STARTING and SUSTAINING a CODING WORKSHOP for LIBRARIANS
Credits

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Motivations

Productivity
Document process
Reduce dependence on IT
Information literacy
Career growth
Home
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UMD Libraries Coding Workshop

The Coding Workshop meets Mondays from 3-4 pm, usually in McKeldin B0228 (DSS Conference Room).

Hacking the Shell

The coding workshop is a forum and a gathering space for library staff interested in coding/computer programming. It is part support group, part learning experience, and part discussion forum. You need no experience whatsoever to participate.

The group began meeting in August 2013, and has been through a number of transformations over its life. It currently functions more like an interest-group than a class. Beginning participants are encouraged to work through Codecademy lessons at their own pace outside of meetings and bring questions for discussion to the weekly meetings. Meetings also feature presentations on discrete topics related to programming, and project-oriented work sessions (either individually or in groups). The primary language of focus is Python, but other languages and technologies are often discussed.

Links

- Coding Workshop Home
- CodeAcademy
- Coding Workshop on Github
- Meeting Schedule
- Agendas
- Useful Links
- Project Ideas
- Cloud9 Instructions
- Adobe Connect Meeting

Clone this wiki locally

https://github.com/umd-codi
History

• Focused on beginners
• 40+ initial participants
• Classroom + Codeacademy
• Slow attrition
• Resurrection as small group
Now

- 1 hour/week
- Co-working
- Short demos
- Group or 1:1 problem-solving
- Mentoring
- Discussion
- Shell programming
Success

• Still going after 27 months
• Several coding novices are using new skills to solve real library problems, esp. data wrangling/cleaning. . .
• Batch generating and transforming metadata received from digitization vendors
• Extracting mp3 metadata tags and writing them to CSV
• Generating inventories of data collections received from researchers (e.g. file count by type)
• Cleaning Hebrew text for frequent word analysis
• Converting Hebrew to civil dates and calculating chronogram values
• Converting PDF to plain text
• Generating a spread sheet of image files contained on a DVD-ROM
• Finding links and directory references in SQL files
• Re-sorting pages of PDFs
• Extracting OCLC numbers from MARC and writing to CSV
• Running a MySQL-backed web application on a server
• Getting data out of Excel and into Solr
Challenges

1. Participation attrition
2. Accommodating beginners
3. Balancing interests and goals
4. Pedagogy
5. Teaching with technology
6. Logistics
Attrition

• From 40+ to about 6 regulars
• Factors: time, logistics, difficulty, tech, supervisor, motivation, falling behind
• Big problem: time/effort required to see benefits in day-to-day work
“I couldn’t apply it to my work for the library”
Beginners

• Beginners need time, curriculum, class, tutorial, mentoring, goals, relevant outcomes
• Do best in a community of learners
• More like Columbia’s Developing Librarian Project?
Interests

• Everyone has different work problems
• Toy problems alienate
• Little agreement on shared project
• Common language?
Pedagogy

• Language features (variables, conditions, loops) vs. application design

• “grammar vs. storytelling”
Technology

- Laptops and/or workstations?
- Command line (local/cloud)
- Mixed success with Codeacademy
- OS differences
Logistics

• Finding a consistent day/time/location
• Organizing can’t be one individual’s responsibility
Get started

• Solve real problems
• Support beginners
• Accept long-term commitment
• Split into interest/domain groups?
• Have more than one leader
• Reward it
Thank you.