Assignment 2 – REFACTOR

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New classes:

1) ***Urgency***
   Represents the urgency rating of patients.
2) ***Analyzer***
   Analyzes the average wait time of patients and the room usage after simulation.
3) ***Printer***
   Prints the message to console during the simulation.
4) ***CMDHandler***
   Parses the command line arguments.
5) ***PresetGenerator*** and ***RandomGenerator*** (both implement ***IPatientGenerator***)
   Both are patient generators to create patients during the simulation. PresetGenerator generates patients with preset parameters; RandomGenerator generates patients with random parameters.

Main changes:

1) User provides inputs through command-line arguments, instead of Scanner. Uses a CMDHandler to check the arguments format, and parses the arguments.
2) User selects which mode to run the simulation, preset or random. If user selects random mode, then uses a RandomGenerator to generate patients; if user selects preset mode, then uses a PresetGenerator to generate patients.
3) Urgency is now a class. The natural order of Urgency objects is by their urgency level (the lower the level, the higher the priority)
4) When the simulation has finished, analyzes the results using an Analyzer, and prints the results to console using a Printer.

Please see the UML diagram on next page. (the test classes are removed in this diagram to reduce complexity of dependencies)