Breakout Exercises - Complete Instruction Sheet

**Pseudo Code [Module 1]**

Programming the Library

**Introduction:**

* + We are going to ask you to program the different goals and actions of a library
  + We will be practicing by putting these expressions into a computer program using a PseudoCode language
  + PseudoCode does not follow any particular syntax, but is just the primary steps for a programmer to follow

**Purpose:** demonstrate both the complexity of coding and how it may be intimidating to most patrons while also showing how do-able it is to edit

* + There will be a reference picture that we have already filled in

**Instructions:**

1. Your job is to take the template document and fill in your own goals and actions
2. Try not to worry about the technicalities of the code
3. Open​ [PseudoCode template](https://github.com/jasonclark/algorithmic-awareness/blob/master/modules/one/library-pseudocode-exercise-template.py) in text editor​​
4. Work through adding values and encoding decisions individually.
5. One goal is complex​, you will need to add methods
6. Come back together to discuss​

**Teaching moment:** This exercise will provide a theorized example of the workings of an algorithm. In addition, it will give an introduction to coding with a balance between technical and comprehensive learning.

**Questions**

* + What were some of your library’s goals?
  + How did you decide on your locations and actions?
  + How do you view the role of a programmer and what are some of the challenges they may face when creating algorithms?

**Anonymous and Personal Profiles [Module 2]**

A Side by Side

**Purpose:** Create an understanding of how data profiles impact personalization and experiences

**Environment:** Google

**Goals:**

* + Discern how data profiles deliver a user experience
  + Learn how to move into algorithmic environments without your data footprint
  + Recognize the limitations of hiding and shielding your personal data from algorithmic environments

**Instructions:**

1. Open up two web browsers - one in which you are logged in and one in which you are not
   1. This is probably google chrome for most of you
2. Open up two tabs in each web browser, Google.com and Amazon.com in both
3. Run a search for “climate change”
   1. Note the results
4. Run another query of your choosing
5. Note the personalization in the results for both environments
   1. Specifically the logged-in versus the not logged-in

**Discussion Questions:**

* + What are your initial observations?
  + What was surprising or predictable about your results?
  + What do you see as the limitations of hiding your personal information from these environments?
  + How might these results affect your future browsing?
  + What are the implications of targeted advertisements and data profiles?

**Your Google Profile [Module 2]**

Data Download

**Instructions**

1. Open a window in Google Chrome
2. Go to your Google Account
   1. Either click on three dots in the upper right-hand corner
      1. Go to “Settings” then “Manage your Google Account”
   2. Or click on your google picture
3. Click on “Data & Personalization”
   1. From here you can check out your “Ad Personalization”
4. You can “Download your Data” from here

**Discussion Questions**

* + What was surprising or predictable about your profile?
  + What are some implications of Google using your personal information?

**Sprinting Breakout Session [Module 3]**

Transparency, Algorithmic Awareness & User Needs in Software

**Instructions**

1. Get into groups of 4 or 5 people (might need to adjust groups to enable quicker timeline for exercise)
   1. Try to create interdisciplinary groups
2. Brainstorm a software that could be improved upon via transparency or algorithmic awareness
   1. Preference would be for a local software system that you might be able to impact
   2. Further examples include: Netflix, Facebook, Google Search, etc.
   3. Our example: Google Search → Teaching Tool
3. Propose a software update with these aspects in mind
4. Prepare a one-minute [elevator pitch](https://docs.google.com/document/d/1eMVLToepRD1MB8RXchMk_qw12YW0Os0MilW4Bo2eBEI/edit?usp=sharing)
   1. See handout if you need more detailed instructions, but focus primarily on your user-friendly software development
5. Feedback
   1. Send a representative from your group to “pitch” the ideas
      1. This will happen within 3-4 minute rotations
      2. Make sure to give enough time for pitch AND feedback/comments/critics
      3. Finally, the representative will arrive back at their original group
   2. The representative presents the feedback to their group
   3. Troubleshoot and revise based on feedback
6. Review
   1. Either present to the entire class or wrap up depending on time

**Discussion Questions**

* + What were some of your ideas?
  + How does the sprinting technique help refine your ideas?
  + How might user needs and transparency play into general software development?
  + Are there times where algorithmic awareness or transparency would not improve the user experience?