Programming and Data Science for User Experience Researchers HCDE 598 A — Jonathan T. Morgan & Ray Hong

Week 4 | April 18, 2016

Your feedback

Week 3 feedback survey

- Review too slow, review too fast, review just right
- Real examples were/are appreciated
- Would like to go through more "data handling" strategies
- Real life examples would be helpful
- It was hard to connect the new material (dictionaries) to the coding challenges
- "There are multiple sets of challenge questions discoverable on the wiki for each week"
- I got stuck/ran out of steam during project time

Changes based on feedback

- Tonight's lecture: we'll revisit material from last week that was inadequately covered, using a concrete example
- **Real life research examples:** There are two this week!
- Project time: we'll do project time from 8:40 9:20, and end with something a
 little more structured and slightly less taxing, but still useful—an end-to-end
 research example from my own work.

Overview of the day

- Feedback review & administrative stuff (6 6:15)
- Week 3 coding challenges (6:15 6:45)
- Week 3 concepts follow-up (6:45 7:15)
- 10 minute break
- Reading and writing text files (7:25 8:00)
- Burke-Gilman traffic counter project intro (8:00 8:30)
- 10 minute break
- Peer programming: BGT traffic project (8:40 9:20)
- Notification survey analysis walkthrough (9:20 9:45)

Curriculum tweaks

- Final project idea due date pushed back 1 week, to May 2 (week 6)
 - Reason: you don't have all the info/tools you need to make these choices!
 - Ray and I will present examples of datasets and rq's next week.
 - By the end of next week, you will know how to work with APIs and JSONformatted data—which is how most of you will be gathering your final project datasets.
- MySQL is being dropped from the curriculum :(
 - BUT... I will still provide some examples of MySQL databases that contain data you can use for your final project.
 - AND... I'll provide links to self-study resources for those who want to learn (or brush up on) MySQL.

What we'll cover instead

- Week 5: intro to APIs and JSON. (Warning: contains kittens)
- Week 6: data visualization with MatPlotLib (and other tools)
- Week 7: more advanced text processing with RegEx
- Week 8: basic statistics with SciPy
- Week 9: Research design, or, "how to tell stories with data"

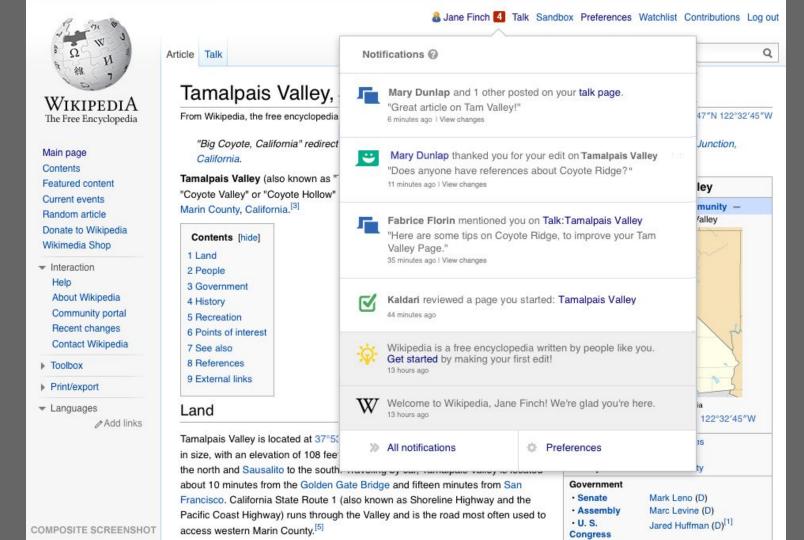
Reminder

- The coding challenges assigned this week are required
 - Due next week before class
 - You have to attempt the first 4 challenges, and turn in your code
 - There will be a dropbox on Canvas
 - You will be graded pass/fail based on whether you turned in code that attempts all 4 challenges by the due date
 - You do NOT have to attempt challenges #5 and #6, but they could be fun...

Questions?

Research programming example

Wikipedia Editor Survey: use of the Notifications feature







Engl	ish	1

Q8. Please rank the following list of notification types in order of how important it is that you read this type of notification soon after it occurs.

Re-order the list below by dragging the most important notification to position 1, the second most important to position 2, and so on.

other pages now link to a page you created
someone sent you an email
someone mentioned you on a talkpage
your edit was reverted
someone thanked you for your edit
a page you created was reviewed
your user rights were changed
someone left a message on your user talkpage

Research questions

Sampling: logged-in users who have at least 1 unread notification (n = 120)

Questions

- Which types of Notification are editors exposed to?
- Which types of Notification do editors consider most important?

Design goal: figure out which notifications to prioritize in the feed, which ones to de-emphasize

Podium

Allie Deford Morgan Duffy Khuyen "Max" Lam

Daren Chaisy

Ender Barillas Jonathan Wang Olivia Frederick Yuan Zhuang Sahil Anand Nick Throm TJ Koines George Karalis Nikhil Venkatesh Susan evans Spencer James Abhishek Anand

Gabriela Madrid Nick Anderson John Jessup Demi Boe David wang Kristine Kohlhepp Setumadhava G Kathawate Emma Bulajewski Vishwas Shetty Todd Little Nicole Bernardi Anne Burker +2 students