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Cs1122

Week 4 exercise

1. The five steps include Gather requirements where you take all the clients wants/need for the program and write them down in English. Step 2 is to draw CRC cards of all possible classes and to find responsibilities and collaborators. Step 3 is to draw a UML diagram to find the relationships of the classes. Step 4 is to use Javadoc to document the methods and behavior of the program. The last step is to implement the program and work out any bugs.

2. You want to Identify the object that is responsible for the action so you know where in your program to put the method. You wouldn't put a truck size method in a car class.

3.

a. University, Student -Aggregation

b. Student, Teaching Assistant- Aggregation

c. Student, Freshman- inheritance

 d. Student, Professor - Aggregation

e. Car, Door - Aggregation

f. Truck, Vehicle - inheritance

g. Traffic, Traffic Sign - Aggregation

h. Traffic Sign, Color - Aggregation

4.

| Class name: FileHandler | Collaborators |
| --- | --- |
| Responsibilities | Country |
| Reads in file | InfoSorter |
| Makes new Country(name,population, population density) | |
| List of country's | |
| | |
| | |
| | |

| Class name: Country | Collaborators |
| --- | --- |
| Responsibilities | FileHandler |
| Get/set name | |
| Get/set population | |
| Get/set population density | |
| Get/set area | |
| | |
| | |

| Class name: InfoSorter | Collaborators |
| --- | --- |
| Responsibilities | Country |
| Find largest area | Fileshorter |
| Find largest population | |
| Find largest population density | |
| Print results | |
| | |
| | |