The main class HealthDataSimulator use a parser method "parseArguments" to get input from user to set the patient count, output strategy. By default, the patient number is 50 and output strategy is ConsoleOutputStrategy. Assign each patient with unique patient ID iteratively from 1 to patient count. It also initials and sets the OutputStrategy object. Then it uses "scheduleTasksForPatients" method to initial data generators and call each generator's "generate" method by passing through the patient IDs and the output strategy. These generators simulate blood level, blood pressure, blood saturation, ECG, and the alert status respectively. They implement the PatientDataGenerator interface to realize the generate method. The data generation is scheduled by scheduleTask method. ECG, blood saturation and alert are simulated on seconds basis with a random [0,5) seconds, while blood pressure and blood level are on minutes basis.

The output strategy has 4 options. Each of them implements the OutputStategy interface. This interface realizes the pass through of one of these 4 strategy objects to the generators. The WebSocketOutputStrategy contains the SimpleWebSocketServer object which composite the WebSocketOutputStrategy object.