

# Working with OAuth 2.0 APIs in Azure Data Factory

by Martin Schoombee



Photo by [tabitha turner](#) on [Unsplash](#)

# About Me

“I help people make sense  
of their data”

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<https://github.com/mschoombee/Presentations/wiki/Presentations>



# Agenda

- What is OAuth
- The Authorization Flow
- Testing APIs (with Postman)
- Azure Data Factory – Linked Services, Datasets & Pipelines

# Open Authorization (OAuth)

*“A way for Internet users to grant websites or applications access to their information without giving them their passwords”*



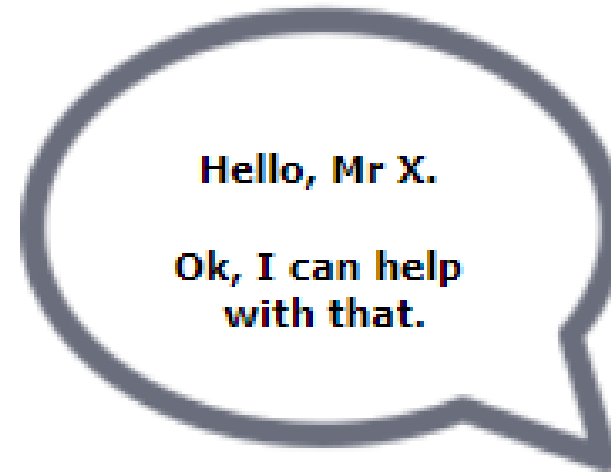
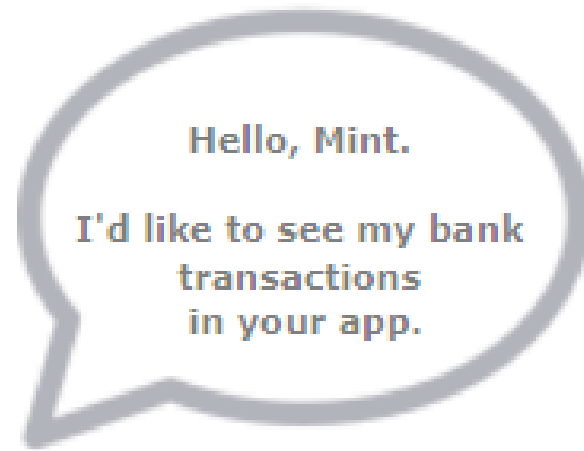
# Authorization Flow





Hello, Mint.

I'd like to see my bank  
transactions  
in your app.





Hello, Piggy Bank  
API.

Mr X would like to see  
his transactions in  
my app.





Hello, Piggy Bank API.

Mr X would like to see his transactions in my app.

I need to get Mr X's permission first.

Here's a login screen...



