User Authentication: Passport

MP3 grades are out on compass

Paper prototypes are due next class

MP4 is due a week from today

Passport

What is it?

Application-middleware for NodeJs that is designed to authenticate requests

Supports a comprehensive set of authentication mechanisms called strategies

Strategies are packaged as individual modules that makes it easy to plug different forms of authentication into a web application

Configuring Passport

app.use - add middleware required to initialize passport and support user sessions

```javascript
var cookieParser = require('cookie-parser');
var session = require('express-session');

var passport = require('passport');

app.use(cookieParser())
app.use(session({ secret: 'passport' }));
app.use(passport.initialize());
app.use(passport.session());
```

Using Strategies

Strategies supplied via use()
Strategies require what's known as a verify callback which is code that
finds a user with given credentials

```javascript
var LocalStrategy = require('passport-local').Strategy;

passport.use('local', new LocalStrategy(
    function(email, password, done) {
        // authentication code
    }
));
```

Using Strategies

The verify callback is invoked with the given credentials as arguments. If they're valid, done is invoked with the user that was authenticated and passes that user to Passport

```
if ( isValid(email, password) ) {
    return done(null, false);
} else {
    return done(null, userObject);
}
```

User Sessions

If authentication succeeds, a session will be established and maintained as cookie in the user's browser

Subsequent requests will contain the unique cookie that identifies the user.

Passport will serialize the user instance into the session for you

How do we handle usernames, passwords, and security?

Never store passwords in plain text!

DEMO

OAuth

An open standard for authorization, commonly used as a way for Internet users to authorize websites or applications to access their information on other websites but without giving them the passwords.

https://en.wikipedia.org/wiki/OAuth

Further Reading: https://oauth.net/articles/authentication/

QUESTIONS?

NEXT CLASS: Design Lab

Bring your paper prototypes!

courses.engr.illinois.edu/cs498rk1/