BACK

Build A Computer for Kids

# Design Concept

The idea behind this project was to give young children a foundation to build a computer. Kids can be intimidated by how technology works, and that’s a really easy challenge to fix. Kids love to play games and they are outstanding when navigating through the technology they use. The challenge arises with them knowing how a computer works and what parts make up a computer. In comes the first game designed to equip young children with a basic knowledge of computer hardware. We are bringing computer building to their level!

**Program Development**

The game begins with a welcome screen. The screen will have a child friendly picture, and instructions to begin. A song will play during initial startup while the player reads the instructions.

Public void act()

{

Greenfoot.playsound(“thissong.mp3”);

GreenfootImage img = new greenfootImage(“thispic.jpg”);

GetBackground().drawImage(img. Here, there);

Hit enter to move to next world.

Next there will be a series of computer parts on the screen. The player will see all the parts and will get a chance to interact with them. There will be a text box that comes up and the parts will move. We will find a code that will allow the parts to be hovered over in one world and clicked on in another. We are going to make a method, or just code in the act method in one class. Compparts and all the subclasses will do the same thing. That will remove the need to code everything for the 7 classes.

Compparts class

If (getWorld() instanceof livingroom && mouseon)

Then do this (display a text)

Else (don’t display the text and let me drag this part and play sound “blip”)

When the player hovers over each part the text box that appears will give a slightly witty remark about what the part is. This will be accomplished by a “setDescription” that will tell what it is, by it being a textbox passed to an actor added (found how from a project online). Then there will be a “drawImage” that has instructions on what to do. There are multiple ways to put text banners in here so we will use 2 different ways. One uses an actor added with an image that is a message rather than an actor. The other way is to draw it on the background image.

After all of this is done the last thing left will be an “if statement” that once the computer parts are dragged over the tower the game will end. We plan to play music and have a funny ending.

Public class tower extends actor

Public void act()

If (isTouching(Memory.class), && istouching(blueraydrive.class) ……..

{

Greenfoot.playsound(“ending.mp3”);

setWorld(ending);

new animation of tristan and kevin clapping.

This will pretty much end the game.!

Method Signatures

Most of the code for the game will be found in the 3 or so worlds that we will have, the CompParts superclass, and maybe 1 or 2 other classes.

Edit: After numerous tests and things not working the internet led us to understand that the subclasses act method was overriding everything in the superclass. The act methods are not needed at all in most of our actors! The methods will rely heavily on what world they are in and mouse state. IF greenfoot.mouseMoved or greenfoot.mousePressed &&dragged.

If all the parts touch the tower the user wins()