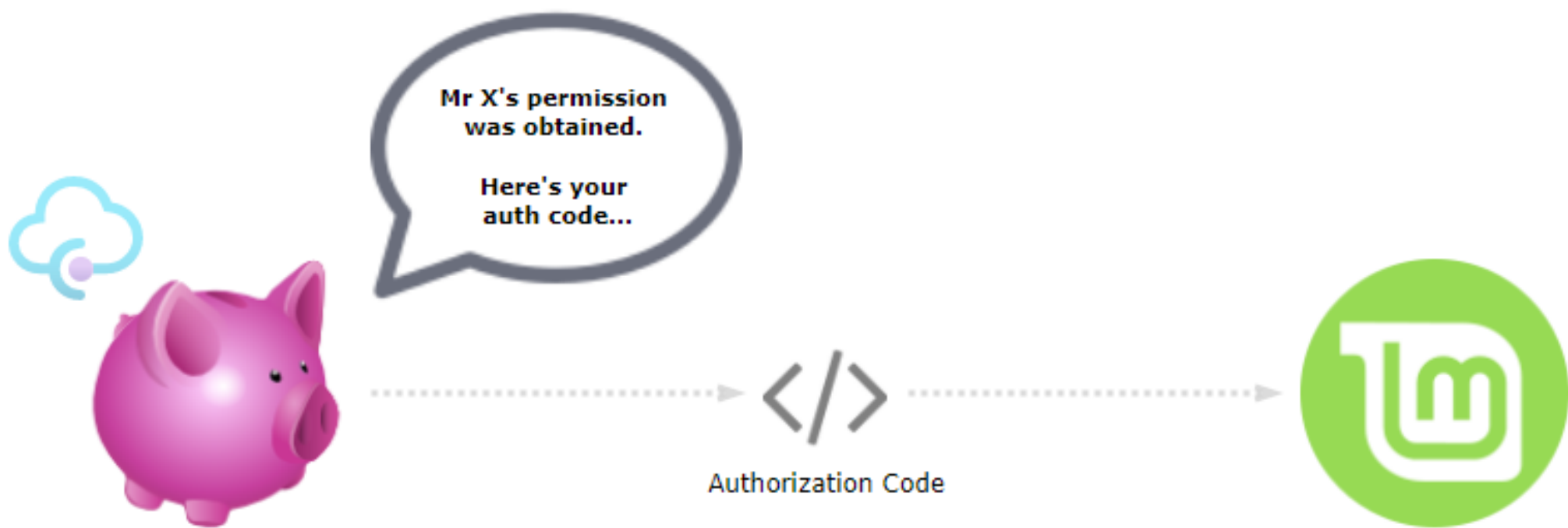


User Name:

Password:

SIGN IN









I don't see the problem

# OAuth 2.0 Challenges

## 1. Variation





# OAuth 2.0 Challenges

1. Variation

2. User Interaction Required





# OAuth 2.0 Challenges

1. Variation
2. User Interaction Required
3. Error Messages



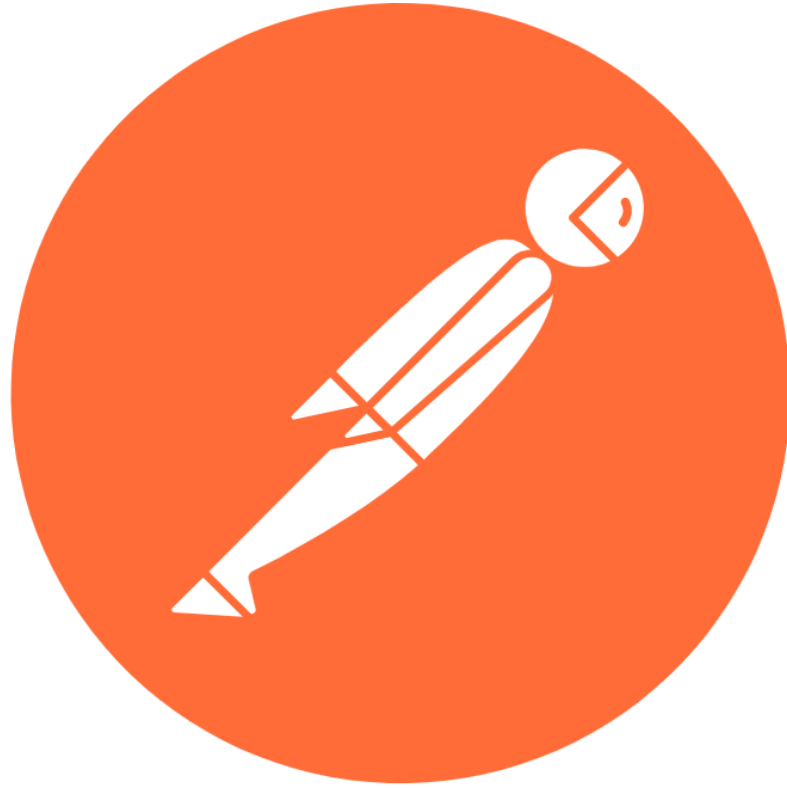
# OAuth 2.0 Challenges

1. Variation
2. User Interaction Required
3. Error Messages
4. Add Azure Data Factory









POSTMAN

# Lessons Learned

## 1. API Docs!!





# Lessons Learned

1. API Docs!!

2. Start with Postman\*



# Lessons Learned

1. API Docs!!
2. Start with Postman\*
3. \*Generic\* Linked Service





# Lessons Learned

1. API Docs!!
2. Start with Postman\*
3. \*Generic\* Linked Service
4. Use Azure KeyVault



# Lessons Learned

1. API Docs!!
2. Start with Postman\*
3. \*Generic\* Linked Service
4. Use Azure KeyVault
5. Separate Token Refresh



# Lessons Learned

1. API Docs!!
2. Start with Postman\*
3. \*Generic\* Linked Service
4. Use Azure KeyVault
5. Separate Token Refresh
6. Pagination :-/



# Resources

- OAuth
  - <https://www.oauth.com/>
- Xero
  - <https://developer.xero.com/>
- KeyVault Secrets API
  - <https://docs.microsoft.com/en-us/rest/api/keyvault/secrets/get-secret/get-secret>
- My Blog Series
  - <https://martinschoombee.com/2022/02/15/working-with-oauth-2-0-apis-in-azure-data-factory-a-series/>