움
- 예
  - Twitter REST API
  - Facebook Graph API
  - me2 API

# 소셜 API – Embeddable social features

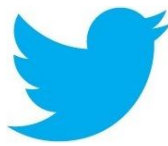
- 실제 데이터의 움직임은 없음
- 사용자 대 최종서버 간의 움직임
- '트윗', '좋아요' 등을 누르는 동작
- REST API에 비해 구현이 쉬움
- 예
  - Twitter for website
  - Facebook Social Plugins

# Twitter API



- Twitter4J
  - 자바에서 쉽게 사용할 수 있는 라이브러리
  - 사용하기 쉽고 적합
  - 지원하는 플랫폼이 다양
  - framework package
    - Google App Engine
    - JAVA Package (안드로이드 단말 지원)
- Twitter 개발자 가이드
  - <https://dev.twitter.com/>

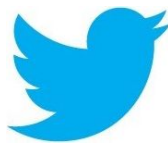
# oAuth(Open Authorization)란?



- “**oAuth**는 Open API로 개발된 표준 인증 방식으로, 각종 애플리케이션에서 사용자 인증을 거칠 때 활용될 수 있다.”  
(출처 : 위키 백과)
- 서비스들 간의 연동에서 사용자의 정보를 인증하는 비슷비슷한 방식들을 표준화한 것
- Twitter API는 oAuth 2.0 인증방식 사용
- Facebook과 Twitter에서 사용



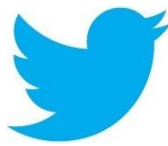
# OAuth(Open Authorization)란?



- User : 계정을 가진 사용자로서 서비스 초기 요청자
- Service Provider : 글쓰기 등 실제 서비스를 제공하는 최종 서버
- Consumer : 사용자를 대신해 Service Provider로 접근하는 주체

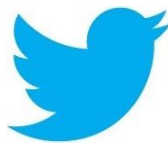


# oAuth – Valet key



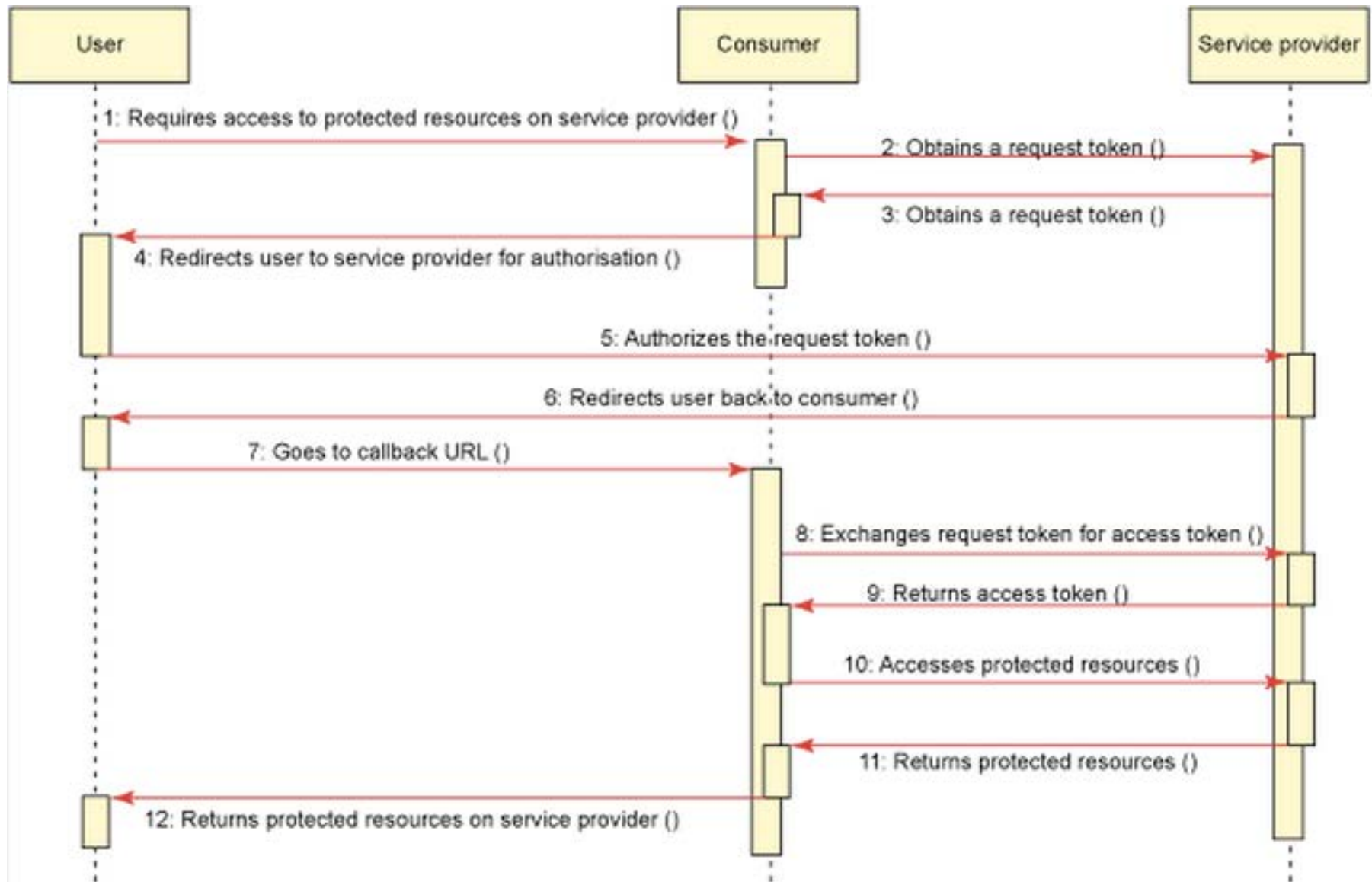
- Consumer가 사용자로부터 Valet key를 위임 받아 사용자의 요청을 대신 서버로 전달
  - Request Token
  - Access Token
- Consumer와 Service Provider간의 최종적 관계
  - 트위픽 (twitpic)
- 최소한의 제한된 기능

