Collecting Social Media Data

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2. Web APIs (application programming interface): use a set of structured https requests that return JSON or XML files
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Types of APIs:

1. RESTful APIs: queries for static information in current moment (e.g. user profiles, posts, etc.)
2. Streaming APIs: changes in users’ data in real time (e.g. new messages, deletions, etc.)
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Rate limits
1. Restrictions on number of API calls by user and period of time
2. APIs are expensive!
Connecting with an API

Constructing a REST API call

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- Parameters: ?ids=barackobama,johnmccain
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Authentication

- Most common is an open standard called OAuth
- Connections without sharing username and password, only temporary tokens that can be refreshed
- httr package in R implements most cases (examples)
Twitter and Facebook

R packages

- Twitter: twitteR for REST, streamR for Streaming
- Facebook: Rfacebook
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Python: tweepy and facebook-sdk
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Integration with quanteda