# **TEAM CareBears**

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#### Woo

boolean startScreen

boolean playing

boolean endGame

boolean areYouSure

boolean sortStats

Plmage startPic

Plmage dirt

ArrayList<Plant> plants

ArrayList<Plants> allPlants

ArrayList<Integer> planLifeTimes

ArrayList<Food> food

ArrayList<Button> buttons

Button startGame;

Button stats;

Button end;

**Environment environment** 

boolean rain, showRain

boolean sunlight showSunlight

boolean fooddrop

long time

Timer plantTimer

Timer bacteriaTimer

boolean showGrid

boolean shop

int bactTime

void setup()

void makeButtons()

void draw()

void runButtons()

void runTimers()

void mouseClicked()

void growBact()

void removeFood()

void keyPressed()

void showTheRain()

void showTheSun() void showTheGrid()

void checkBactPlant()

void checkFood()

void showFood()

void resetBools()

void makeLifeTimes()

void tempModPlant()

void endSim()

void killBact()

void sort(ArrayList<Integer> \_heap)

void heapify(ArrayList<Integer> \_heap, int size, int x)

## **ENVIRONMENT**

int[][] grid

int[][] rain

int[][] sun

void sunlight (int intensity) void rain (int intensity)

void getGrid()

void showRain()

**Button** 

int x,y int rectSize

int w.h

color rectColor, baseColor

color rectHighlight

color currentColor

boolean rectOver

String name

boolean active

Button(int x, int y, int w, int h, color rectColor, color rectHighlight, String name) boolean mouseOver()

void display()

void click()

void update()

### **BACTERIA**

int xcor, ycor

int dx, dy

int size

int health

int maxSize

int growthRate

int waterPriority

int lifeTime

int birthDate

int r, g, b

Bacteria(int x, int y)

void move()

void eat(Plant p)

void shrink()

void display()

void run()

# Timer

PFont font

int time

int secondTime

int interval

String type

TImer()

Timer(String type, int interval)

reset() run()

# **PLANT**

int xcor

int ycor

int maxSize

int growthrate

int waterPriority; int waterNeed:

int lifeTime:

int birthDate;

int r, g, b;

int temp; int time;

boolean peakStated

Timer intPlantTimer;

Timer peakTimer;

Plant(int x, int y)

void collision(Plant other)

int health()

int takeWater(Environment e)

void grow(Environment e, ArrayList<Plant> plants)

void display()

void run(Environment e)

int compareTo(Plant other) void toEat(Food f)

void display()

#### Food

int xcor, ycor int r, g, b boolean eaten