# OAuth – Token

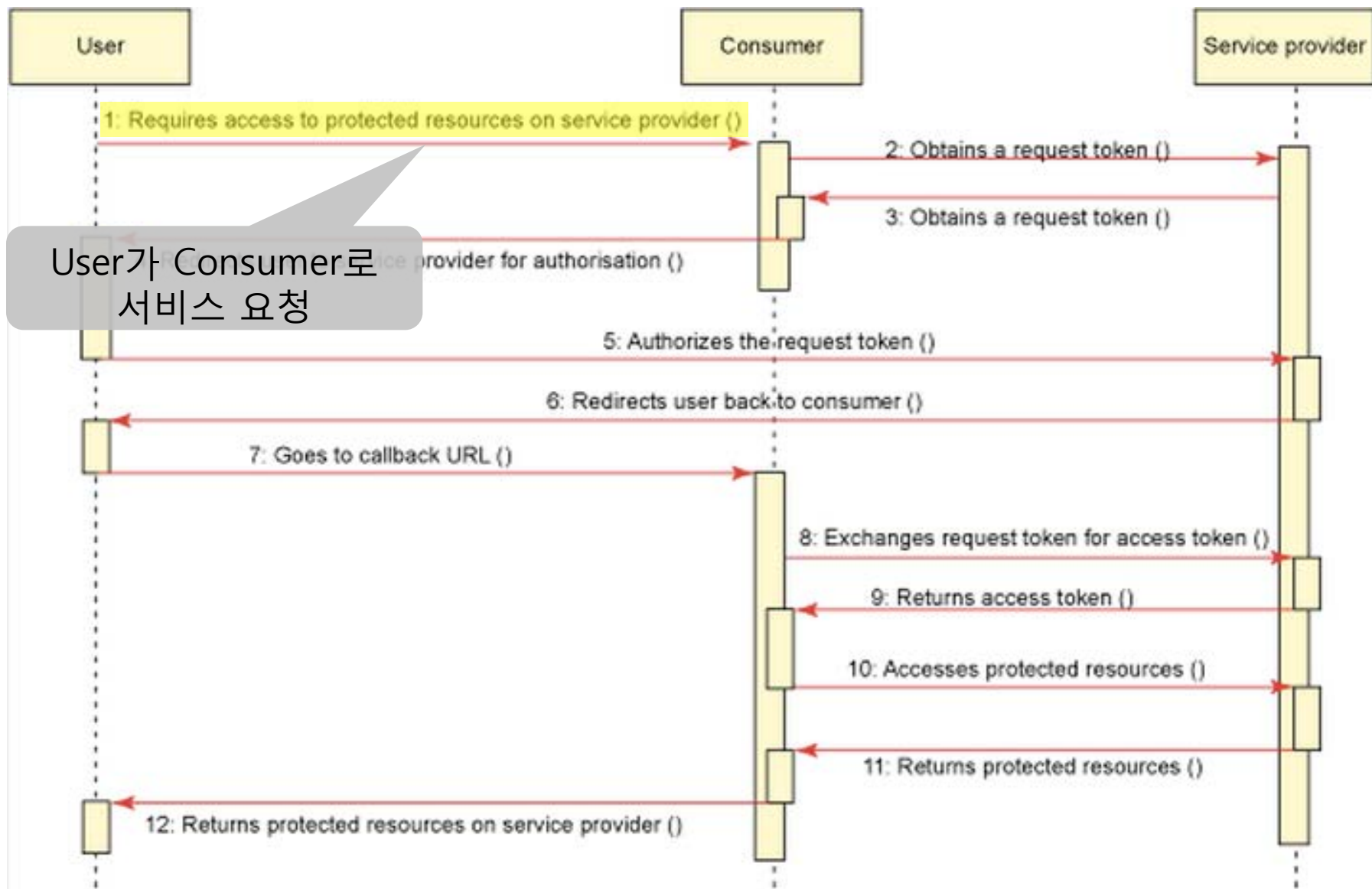
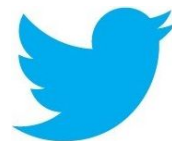


- Consumer가 제대로 된 Consumer인지 확인
- Request Token
  - Service Provider로부터 확인
  - 임시로 사용되므로 처음 인증 후 바로 폐기
- Access Token
  - User로부터 권한을 위임 받았음을 인증
  - 지속적으로 인증 권한을 가지고 있으면서 User를 대리함
  - twitpic

