Coding Dojo: Bank OCR Austrian Institute of Technology September 2014

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Peter Kofler

- Ph.D. (Appl. Math.)
- Professional Software Developer for 15 years



- "fanatic about code quality"
- I help development teams

Coding Dojo? Expectations?

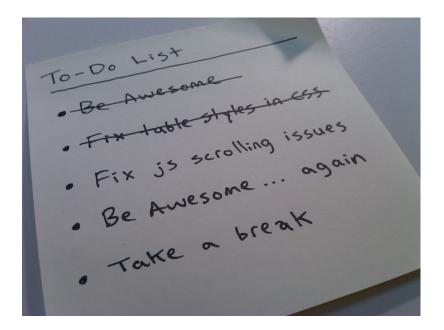
Coding Dojo Mindset

- Safe place outside work
- We are here to learn
- Need to slow down
- Focus on doing it right
- Collaborative Game

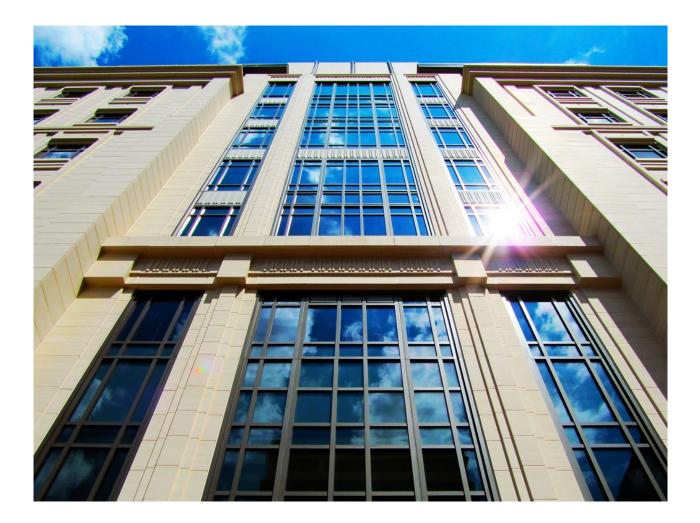


Dojo Structure

- Introduction 15'
- Coding 45'
- Interim (Retrospective) 15'
- Break 10'
- Coding 45'
- Retrospective 15'







Bank OCR

• You work for a bank, which has a machine to assist in reading letters. The machine scans the paper documents, and produces a file with a number of entries which each look like this:

• Each entry is 4 lines long, each line has 27 characters. The first 3 lines contain an account number written using **pipes and underscores**, and the fourth line is blank. Each account number should have 9 digits, all of which should be in the range 1-9.

Bank OCR

- Write a program that can take this file and parse it into actual account numbers.
- Find a pair.
- Choose a programming language.
- Set up the environment.
- Start with creating a test.

Don't Focus on Getting it Done. Focus on Doing It Perfectly.

\rightarrow Practice

Bank OCR considerations

- Which algorithm did you chose?
- How readable are your test cases? (Can you look at them and easily see which digits are being parsed?)
- How do you match digits? (Are you using low level Ifs or high level patterns to match?)
- Functional or imperative? (Do you use iteration or recursion?)
- What if the input changes? (What about the style of digits, number of digits, ...)

\rightarrow Practice

Closing Circle

- What did you learn today?
- What surprised you today?
- What will you do differently in the future?





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