

An AI Workflow in Medicine

The screenshot shows a web browser window with multiple tabs. The active tab is 'campus.datacamp.com/courses/understanding-artificial-intelligence/what-is-artificial-intelligence-ai?ex=3'. The page displays an exercise titled 'An AI workflow in medicine'. The instructions state: 'Let's make a first point of contact with AI applied in the real world, namely in medicine!'. Below the instructions, there is a list of steps to be ordered. The steps are: 'Organize the data and feed it to an AI system for diabetes diagnosing', 'Output a diagnosis for the patient', 'Collect a history of medical data', 'Based on diagnosis results, initiate treatment for the patient', and 'Apply reasoning over a new patient's data'. A 'Submit Answer' button is visible at the bottom right of the exercise area.

Question

Below are some steps needed for establishing an AI-based workflow (concretely via Machine Learning) to diagnose diabetes predicated on historical patients' data.

Guided by the definition of AI itself, your task is to arrange these steps in the most logical order.

Solution

1. Collect a history of medical data.
2. Organize the data and feed it to an AI system for diabetes diagnosing.
3. Apply reasoning over a new patient's data.
4. Output a diagnosis for the patient.
5. Based on diagnosis results, initiate treatment for the patient.

Explanation

1. ****Collecting historical data:**** This is the first step, as AI systems rely on large amounts of data to learn patterns.
2. ****Organizing and feeding data:**** The collected data must be cleaned, preprocessed, and structured to train the AI model.
3. ****Reasoning over new data:**** After training, the AI system uses its

learned model to analyze new patient data.

4. ****Output a diagnosis:**** The AI system outputs its prediction or diagnosis for the new patient.

5. ****Initiate treatment:**** Based on the AI diagnosis, appropriate medical treatment is initiated.