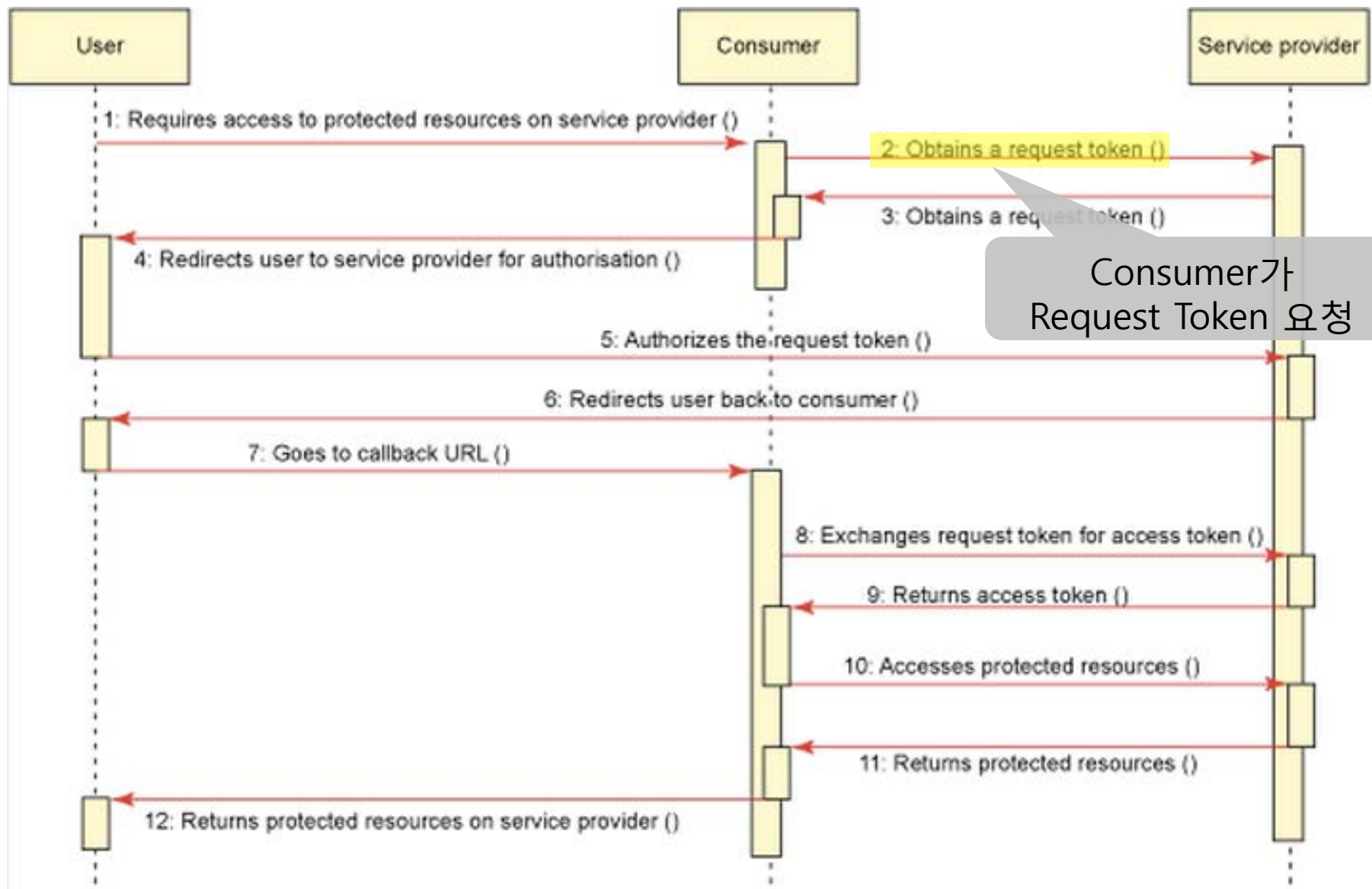
# OAuth – 인증과정



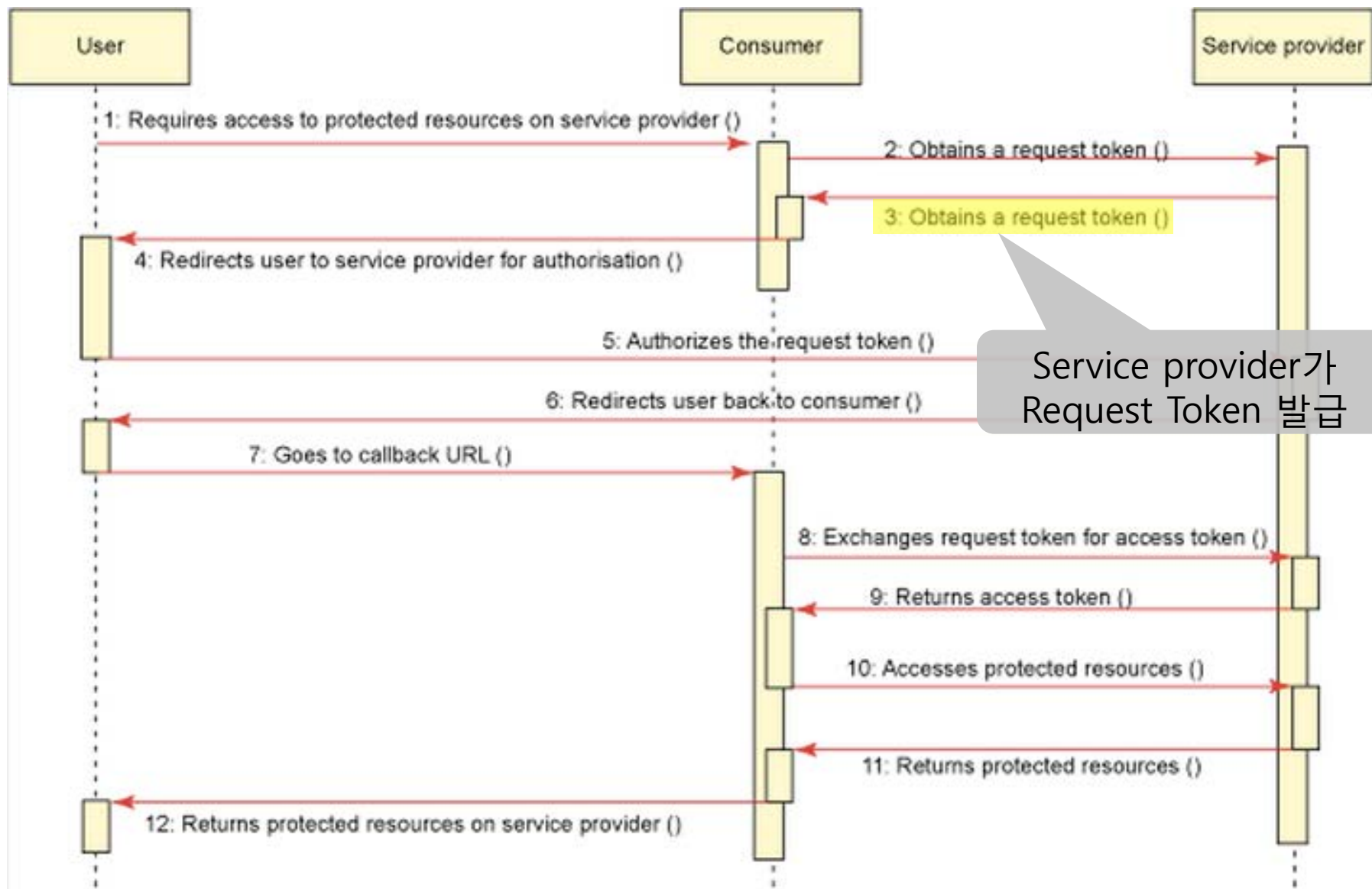
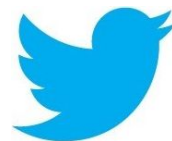
# OAuth – 인증과정



