Short blurb from beginning of the document, go to assignments tab for full PDF with intructions: Prior Art Report

The Prior Art Report documents your search of the prior art (science and technology) related to

your design problem, either directly or indirectly. Your prior art search should have a distinct

purpose, and the report contents should continually reflect that purpose. Your reasons for

conducting the search will include one or more of the following:

1. To stimulate your thinking about solutions to your design problem
2. To improve upon existing designs
3. To see how your preliminary design ideas relate to the latest technology
4. To identify parts of existing designs that may work for your project

State clearly and narrowly your purpose for conducting the search, and write the report to be

consistent with that purpose. In other words, do not select and describe a random and seemingly

unrelated set of articles or patents for discussion without explaining how they came to be

selected or how they might help meet your design project goals. A good Prior Art Report looks

like the result of an organized, focused search to answer a specific set of research questions.

### Brainstorming

Look into previous designs of things that have done the same thing.

Here are some useful things that I found that I wanna look back into

<https://www.cs.cmu.edu/~dabraham/papers/aim04.pdf>

<https://eprints.gla.ac.uk/222006/1/222006.pdf>

Two-Sided Matching: A Study in Game-Theoretic Modeling and Analysis.

* There’s like a lot fo theory on this subject, but it mostly assumes that students have preference lists of projects and vice-versa, but ours has an intermediate layer of weighted decision tables and such, which seems like a neural network learning kind of linear algebra matrix problem. Just some notes

<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=3c16e4d5b67e93c7fa82f45b0528e06fcb518099>

* This is a 2007 implementation of the project we are trying to do from the University of Calgary. We may be able to glean some insight from this

<https://stackoverflow.com/questions/34570039/whats-the-fastest-heuristic-algorithm-to-split-students-into-groups>

* I found this stack overflow question and answer enlightening and similar to our problem

<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=629264ecb6b3ef5f18ef38d2692fce7d1b18fc44>

* Another previous implementation of the project we are doing so we can compare the two