In this lecture, we will discuss…

- ✧ What is OAuth 2
- ✧ Why use OAuth 2
- ✧ OAuth 2 data flow

What is OAuth 2

- OAuth stands for “Open Authorization”
- Open standard protocol that provides simple and secure authorization for different types of applications
- Allows providers to give access to users without any exchange of credentials
- *Authorization framework that enables applications to obtain limited access to user accounts on an HTTP service like Facebook, GitHub, Twitter etc…..*

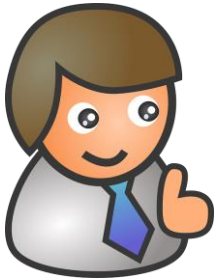
Password Approach: Problems

- Users have to share credentials
- Not secure and intrusive
- Hard to maintain when you authorize many apps
  - Change password at provider (Facebook) – clients need to be updated

OAuth 2 Approach

- Secure as no passwords are exchanged
- Uses tokens (next slide)
- Allows providers to give access to users without any exchange of credentials

OAuth 2 in Action: Movie Service



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MovieEditor Web Application

1. REGISTER APPLICATION

Movie Service

OAuth 2 in Action: Movie Service

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New Application

Name

Movie Client

Redirect uri

http://acme.com/auth/movies/callback

Use one li

Scopes

Separate scopes with spaces.

Submit Cancel

OAuth 2 in Action: Movie Service

MovieEditor Web Application

Application: Movie Client

Application Id:

4968cb91aa46a93eaaafb939370b013466152154220b02ac7fc455b78f1df3be

Secret:

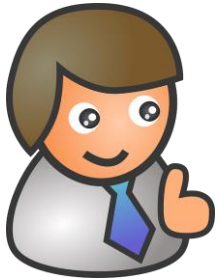
ec3743ecba039850473950dc141a1a7a59a5465487d262b62e7cc31e070f32ed

Scopes:

Callback urls:

http://acme.com/auth/movies/callback Authorize

OAuth 2 in Action: Movie Service



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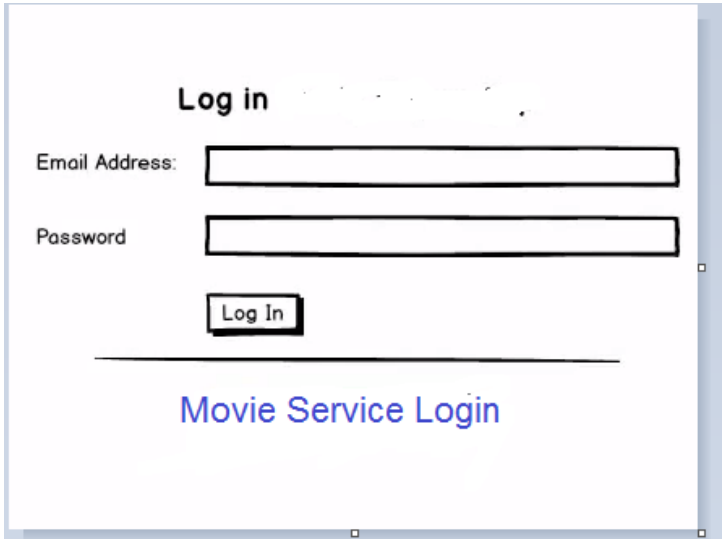
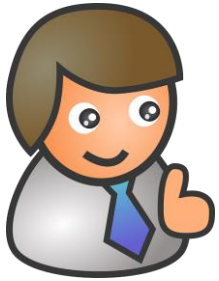
1. I want to work on a movie, please get my movies