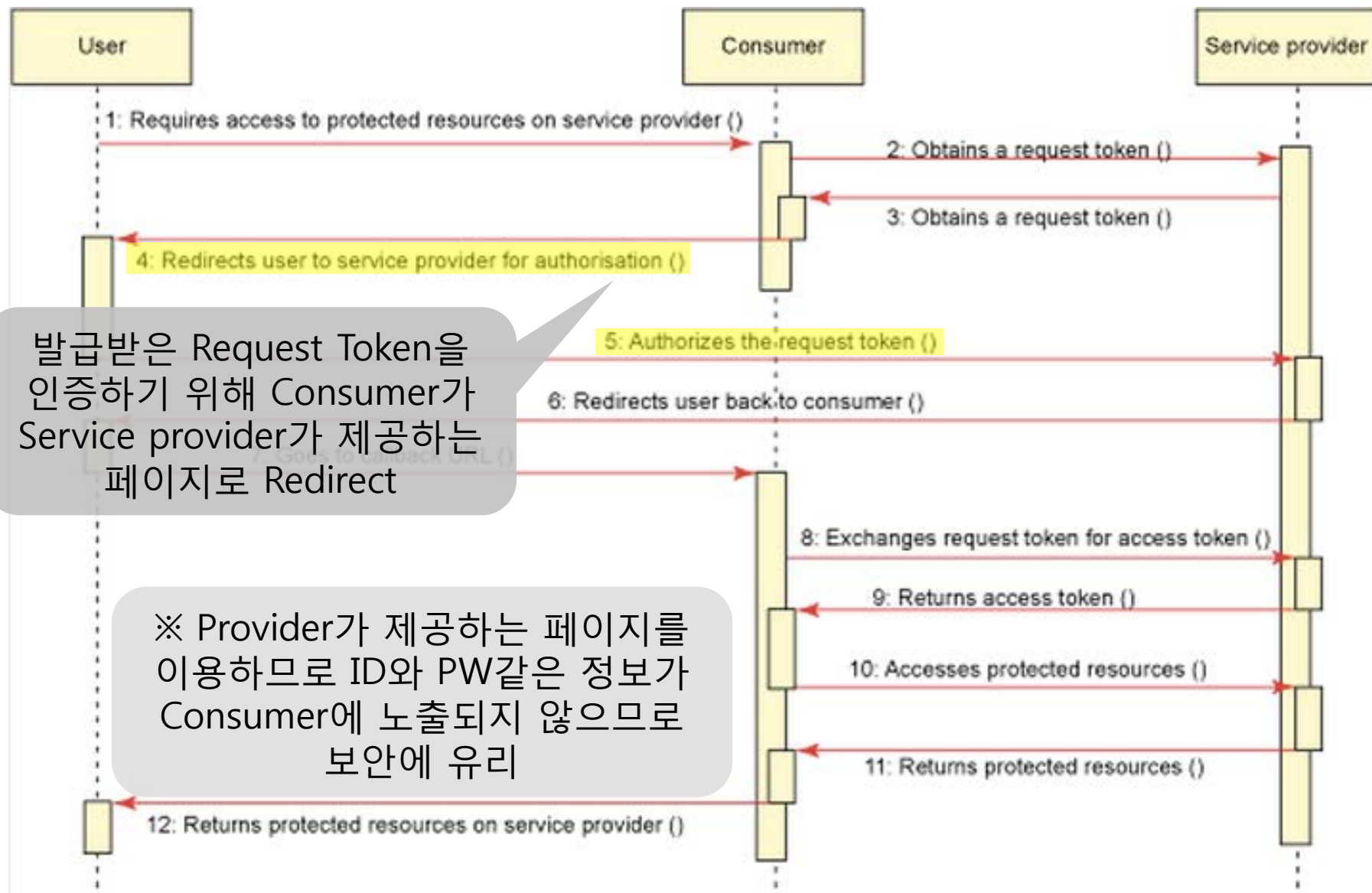
# OAuth – 인증과정



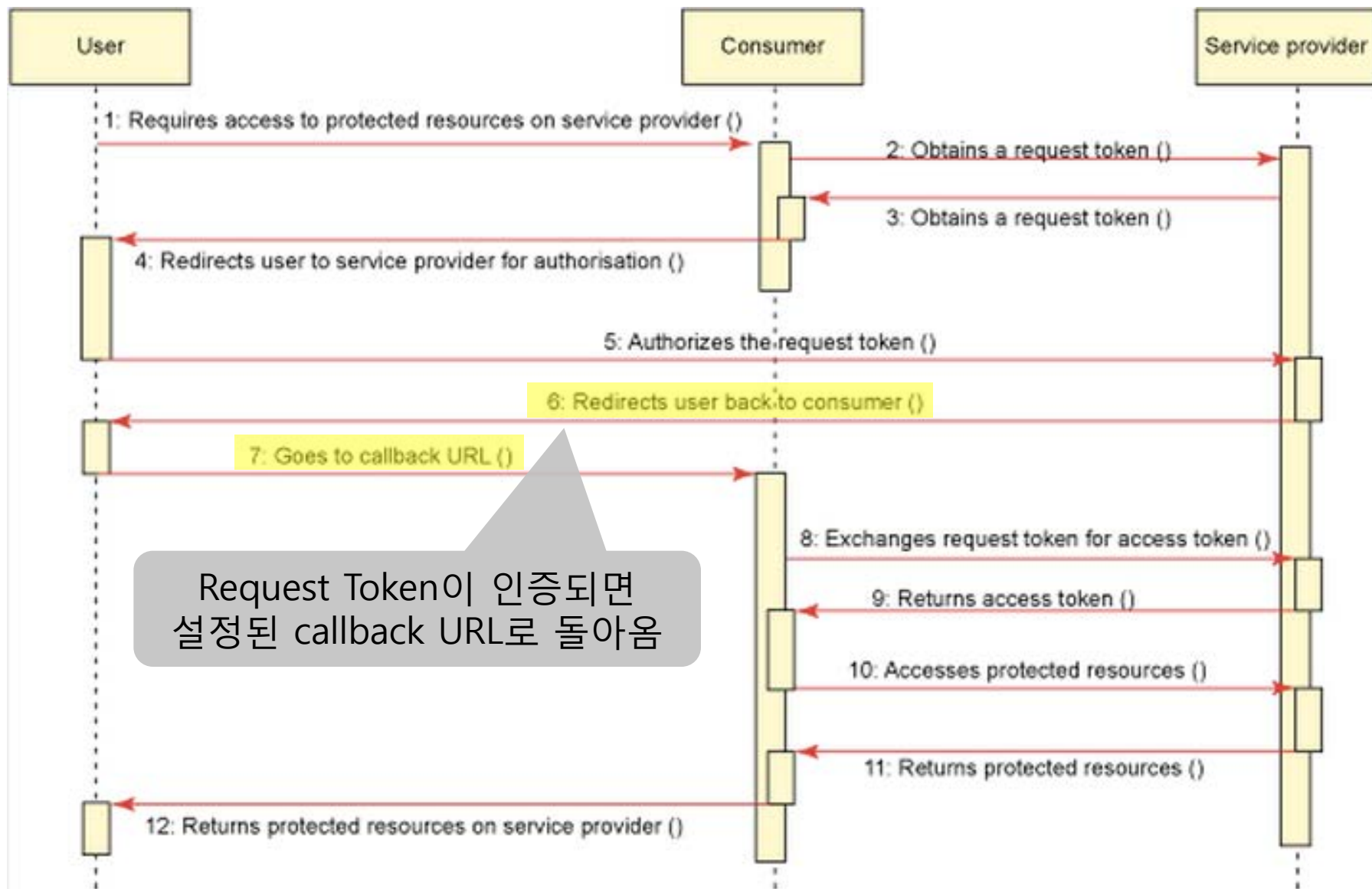
# OAuth – 인증과정



# OAuth – 인증과정

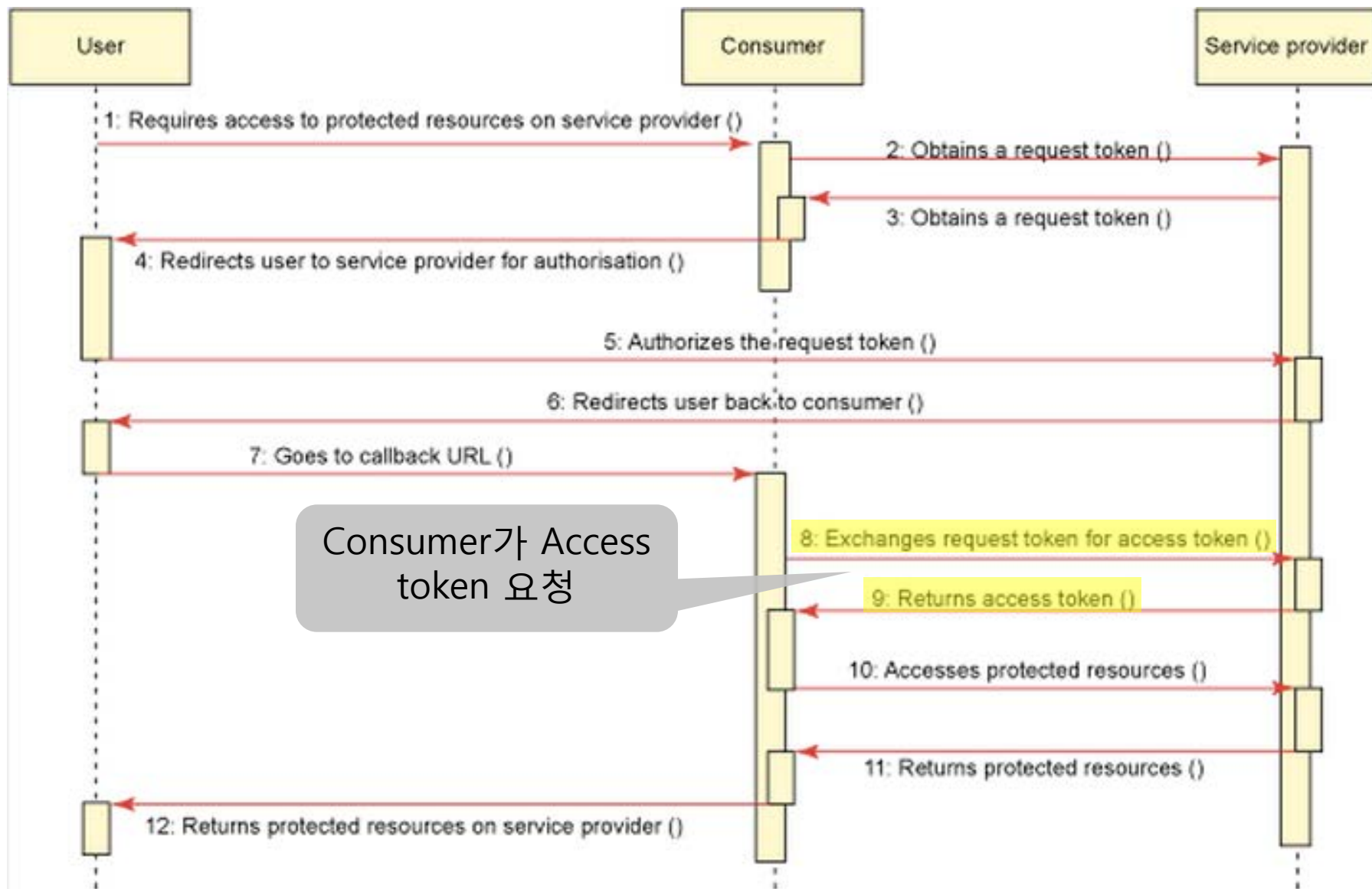


# OAuth – 인증과정

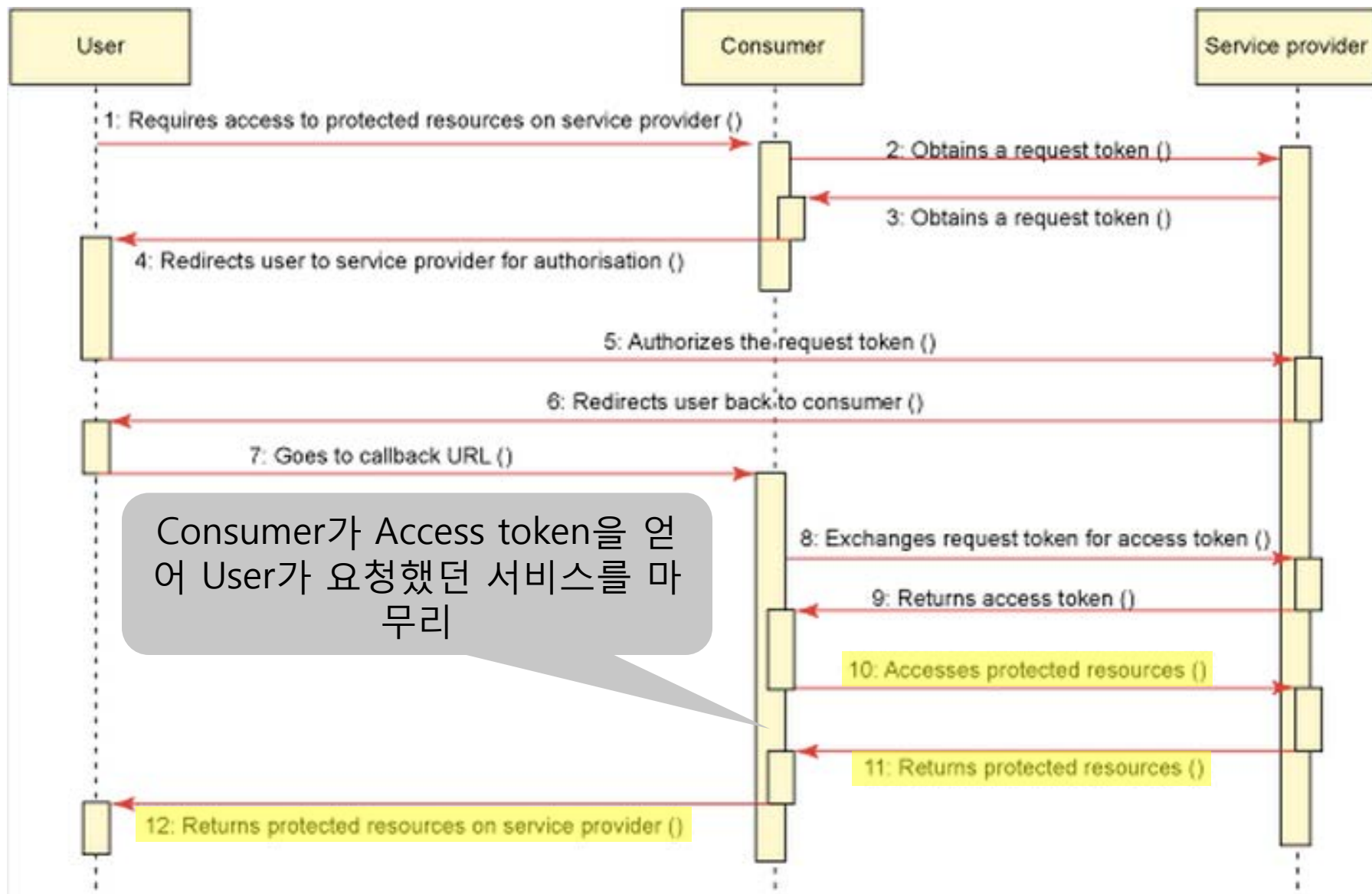




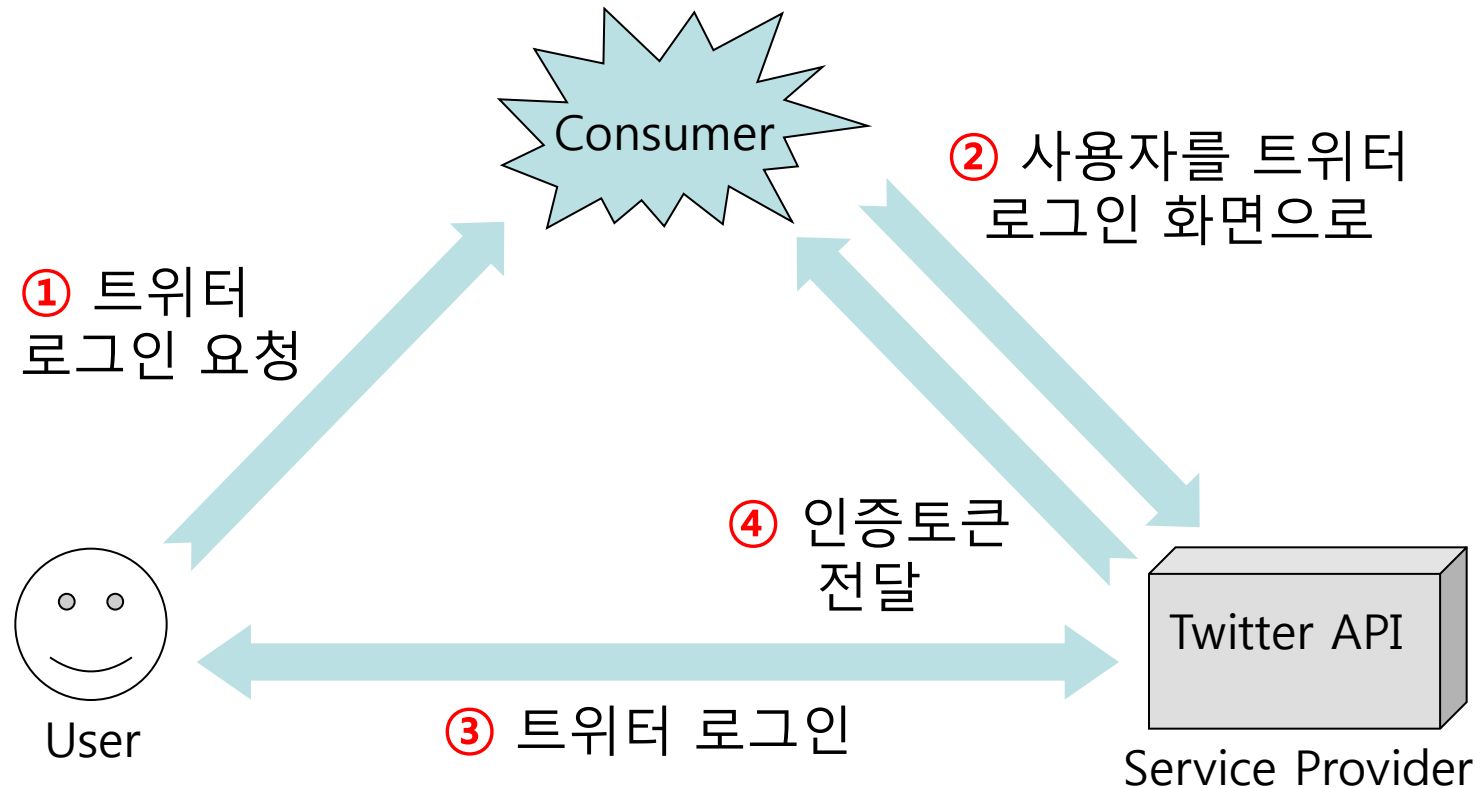
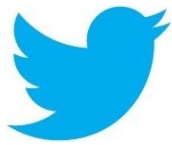
# OAuth – 인증과정



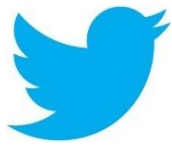
# OAuth – 인증과정



# OAuth – Twitter 인증과정



# Twitter :: 인증



- 웹사이트와 twitter를 연동
- <https://dev.twitter.com/apps/new>
  - Twitter API 키 발급

# Twitter :: 인증



← → G https://dev.twitter.com/apps/new

Developers API Health Blog Discussions

Home → My applications

## Create an application

### Application Details

Name: \*

mobile software project

Your application name. This is used to attribute the source of a tweet and in user-facing authorization screens.

