DAY 2

OO Design - classes and relationships - slide 14

Review homework:

Associations - and how many objects are on each side
Aggregations
Compositions
Classes
Heirarchies

CRC exercise - slide 15

Using the library lending system, assume a role and execute a scenario.
Possible classes are:

- application
- library
- material
- books
- DVDs
- journal
- company
- system
- ID numbers
- item
- borrower
- date
- organization
- employee
- article
- fine

but there may be duplicates or some outside the scope of the system. Which are actors?

Your scenarios are:

- What happens when Johnny Codewarrior, who has no accrued fines and one outstanding book, not overdue, checks out a book entitled "*Document, Your job depends on it*"?
- Judy Hacker, has fines of £2 outstanding, would like a DVD "*Debugging to music"*, does have a book out (not overdue) and is bringing back an overdue journal.
- Miss Marple wants to borrow a journal "*Sleuthing in C#"* but can't find it… is it already out?
- Eric Halfbee comes in with a pile of overdue items, but doesn't know if he has enough money to pay off his debts. If he has, he'd like a borrow a DVD.

Drawing structure and behaviour – slides 17-19

Sketch out the structure of the classes in the library system and their relationships. Hint: some may be built-in classes.

Pick one of the scenarios above and draw a sequence diagram to represent the behaviour of all the objects involved.

Python syntax - slide 21

Implement the library example - just the basic functionality of being able to borrow an item without any problems. Don't forget to use GitHub so that we work as a team ☺

Naming - slide 23

Carry out a code review in pairs and look for good coding practice generally and especially the OO naming conventions used. Do they adhere to standards? Is the code readable?