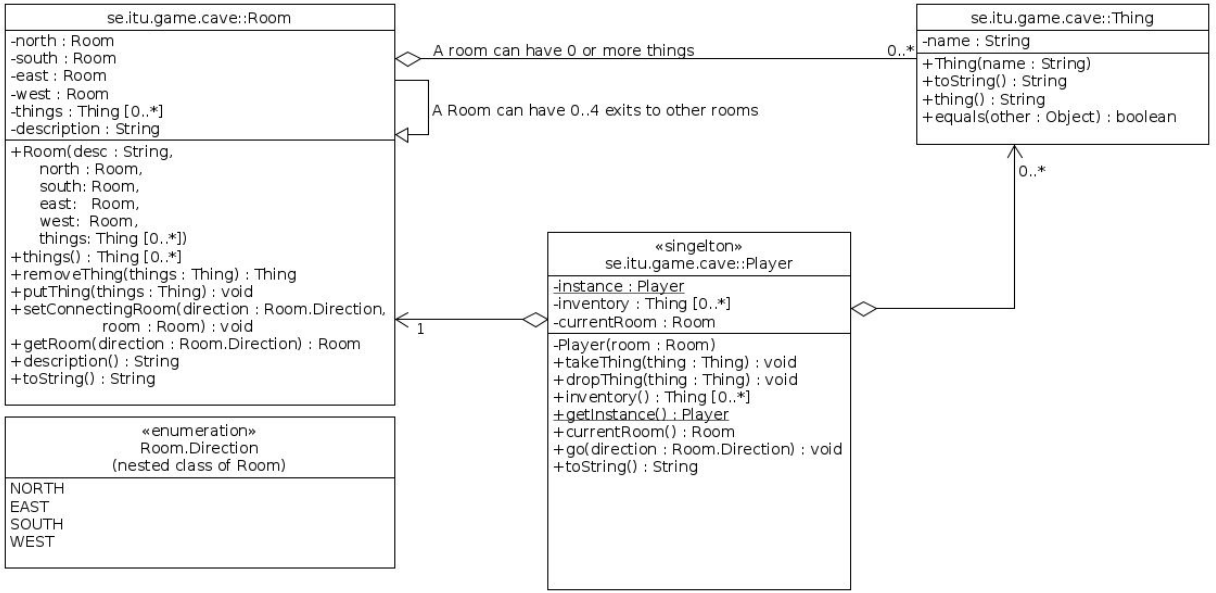
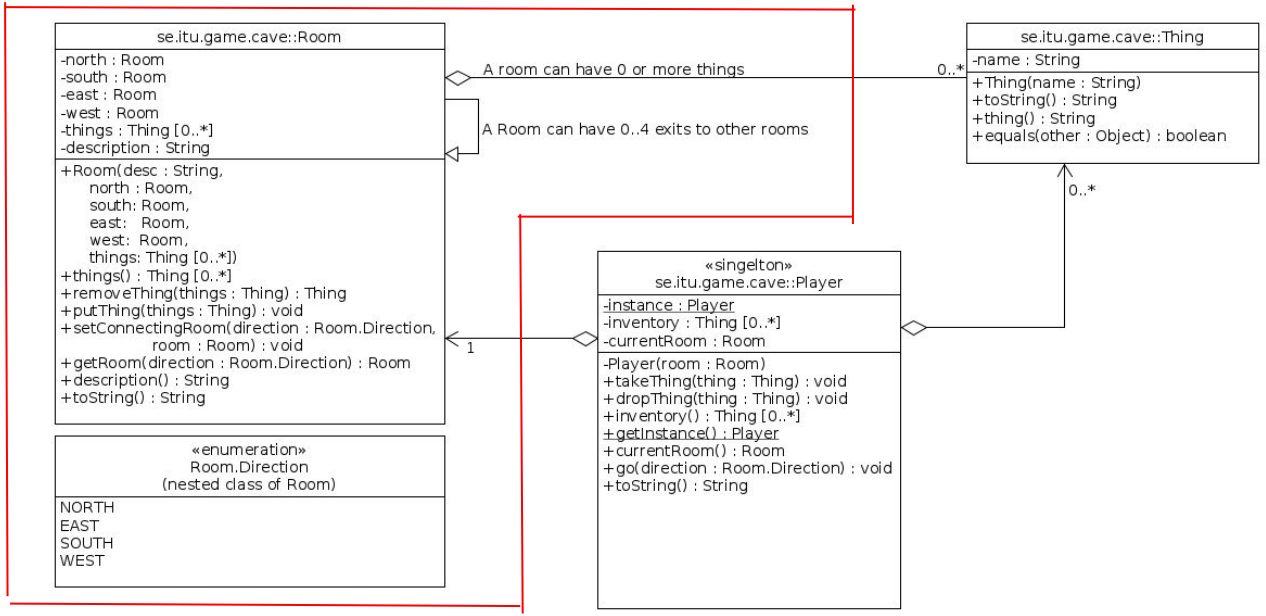
UML for Sprint 1

