

# NETWORKING WITH URLSession



## PART 8: AUTHENTICATION

# AUTHENTICATION

---

- ▶ Basic/Digest access
- ▶ Basic access over HTTPS
- ▶ OpenID Connect (on OAuth 2.0)
- ▶ Client/Server certificates: X.509
- ▶ Kerberos/NTLM (NT LAN Manager)
  - ▶ URLAuthenticationMethodNegotiate



# SECRET KEY, PUBLIC KEY

---

- ▶ Secret key = symmetric encryption
  - ▶ Cheap computation
  - ▶ Needs secure channel to set or change key
- ▶ Public key = asymmetric encryption
  - ▶ Expensive computation
  - ▶ Useful for setting secret key
  - ▶ X.509 certificates verify public keys



# STORING AUTHENTICATION DATA

---

- ▶ Credential store
  - ▶ client certificates
  - ▶ server trust authentication
  - ▶ user/password pair
- ▶ Persistence
  - ▶ none; forSession; permanent; synchronizable
- ▶ Keychain
  - ▶ access and refresh tokens

# AUTHENTICATION DELEGATE METHODS

---

URLSessionTaskDelegate

```
func URLSession(URLSession, task: URLSessionTask,  
    didReceive: URLAuthenticationChallenge, completionHandler: @escaping  
    (URLSession.AuthChallengeDisposition, URLCredential?) -> Void)
```

URLSessionDelegate

```
func URLSession(URLSession, didReceive: URLAuthenticationChallenge,  
    completionHandler: @escaping  
    (URLSession.AuthChallengeDisposition, URLCredential?) -> Void)
```



