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/**  
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 * Group 100  
 * https://github.com/raiyanac/422c\_p4\_rac4444\_tg22698  
 */
```

For this implementation of the Critter project, there is a Main class that ultimately drives the creation of and maintenance of the world. This class is responsible for running the simulation and accepting commands via the Scanner in order to run the world time steps, keep track of energy levels, and update the world.

The abstract Critter class is the baseline for the unique critters. ArrayList is used to store the Critter population. The Critter abstract class contains all the basic necessities for all the critters in our world, such as fields for energy parameters and coordinates for position. The class also contains the walk, run, fight, reproduce, runstats, and makeCritter methods that will be implemented by the concrete Critter subclasses.

On top of the provided Craig Critter subclass, there will be four additional unique sub-Critters that may be spawned in this world. On top of this, there will also be a unique Algae sub-Critter, which has special properties such as the ability to be created spontaneously and conduct photosynthesis. It is also a food resource for other critters. Algae extends the TestCritter class, which is meant to test the project.

The parameters for all the methods are placed in the Params class. The parameters here include the dimensions for the world used to display the world, which can be changed as needed, as well as the starting energy and energy costs for every possible action that can be taken (or attempted) by a critter during each world time step. Unique parameters for the algae - the photosynthesis energy count as well as their refresh count per world time step - are located here as well.