



School of Computer Science

Web and Database Computing 2019

Lecture 25: Additional Interfaces and Examples

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seek LIGHT

Integrating with Host System

Other API classes/functions to make our web applications do more.

Uploading files

Files are uploaded using POST requests. To use them we need to:

1. Save the file to the filesystem
 - Usually all uploaded files go in a given location with random names.
2. Record the file's name/location
3. Use the recorded data to serve the file again later when needed.

There are a number of different server Middlewares, and client libraries to help with this:

- Multer on the server
 - <https://expressjs.com/en/resources/middleware/multer.html>
- Dropzone on the client
 - <https://www.dropzonejs.com/>

Demo

Interacting with the Filesystem

The `fs` module can be used to read and write to files in the server's filesystem.

- `readFile` and `readFileSync` methods can be used to read from files
- `readdir` and `readdirSync` methods can be used to list the contents of folders
- `writeFile` and `writeFileSync` methods can be used to write to files
- <https://nodejs.org/api/fs.html>

Demo

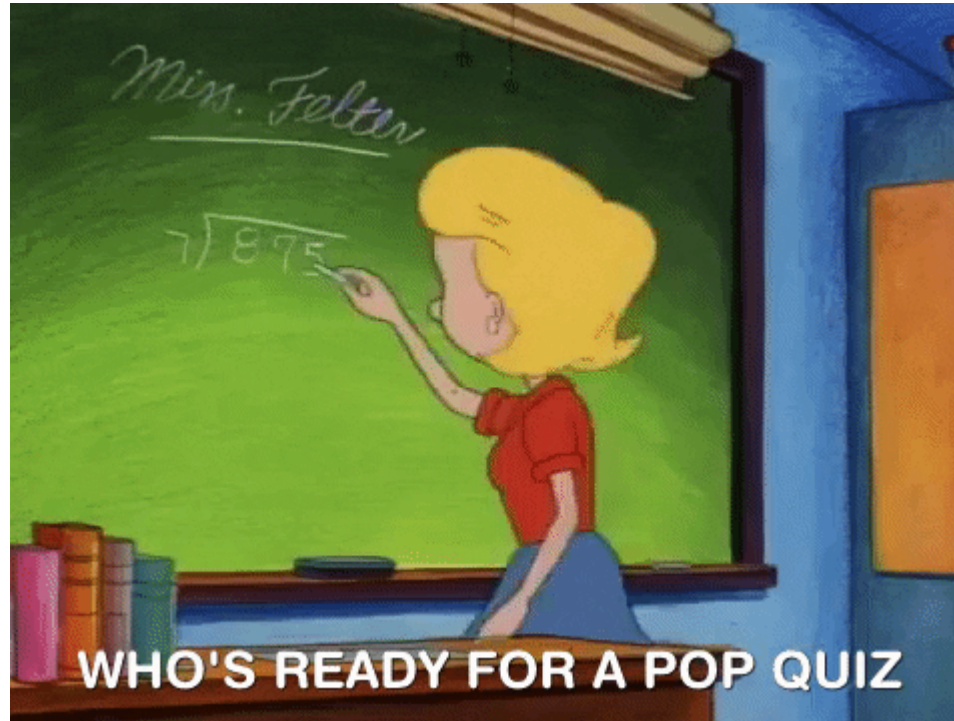
Interacting with other software

The `child_process` module can be used to run and interact with programs in the server's OS.

- `exec` and `execSync` methods can be used to run programs
- `spawn` method can be used to start and interact with a program via STDIN and STDOUT
- https://nodejs.org/api/child_process.html

Demo

Quiz!



Refresher:

- 5 questions in the next 5 slides
 - **Questions also in the Quiz**
- Answers in the online quiz visible after all 3 attempts
- 3 attempts at the quiz
- Keep highest mark
- Can be completed any time in the next 24h
- 0.5% of your final grade

< /quiz >

OpenID Demo

Continuing our Demo from Monday

Questions?



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What's happening

Due:

- Prac Exercise 7 due today.
- Prac Exercise 8 available today.
 - Due start of week 11.

This week:

- Livestream tonight 8:30
 - Answering questions, looking at examples (see announcement)
- Database integration

Further learning:

- Keep working on your group projects