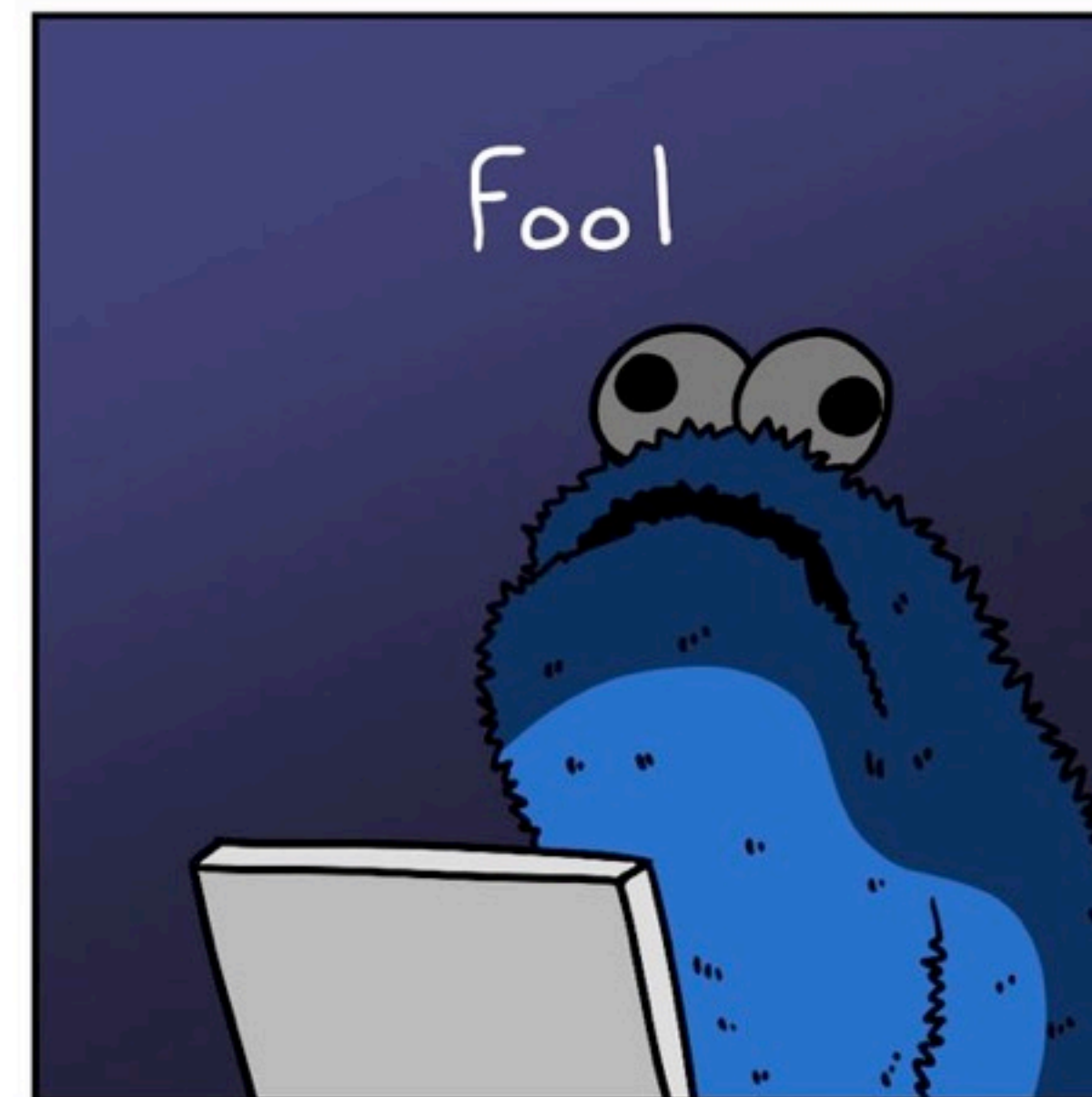
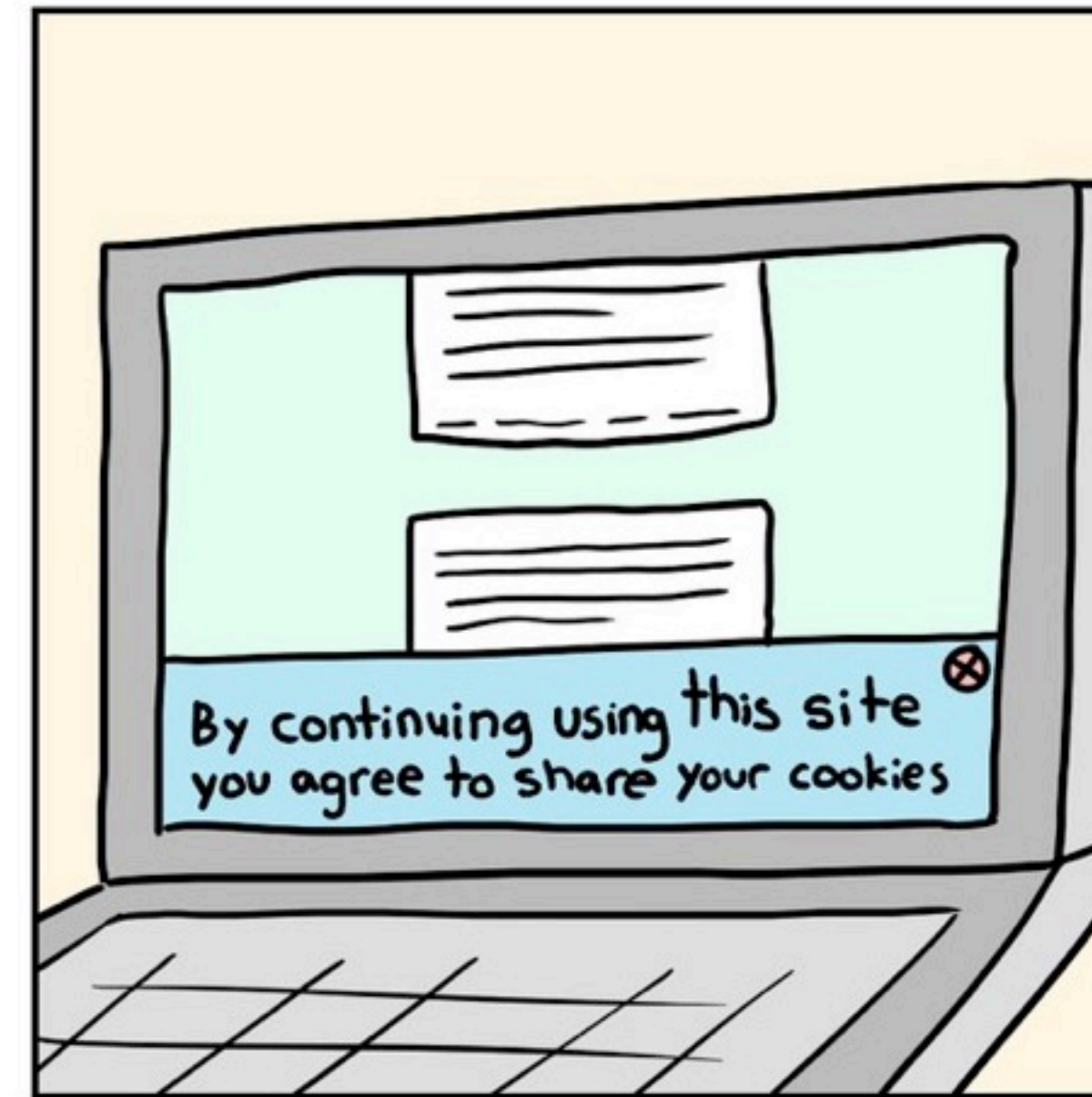
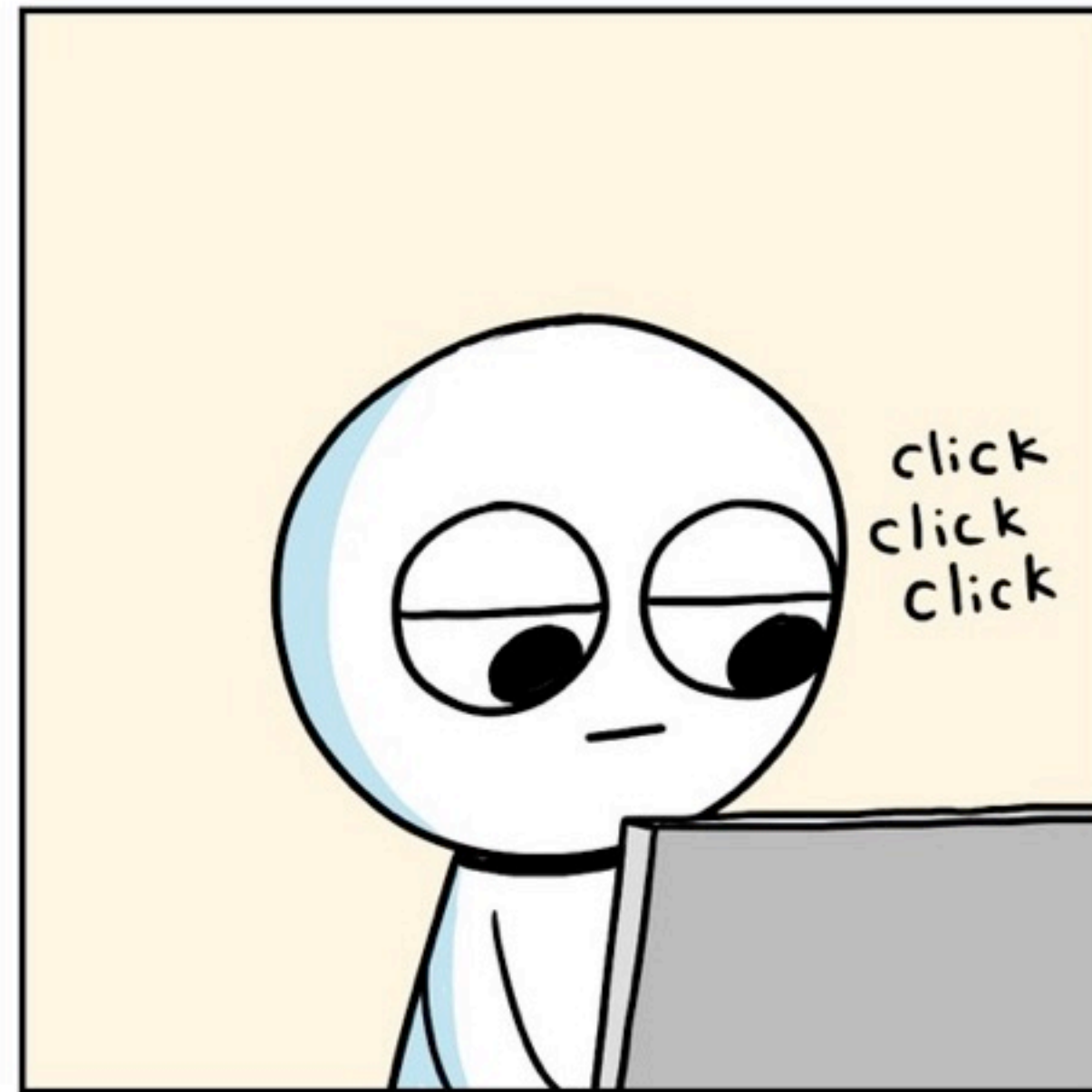
# COOKIES

---

- ▶ Sent by server, returned by client, to maintain identity and info
- ▶ Session/transient or permanent/stored
- ▶ Flash cookies/local stored objects







# URLSESSIONCONFIGURATION

---

## Set cookies from cookie store?

```
configuration.httpShouldSetCookies = false
```

## Accept cookies?

```
configuration.httpCookieAcceptPolicy = .never
```

```
var allHeaderFields: [AnyHashable : Any] { get }  
class func cookies(withResponseHeaderFields  
    headerFields: [String : String],  
    for URL: URL) -> [HTTPCookie]
```

## Store cookies?

```
configuration.httpCookieStorage = nil
```



# DEMO



# CHALLENGE TIME!

---

Carrier 1:52 PM

Stormpath Notes

edward@stormpath.com

.....

[Login](#)

[Login with Facebook](#)

[Login with Google](#)

[Reset Password](#)

[New to Stormpath Notes? Register Now](#)