CS 5306 / INFO 5306
Fall 2017
Project 2

Due: Wednesday, December 6, 4:30pm
(Late submissions accepted with no penalty through Dec 12)

The goal of this project is to ask a question about how some cognitive bias impacts worker performance on a crowdsourcing platform such as Amazon Mechanical Turk and try to answer it via experiments on the platform. The paper we discussed in class, "Financial incentives and the performance of crowds", is one example of a paper that explored how existing knowledge about people can provide guidance on the design of effective AMT tasks, including carrying through on the ideas with circumscribed experiments on AMT. You do not need to do anything as elaborate as they did, but it is an example of the kind of thinking the project is targeting.

Your submission should be 3-5 pages, can be performed either individually or in teams of 2, and should have the following sections:

1. Define/explain the cognitive bias you are targeting. This should be about the cognitive bias, independent of human computation.
2. Explain the effect that you think the bias will have on worker performance.
3. Describe the experiment(s) that you ran to test if it occurs.
4. Document your outcomes.

To help you select a cognitive bias you can consult the following resources:

- The Cognitive Bias Cheat Sheet (depicted in the Cognitive Bias Codex)
- Wikipedia's list of cognitive biases
- The course textbook, *Infotopia*
- The book *Building successful online communities: Evidence-based social design*, which shows how various cognitive biases can impact the success of online communities.

Should you need inspiration, some sample papers of this sort that you can review include:

- Alagarai Sampath, H., Rajeshuni, R. and Indurkhya, B., Cognitively inspired task design to improve user performance on crowdsourcing platforms. *SIGCHI 2014*.
- Cai, C.J., Iqbal, S.T. and Teevan, J., 2016, May. Chain reactions: The impact of order on microtask chains. *SIGCHI 2016*.
- Dai, P., Rzeszotarski, J.M., Paritosh, P. and Chi, E.H., And now for something completely different: Improving crowdsourcing workflows with micro-diversions. *SIGCHI 2015*.
- Gadiraju, U. and Dietze, S., Improving learning through achievement priming in crowdsourced information finding microtasks. *Proceedings of the Seventh International Learning Analytics & Knowledge Conference*.
- Harrison, L., Skau, D., Franconeri, S., Lu, A. and Chang, R., Influencing visual judgment through affective priming. *SIGCHI 2013*.
- Hullman, J., Adar, E. and Shah, P., The impact of social information on visual judgments. *SIGCHI 2011*.
- Lasecki, W.S., Rzeszotarski, J.M., Marcus, A. and Bigham, J.P., The effects of sequence and delay on crowd work. *SIGCHI 2015*.
- Morris, R., Dontcheva, M., and Gerber, E. Priming for better performance in microtask crowdsourcing environments. *Internet Computing*, IEEE 16:5, 2012.
- Suri, S., Goldstein, D.G. and Mason, W.A., 2011. Honesty in an Online Labor Market. *HComp 2011.*
- Yin, M., Chen, Y. and Sun, Y.A., Monetary interventions in crowdsourcing task switching. *HComp 2014*.