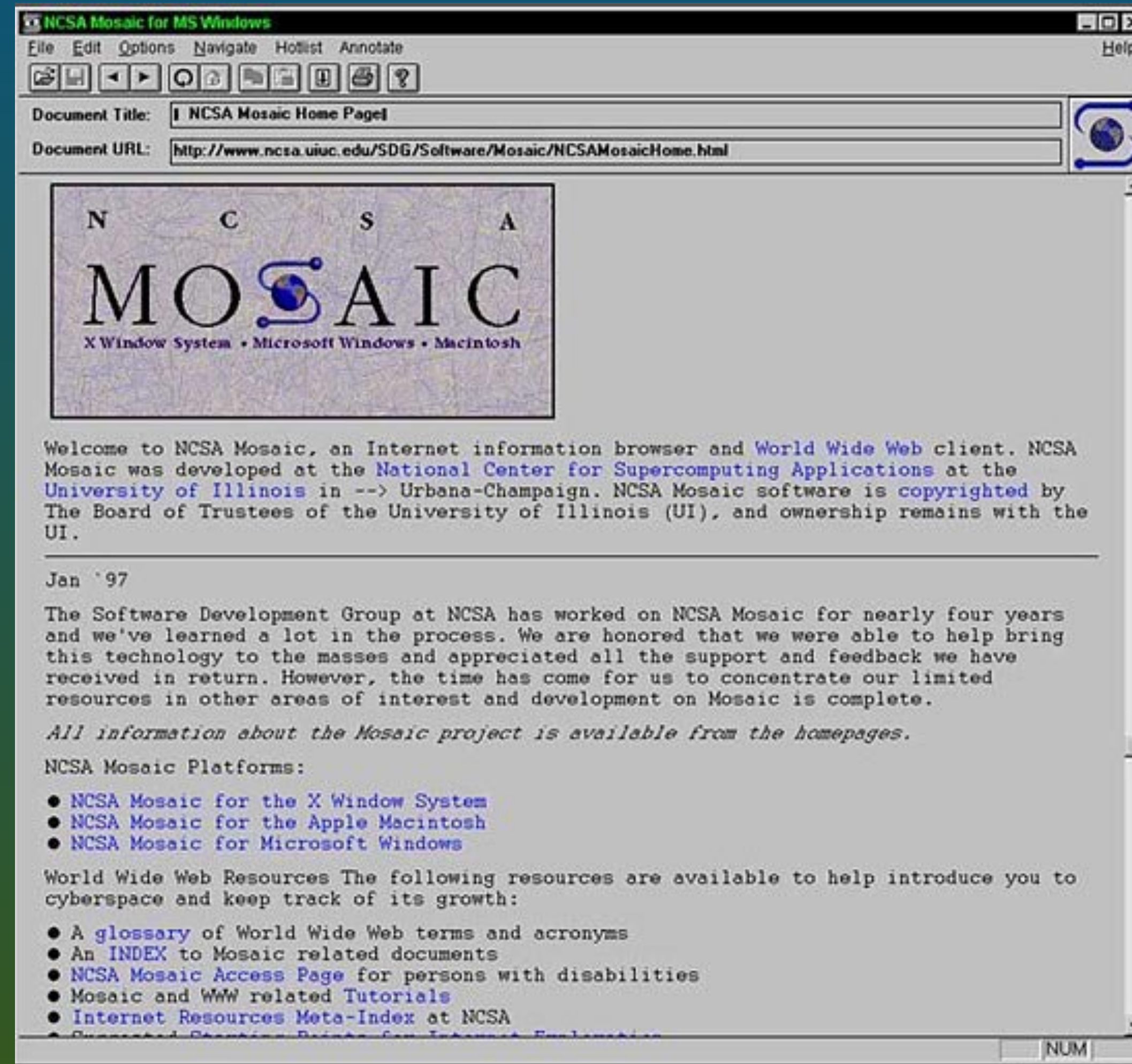


# Security

## Web Engineering

Prof. D. König

# Yesterday, 25 Years ago



# Why Do We Care?

Often, for good UX and plain functionality,  
we need to *identify the user*.

# But then...

With identification come further issues:  
safe password management  
user-creation denial of service attacks  
lost passwords, revoking credentials, ...  
use of external service (OAuth) ?



# What can go wrong?

## **Eine kurze Frage an T-Mobile Österreich endete für den Mobilfunkanbieter im Fiasko**

*Der österreichische Mobilfunkprovider T-Mobile Austria steckt seit Tagen im Shitstorm. Heute gab das Unternehmen zu, Kundenpasswörter unverschlüsselt zu speichern. Ein Drama in zehn Akten.*

# Keep it simple

There is *much* to know about security.

We need a *simple* initial introduction.

Let's follow best practices and use  
*Spring Security*

# Access Control

Once I can identify the user, I often want to restrict access based on the user's characteristics (guest, regular, admin)

# Some Concepts

Authentication: who am I ?

Authorization: what am I allowed to do?

Principal, Role, Authority, Credentials,...



# Strategies

Shield resource vs shield access path,

Allow allow, shield selectively

Disallow all, open up selectively

# Full Security

... is a topic that expands much more than what we can cover here.

Attend specialized modules.

We do a bare-bones introduction,  
so let's start!