Boxes and arrows and shit

UML For the Sprint 1



UML For the Sprint 1- The Room class



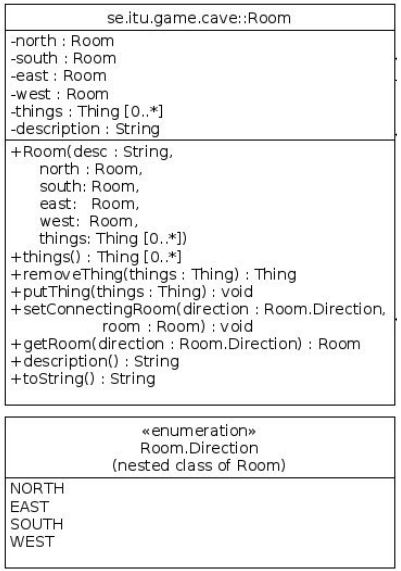
UML For the Sprint 1 - Room

Class name

variables

constructors and methods

inner class (not orthodox)



UML For the Sprint 1 - Room

Class name: `se.itu.game.cave.Room`

variables:

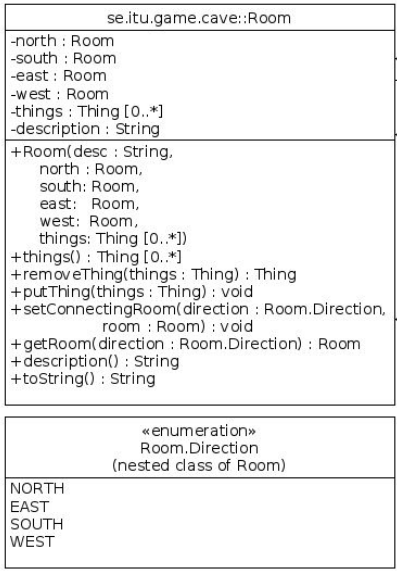
visibility (, -, #, +) name : Type

`-north : Room`

constructors and methods:

visibility name(arguments) : Type

`+removeThing(thing : Thing) : Thing`



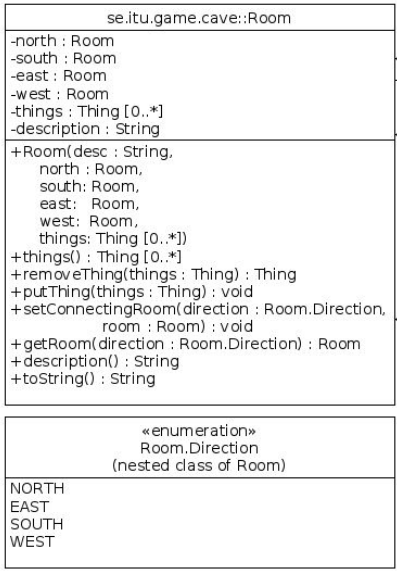
UML For the Sprint 1 - Room - Lists of stuff

```
-things : Thing [*]

    or:

-things : Thing [0..*]
```

