

In my UML I will be leaving out many of the interfaces we were given in the .jar file. The exceptions are those that are directly implemented or extended by one of my classes (AbstractPQable and the interface PQable are included).

AbstractPQable
int getIndex() void setIndex(int) PQueue getPQueue() void setPQueue(PQueue)

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| extends

Rock
String toString()

extends
→

AbstractThing
int compareTo(Object) Position position()

^
| extends

Grass
String toString() All the methods from AbstractBeing

extends
→

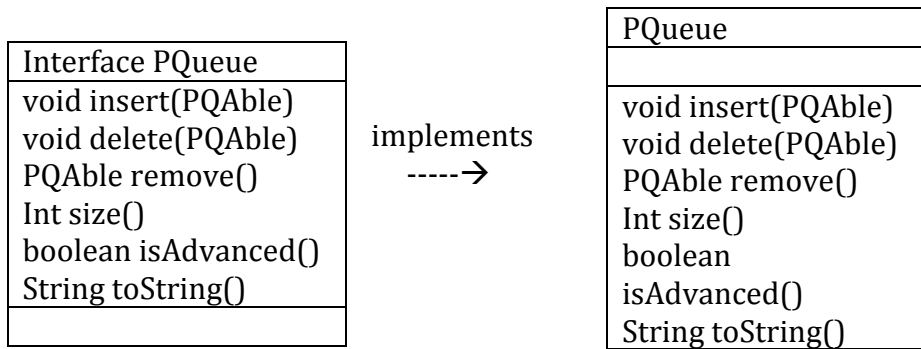
AbstractBeing
int getMass() void setMass(int) int getBirthMass() void setBirthMass(int) int getBirthPercent() void setBirthPercent(int) int getUpdatePeriod() void setUpdatePeriod(int) int getNextUpdate() void setNextUpdate(int) int getMassTaxMills() void setMassTaxMills(int)

^
| extends

Position
int getX() int setX(int) int getY() int setY(int)

GenoType
char[] getGenes() void setGenes(char[])

Frob
All the methods from AbstractBeing String toString() GenoType genes()



FrobWorld
void initWorld()
void initBirthProperties()
void DNAMutation()
void nextEvent()
void main(String[])

The FrobWorld is the most confusing to me currently but I think it will come quickly as I actually implement it. InitWorld() creates the first simulation world with the correct number of initial Things in the world. It should also create a PQueue that begins holding the beings as they begin to do their events. There are 2 classes that don't extend anything (Position and GenoType). Position is pretty self-explanatory and may be axed during implementation if it is not any better than just putting 2 integers in Thing. The GenoType holds the char[] that determines the movements and initial values of the frobs. I am a little confused about the Being class and what it should actually have implementation for. Being is abstract since both grass and frobs use different init and max values so you should not be able to make just a being. For the same reason I am making Thing abstract as well.

I get the feeling I am missing something important. Sadly I will not find out until I actually start trying to implement.