Frame

JFrame
Grapher
Grid
GridSelector

Grapher

JPanel
Location edited

Grid

Locations[][]
JPanel

Holds all Locations
displays them to
screen

is taken by

GridSelector

JPanel
MouseListener

Allows selection of
Locations on Grid

gives a
location to

LocationEditor

JPanel
Location edited
JComboBox[] animals
JTextbox[] animalPops

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getAdjacent

Has terrain type
Has list of LifeForms
living there
Has combo boxes for
each animal

Has a 2D array of

Modifies

Location

ArrayList LifeForms
Terrain
int x,y

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getAdjacent

Has terrain type
Has list of LifeForms
living there

Has a single

Terrain

String name
int lightLevel
int waterAvailability
int shelterAvailability

Plant

double foodAvailable

Specific plants will be extended from the generics and will have static reproduction chances, foodValues foodRequirements mobilities and names

Has an array list of

Extends into

LifeForm

String name
Static int count
int creatureID
double reproductionChance
double foodValue
double foodRequirement
double mobility

Extends into

Extends into

Extends into

Herbivore

String[] plants
double [] plantPreferences

Omnivore

String[] plants
double [] plantPreferences
String[]animals
double[] animalPreferences

Carnivore

String[]animals
double[] animalPreferences

Specific Herbivores, Omnivores and Carnivores will be extended from the generics and will have static preferences, reproduction chances, foodValues foodRequirements mobilities and names and names