This system was made to simulate the cardiovascular patient data across several domains. We have the PatientDataGenerator interface that tefines the contract for every single data generator. Each of these generators produces simulated patient data and sends them to output handler. AlertGenerator creates alert events for the patients. It tracks them and randomly triggers them to simulate real world events.

BloodLevelsDataGenerator Generates white cells, red blood cells and uses values from patiets. BloodPressureDataGenerator Produces pressure for each patient to simulate real world while keeping the values withing healthy ranges. BloodSaturationDataGenerator On the other hand simulates oxygen values or patients. Each with range to create the changes of blood. ECGDataGenerator Generates data to mimic heart signals. OutputStrategy is interface that defines how each data is outputted and consumed. And lastly Alert Class represents alerts with patients descriptions that serves as a base class for specific alert types.