



AlertGenerator: Generates patient alert data and implements the PatientDataGenerator interface, ensuring a consistent method for data generation. It tracks alert states for each patient using a boolean array.

BloodLevelsDataGenerator: Generates blood levels data (cholesterol, white blood cells, and red blood cells) for patients. Implements the PatientDataGenerator interface and maintains the values for each patient.

BloodPressureDataGenerator: Generates blood pressure data (systolic and diastolic pressure) for patients. Like other generators, it implements the PatientDataGenerator interface and simulates variations in blood pressure.

BloodSaturationDataGenerator: Generates blood saturation data for patients and implements the PatientDataGenerator interface. It tracks and fluctuates saturation.

ECGDataGenerator: Generates electrocardiogram (ECG) data for patients, implementing the PatientDataGenerator interface. It simulates ECG waveforms.

All of the data generated is realistic data, based on how the human body works.