Description: \*

mobile software project

Your application description, which will be shown in user-facing authorization screens.

Website: \*

연동하고자 하는 웹페이지 주소

Your application's publicly accessible home page, where users can go to download the application and will be shown in user-facing authorization screens. (If you don't have a URL yet, just put a placeholder here but remember to change it later.)

Callback URL:

user 로그인 후 돌아오는 페이지 주소

Where should we return after successfully authenticating? For @Anywhere applications, specify their oauth\_callback URL on the request token step, regardless of the type of application.

### Developer Rules Of The Road

claim. In any event, you will not settle any such claim without Twitter's prior written consent.

#### 8. Miscellaneous.

These Rules constitute the entire agreement among the parties with respect to the subject matter hereof, including all understandings and contemporaneous communications. Any modification to the Rules of the Road must be in writing. You may not assign any of the rights or obligations granted hereunder, voluntarily or by operation of law (including a merger, acquisition, or sale of assets) except with the express written consent of Twitter. Any provision of these Rules that is in conflict with the laws of the State of California, without regard to or application of conflict of laws principles, is void. This agreement will be brought exclusively in the federal or state courts of the State of California, and the personal jurisdiction in those courts. No waiver by Twitter of any covenant or right under these Rules shall be deemed a binding writing duly authorized by Twitter. If any part of this agreement is determined to be invalid or unenforceable, that provision will be enforced to the maximum extent permissible and the remaining provisions will survive.

View the [API Terms of Service: Archive](#) or [the most recent changes](#).

☒ Yes, I agree

By clicking the "I Agree" button, you acknowledge that you have read and understand this agreement and agree to be bound by its terms.

### CAPTCHA

This question is for testing whether you are a human visitor and to prevent automated spam submissions.

alznat 3241

alznat3241

Create your Twitter application

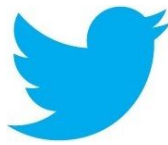


## OAuth settings

Your application's OAuth settings. Keep the "Consumer secret" a secret. This key should never be human-readable in your application.

Access level	Read, write, and direct messages <a href="#">About the application permission model</a>
Consumer key	[REDACTED]
Consumer secret	[REDACTED]
Request token URL	<code>https://api.twitter.com/oauth/request_token</code>
Authorize URL	<code>https://api.twitter.com/oauth/authorize</code>
Access token URL	<code>https://api.twitter.com/oauth/access_token</code>
Callback URL	<code>http://blog.naver.com/ppsd01</code>
Sign in with Twitter	No

# Twitter :: 인증



- 연동 후

Settings - Application Type - Access에서

**Read only->Read and Write**로

변경해주어야 읽고 쓰기가능

## Application Type

Access:

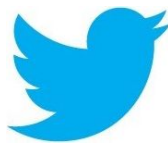
☐ Read only

☒ Read and Write

☐ Read, Write and Access direct messages

What type of access does your application need? Note: @Anywhere applications require read & write access.  
Find out more about our [Application Permission Model](#).

# Twitter :: 인증



- 연동 후

Settings - Application Type - Access에서

**Read only->Read and Write**로

변경해주어야 읽고 쓰기가능

## Application Type

Access:

☐ Read only

☒ Read and Write

☐ Read, Write and Access direct messages

What type of access does your application need? Note: @Anywhere applications require read & write access.  
Find out more about our [Application Permission Model](#).



# Twitter :: 인증



<http://twitter4j.org/>

## Download

· Latest stable version



[twitter4j-3.0.3.zip \(JavaDoc / Migration guide from 2.1.x to 2.2.x\)](#)

~~twitter4j-android-3.0.3.zip~~(Regular version got slimmed down from version 3.0.3. Thus build for Android platform was retired. Use regular version instead.)

· Latest snapshot build



[twitter4j-3.0.4-SNAPSHOT.zip \(JavaDoc\)](#)

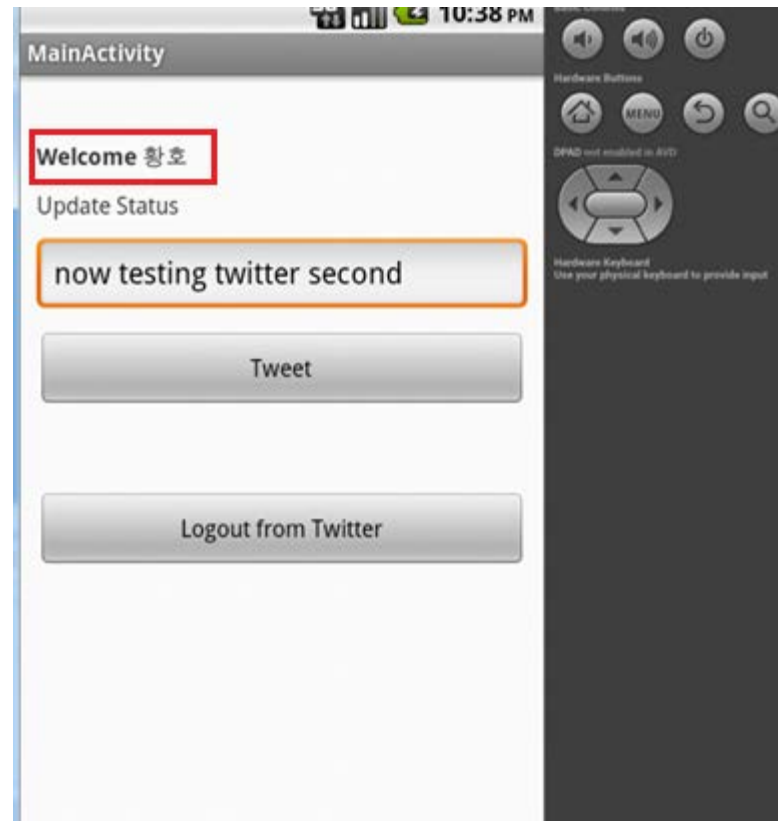
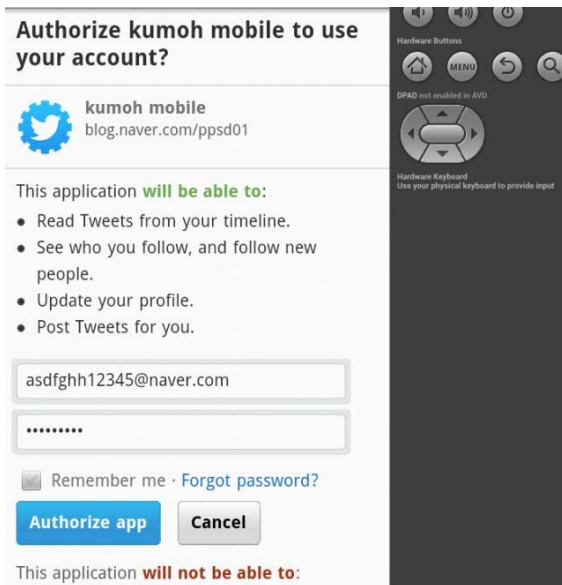
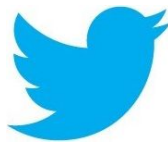
~~twitter4j-android-3.0.4-SNAPSHOT.zip~~(Regular version got slimmed down from version 3.0.3. Thus build for Android platform was retired. Use regular version instead.)

