

CIS 225

MidTerm Exam – Patient Log

The Nub's Nob ski patrol needs a program that allows patrollers to enter incident information and generate reports. Read entire exam before starting your code.

1. Data entry – patient information
 - a. Last name
 - b. First name
 - c. Auto-generated unique 5-digit ID number
 - d. Injury location:
 - i. Arms
 - ii. Abdomen
 - iii. Head
 - iv. Legs
 - e. Injury severity: 1-10 (10 being most severe)
 - f. Type of injury:
 - i. Break
 - ii. Sprain/strain
 - iii. Burn
 - iv. Soft tissue slash
 - v. Soft tissue blunt
 - g. Address
 - h. Age
2. Data storage
 - a. Store ID numbers, patient info, and injury information objects together in a collection.
3. Process information
 - a. Calculate average injury severity for month
 - i. Total for all
 - ii. Broken down by ages (1-5, 6-10, 11-15, 16-20, 21-50, 50+)
 - b. Determine if any customer has more than one incident in a month
4. Report generation
 - a. Generate report for each of #2
 - b. Generate report that displays patient's name, age, address and all injury info for any injuries that are severity 8 or higher.
5. General requirements:
 - a. Good abstraction
 - b. High cohesion and low coupling
 - c. Demonstrate each: ArrayList, Iterator, HashMap, & HashSet
 - d. Adherence to all of our good programming practices (magic numbers, self-documenting code, etc.)