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. In season 8, bisexual, pansexual, and gender queer contestants were chosen such that any contestant could be the perfect match of any other. This is also what we will simulate: you do not need to account for the gender or sexuality of contestants.

Requirements

Your simulator **must** do the following:

- Create 16 contestants and randomly select the 8 perfect pairs
- Simulate the game play

Additionally, your simulator must do **at least one** of the following:

- Visualize the game using a GUI
- Compare three or more game playing algorithms

Schedule/Deliverables

We will meet Tuesdays at 9:00 AM EST in Discord.

- Sept 13
    - Intro meeting
- Oct 4
    - Block diagram prepared with e.g. lucidchart, code2flow, or creately
    - Github repo containing block diagram + any code (personal or through UConn)
- Nov 8
    - (mostly) working code demo
- Dec 6
    - Fully working code demo
    - Finalized github repo

Expectations

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.