

Recitation Guide Wednesday May 23, 2007

- A. Handle Installation Issues
 - a. If necessary, quickly run through how to set up Dr. Java.
 - b. Try to handle individual issues as quickly as possible. If necessary, employ the help of students to help out with a general walkthrough.
- B. Quiz 1
 - a. Feedback.
 - b. Comments on length, difficulty level, preparedness going in.
- C. Homework 2 and introduction to Turtles
 - a. Homework 2 is due on Friday. TSquare is still in the process of being set up. Email will be our backup method.
 - b. Go through Homework 2's assignment description answer any questions. Teach students how to use

```
FileChooser.setMediaPath("C:/cs1316/MediaSources/"); and
FileChooser.getMediaPath("swan.jpg");
```

 - i. Remember that the MediaPath needs to be set **ONLY ONCE** on a computer. Please tell students how the inclusion of `FileChooser.setMediaPath()` in homework is incredibly annoying for grading homeworks.
 - c. World and Picture canvas
 - i. Remember that Turtles need to be given either a World or a Picture (blank or not) to play in!
 - ii. `//Turtles default to invisible`
`World w = new World;`
 - iii. `//Turtle default to visible`
`Picture canvas = new Picture (500,500);`
 - iv. `//Turtles default to invisible`
`Picture swan = new`
`Picture(FileChooser.getMediaPath("swan.jpg"));`
 - d. Turtles
 - i. `World w = new World();`
`Turtle t = new Turtle(w);`
`t.setVisible(true); //set t to be visible`
 - ii. See `TurtleSquares.java` for a good example of how to use Turtles to draw boxes.
 - iii. Other useful methods in `SimpleTurtle.java`
 1. `penUp();`
 2. `penDown();`
 3. `getHeading();`
 4. `setHeading();`
 5. `forward(); //defaults to 100 pixels`
 6. `forward(int pixels);`
 7. `getXPos();`

```
8. getYPos();
9. moveTo(int x, int y);
10. turn(int degrees);
11. turnLeft();
12. turnRight();
```

iv. **Dropping Pictures with Turtles and MyTurtlePicture.java**

1. MyTurtlePicture.java has a good example of a Turtle dropping Pictures.
2. drop(Picture p) //method to drop Pictures
3. Remember the Turtle always drops the picture on his right foot
4. turnRight();

v. **Sample solution (well sort of) using just Turtles and flip()**

1. PictureCollage.java
2. This is just kind of to show that there is a way to just get all the Turtles to do the work for you. The mirroring doesn't have to be exact "mirroring." Like if you removed all of the flip()s from my code it's still okay. The whole point is to get them to use Turtles to move and drop the Pictures. The whole prettiness factor is something for the extra credit. Also notice that I didn't do any picture manipulations that are necessary for this assignment. I guess we can allow them to use flip() since it really isn't a mirroring method.