Honors Project - Are You the One?

Overview

Design a simulator of MTV's reality show *Are You the One*. The rules of this game are:

- 16 contestants get paired into 8 "perfect matches"
- Each week:
  - contestants couple up with who they think their perfect match is
  - contestants are told the number of correct couples (but not which couples are correct)
  - one couple is sent to the "truth booth" for a definitive result of whether they are a prefect match

The goal is to find all perfect pairs as quickly as possible.

Requirements

There are two paths you can pick:

Path 1 - Graphic Design is my Passion

Design an interactive GUI so a user can play a game of Are You the One. Make the GUI as garish or as elegant as you can.

Path 2 - I'm more of a numbers person

Write code to simulate gameplay, and design 3 algorithms to play the game. Compare these algorithms using e.g. number of rounds to get all perfect matches or time for the algorithm to run. Use histograms to compare how these algorithms stand up against each other over a few hundred or a few thousand runs.

Schedule/Deliverables

We will meet certain Mondays at 4:30 PM EST in MCHU 101.

- Monday 9/9
  - Intro meeting
- Friday 9/13
  - Deadline to apply for honors conversion
- Monday 9/30
  - Present a block diagram representing either the logical flow or the classes for your program. Prepare your block diagram using e.g. lucidchart, code2flow, or creately.
  - Set up a github repo to hold your code
  - Share code repo w/ professor
- Monday 11/4
  - (mostly) working code demo
- Monday 12/2
  - Fully working code demo

Expectations

UConn's honors conversion info

I purposfully leave a lot of room for creativity in this project - what does a good block diagram look like? How should my GUI look? How do I compare algorithms? This is to encourage creativity and different approaches to this problem.

Feel free to try weird things and be creative. As long as your final project is high-quality and clearly shows sufficient work, we can have some wiggle room with the above deliverables. Reach out to me as soon as possible if there is a specific delieveralbe/requirement you would like to adjust.