Objectives:

As a programmer, you will be expected to understand good coding practice and logical structures. For this project <u>you</u> must demonstrate mastery of:

- Proper code layout
- Interclass method calls
- Random
- Fnums
- Collections:
 - o Set
 - o Map
 - List or Array
- Selection (if and/or switch)
- Looping
- Constants
- Overloaded method
- Static
- Cohesion/Coupling
- Good programming practices!

CIS 225 Mid-Term Exam

Mastering code and creating interesting algorithms

Task

The Nub's Nob ski patrol needs a program that allows patrollers to enter incident information and generate reports. Please 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.

OPEN BOOK, OPEN NOTES, OPEN INTERNET!