# Twitter :: 인증



```
private void loginToTwitter() {  
    // Check if already logged in  
    if (!isTwitterLoggedInAlready()) {  
        ConfigurationBuilder builder = new ConfigurationBuilder();  
        builder.setOAuthConsumerKey(TWITTER_CONSUMER_KEY);  
        builder.setOAuthConsumerSecret(TWITTER_CONSUMER_SECRET);  
        Configuration configuration = builder.build();  
  
        TwitterFactory factory = new TwitterFactory(configuration);  
        twitter = factory.getInstance();  
  
        try {  
            requestToken = twitter  
                .getOAuthRequestToken(TWITTER_CALLBACK_URL);  
            this.startActivity(new Intent(Intent.ACTION_VIEW, Uri  
                .parse(requestToken.getAuthenticationURL())));  
        } catch (TwitterException e) {  
            e.printStackTrace();  
        }  
    } else {  
        // user already logged into twitter  
        Toast.makeText(getApplicationContext(),  
            "Already Logged into twitter", Toast.LENGTH_LONG).show();  
    }  
}
```

# Twitter :: 인증



# Twitter :: 쓰기



- **twittwe4j.updatestate**

- 쓰기는 POST 방식을 사용

```
protected String doInBackground(String... args) {
    Log.d("Tweet Text", "> " + args[0]);
    String status = args[0];
    try {
        ConfigurationBuilder builder = new ConfigurationBuilder();
        builder.setOAuthConsumerKey(TWITTER_CONSUMER_KEY);
        builder.setOAuthConsumerSecret(TWITTER_CONSUMER_SECRET);

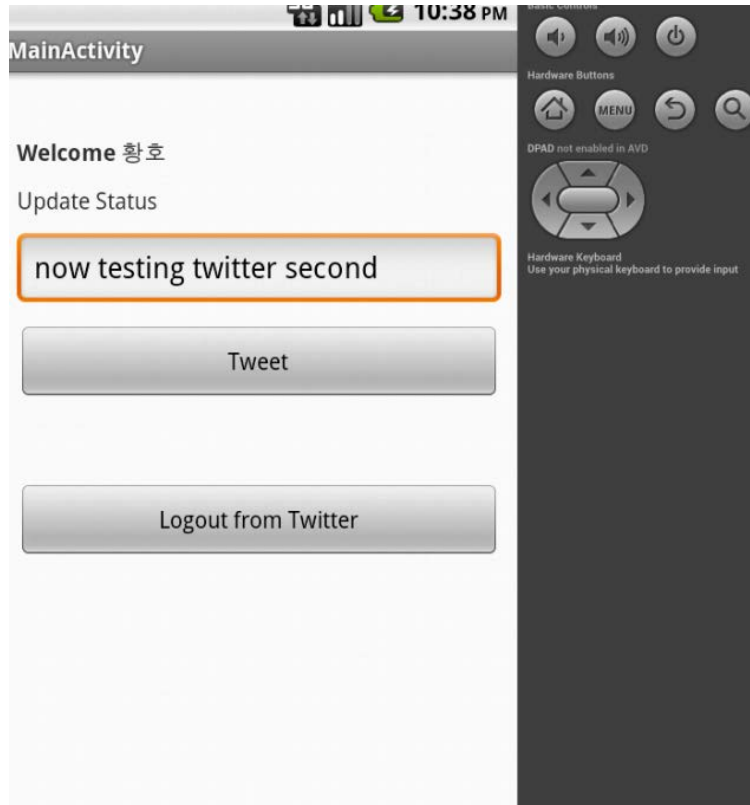
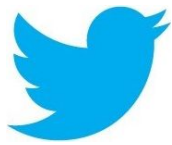
        // Access Token
        String access_token = mSharedPreferences.getString(PREF_KEY_OAUTH_TOKEN, "");
        // Access Token Secret
        String access_token_secret = mSharedPreferences.getString(PREF_KEY_OAUTH_SECRET, "");




        AccessToken accessToken = new AccessToken(access_token, access_token_secret);
        Twitter twitter = new TwitterFactory(builder.build()).getInstance(accessToken);

        // Update status
        twittwe4j.Status response = twitter.updateStatus(status);

        Log.d("Status", "> " + response.getText());
    } catch (TwitterException e) {
        // Error in updating status
        Log.d("Twitter Update Error", e.getMessage());
    }
    return null;
}
```

# Twitter :: 쓰기 예제



-  황호 @asdfghh12345  
now testing twitter second  
1시간  
펼치기
-  황호 @asdfghh12345  
two test tweet  
3시간  
펼치기
-  황호 @asdfghh12345  
now testing twitter api  
4시간  
펼치기



- 에러 발생 했던 부분  
안드로이드 avd 뒤에 숫자  
로그아웃 에러 처리 안해서 났던거  
페이스북이나 다른 API와 달리 어플리케  
이션은 웹서비스 아니라 데스크탑 클라이언트  
인증 때문에 애 먹음

i.twitter.com/o...

Sign up for Twitter >

umoh mobile to use  
nt?

mobile  
er.com/ppsd01

will be able to:  
from your timeline.  
follow, and follow new  
profile.  
or you.

mail

me · [Forgot password?](#)

Hardware Buttons

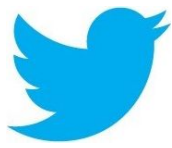
DPAD not enabled in AVD

Hardware Keyboard  
Use your physical keyboard to provide input

backdoor: 해킹 공... 코드엔진

오전 5:28  
2013-04-25





# Q&A