MovieEditor Web Application

Movie Service

OAuth 2 in Action: Movie Service





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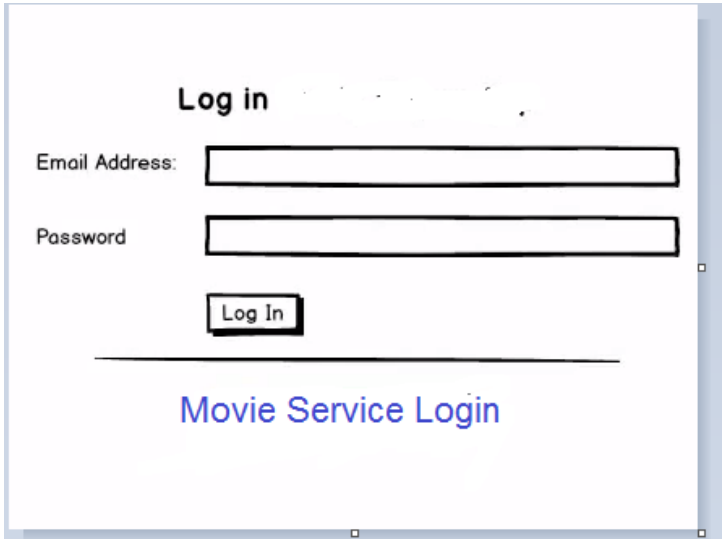
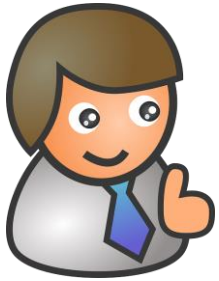
OAuth 2 in Action: Movie Service





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app_id=12345
Redirect_uri = http://acme.com/auth/movies/callback
Scope = create_movies

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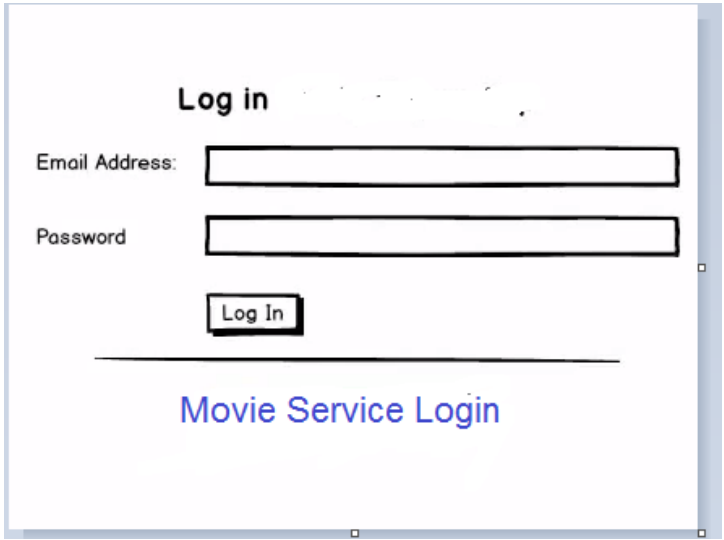

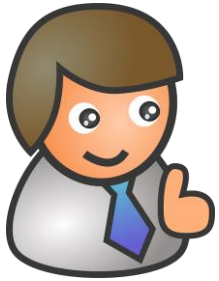

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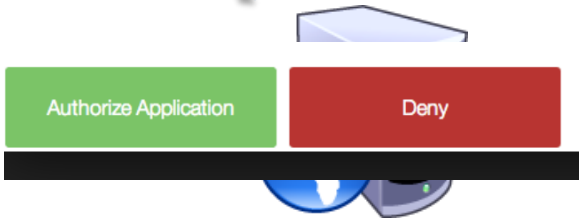
YES - Authorize



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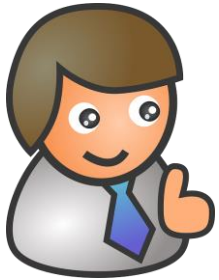

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code = abcdef

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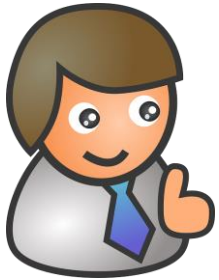
OAuth 2 in Action: Movie Service



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code=abcdef
app_id=XXX
secret_id=XXX

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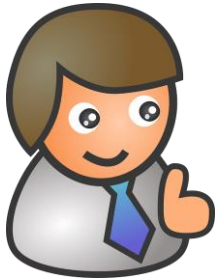

