Assignment-3: User Interface for ML models.

Goal:
This assignment extends your work from Assignment-2. You will design and implement a front-end interface for your predictive model that clearly communicates what the model can do and presents its predictions in an understandable and responsible way. You will also evaluate the interface against the Microsoft HAX principles.

Deadline: 18-October-2025, 2359 hrs
(Late submissions penalized 10% per calendar day.)

What to do:

1. Continue in the same pair as Assignment-2.
2. Build a front-end interface for your trained model (from Assignment-2).
   - Think about how the model is expected to be used and build the interface appropriately for the users.
   - The interface should allow users to:
     - Input relevant features (e.g., student or work attributes).
     - View model predictions.
     - Understand what the model can and cannot do.
     - See performance and fairness indicators (overall and across groups) – communicate what the model can do and how well it can do that.
   - You may use a suitable framework of your choice.
3. Design expectations:
   - Keep the interface simple and functional.
   - Clearly indicate the scope and limitations of your model.
   - Indicate model fairness (before and after mitigation).
   - Ensure the interface makes it easy for users to interpret the results responsibly.
4. Evaluation:
   - HAX Principles: Evaluate your interface against the *Human-AI eXperience (HAX)* principles. Reflect on which principles your design meets well and where it can improve.
5. Technical requirements:
   - The front end must connect to your trained model backend.
   - Deploy it online along with your previous project.

What to turn in:

1. Code and Deployment:
   - GitHub repository link with both backend and front-end code.
   - Working deployment link.
   - Both partners' contributions must be visible on GitHub.
2. Short Report (max 4 pages):
   - Describe on what user you are considering for your system, and how the interface design relates to their usage of the model.
   - Show screenshots illustrating how users can see predictions and fairness indicators and point out how the interface communicates what the model can do.
   - Briefly present results of your HAX-based evaluation.

Tips:
- Prioritize clarity and usability over visual complexity.

- Focus on helping non-ML users make sense of the model's purpose and fairness.
- Make your evaluation systematic but concise—use simple tables or bullet summaries for HAX.
- The next two assignments will follow on the same codebase, keep it extensible.