Twitter

- A service which lets you send short messages
- Messages can be listened to, and send from a mobile phone as text messages.
- Messages can be public, as well as private. (direct messages)
- Also stores all the messages sent and received, like an email inbox.
- Lets others follow you, lets you follow others.
Twitter

- Create a twitter account for your service (say @RUWaiting)
  - Make your Users follow you (follow them back)
  - This makes sure that you can send direct messages to them & vice-versa
- Users can send a direct message to @RUWaiting with start location, destination and time.
- A server can read the direct messages and respond.
- Responses can be through direct text messages also.
Twitter Example

- (Rider Perspective)
- Send text: d RUWaiting Home; Busch; 1.20PM
- Response: Car – ZZZ 123 Corolla, Driver – Borgida, Near Johnson Park Entrance, Passcode: 7912; 1PM; Accept?
- Send: d RUWaiting yes
- Response: Ride all set!
Twitter Advantages

- Can be used with a mobile phone through text messages
- Access to the direct messages through many simple client libraries (available in multiple languages)
Twitter Disadvantages

- People need to have twitter accounts
- Users need to enable phone access to twitter
- Users will need to pay for the incoming messages as well as outgoing ones.
- Some of this can be mitigated when the service becomes bigger and we can afford a proper SMS Gateway (Like those you see in ads: “Send text message to 34334 for more info”)
OAuth

- Twitter authentication is the only difficult part
- Your application needs to be registered with Twitter
- [https://twitter.com/oauth_clients/new](https://twitter.com/oauth_clients/new)
- Your application will get a key and secret
- App can then generate a “Request token” url for each user. (In this case, only @RUWaiting)
- App then gets permission from @RUWaiting through the URL, to allow the application to use @RUWaiting's account.
OAuth continued.

- An access token and secret w.r.t to @RUW aiting are retrieved by your application.
- Your application can then use this token to access @RUW aiting account (say, read direct messages).
- All of this was to make sure the application does not need to know @RUW aiting's password!
A twitter client library for Java

- Twitter4j - twitter4j.org