Could be a java.util.List<Thing> for instance



UML For the Sprint 1 - Room - Stereotypes

<<enumeration>>

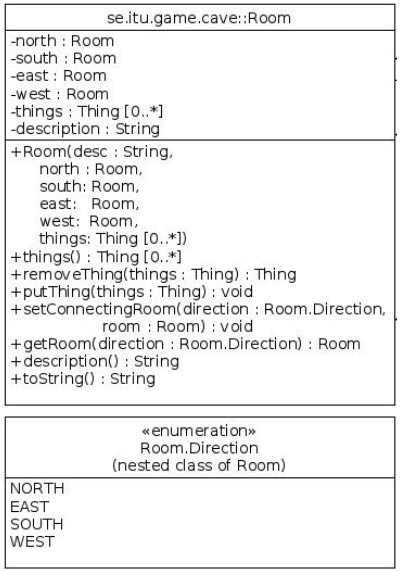
Room.Direction

In Java:

```
public enum Direction {

   //...

}
```



UML for Player

<<singleton>>

-instance : Player

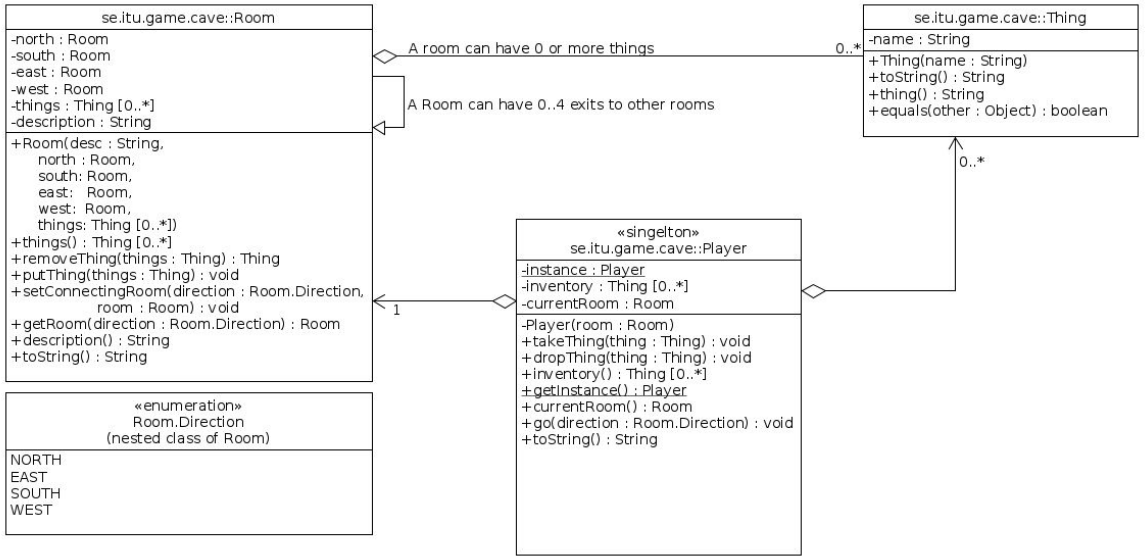
New thing! Static - underline

Associations

- Player knows its current Room
- Player has 0..* Thing
- Room has four other Room:s
- Room has 0..* Thing

For instance:

```
Player<>------>Room
               1
```



Composition vs Association vs Aggregation

Composition - “is part of” relationship - an object “owns” another object (which is part of the first object). If an object creates another object - it “owns it” - when the object dies, the other object dies too.

Aggregation - “has a”, “knows”, “uses” - an object uses another object.

- The Room doesn’t own the four Room:s in N, S, E, W - but it can use them.
- The Player doesn’t own the currentRoom - but can use it (look for things etc)

In all cases, variables are used.

Inheritance

Implementation inheritance (implementing an interface) uses a dotted arrow from the implementing class to the interface

Inheritance using *extends* uses a normal arrow from the extending class to the super class.

In the UML for Sprint 1, we don’t use inheritance.