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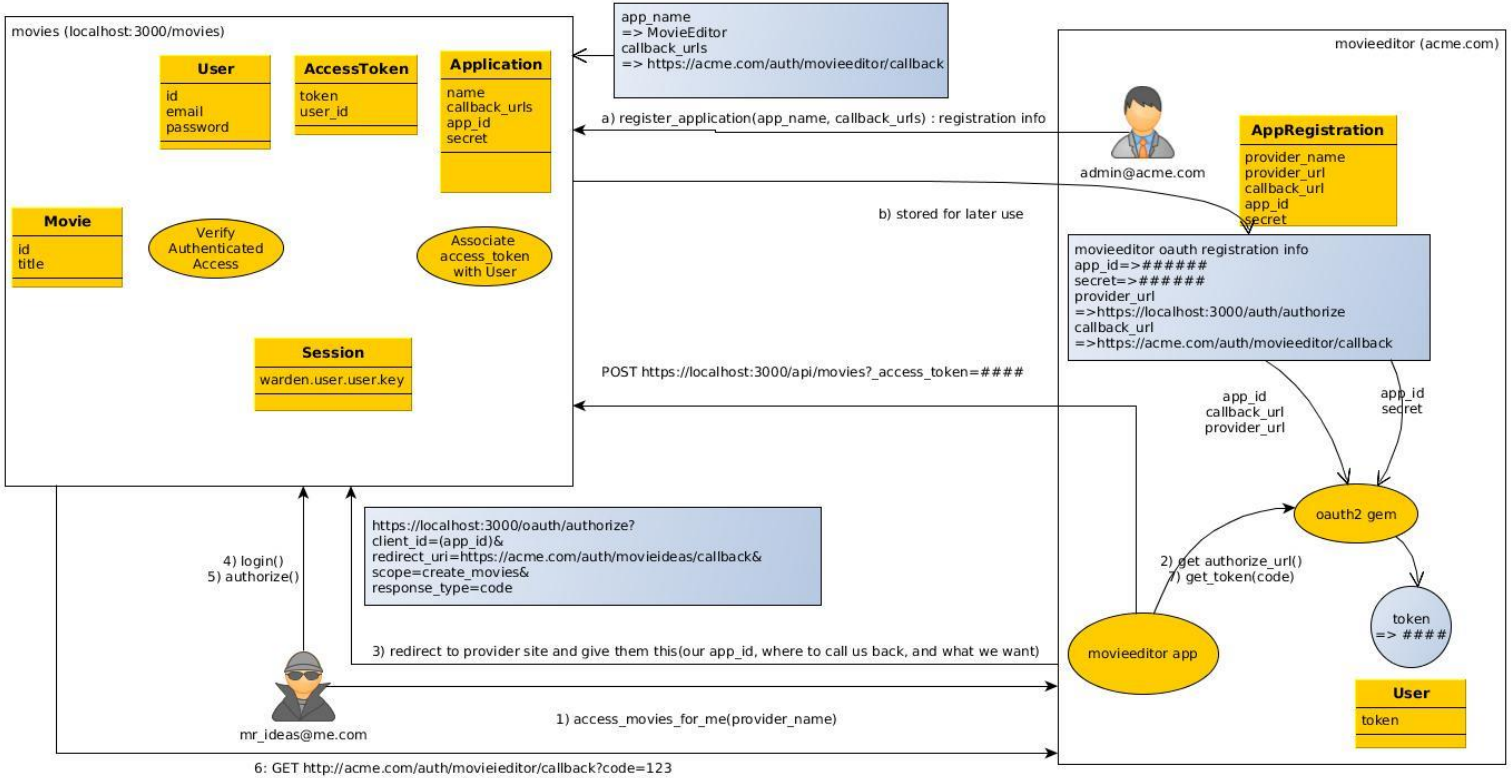
{ access_token: “efg123” }

Movie Service

Movie Service: Example



Summary

- OAuth 2.0 is the next evolution of the OAuth protocol which was originally created in late 2006

What's Next?

- OAuth 2 Movie Service – Workflow