Program Design – PP10.27

## Input

1. In detail indicate what the inputs to this program are?

There is a possible input of the radius of the circle if you click inside the circle

1. How do you validate the input

There is a check for <=0 inputs that throw an illegal argument error

1. Pseudocode: Briefly explain how this section will look like

If the input is below or equal to 0, throw new illegalargumentexception(“Invalid Radius”);

## Processing

1. What is this program calculating?

Its not calculating anything, rather the Shape library handles processing for me.

1. Can we divide the calculations to the smaller “modules”

N/A

1. Pseudocode: Briefly explain how this section will look like – Each module should have its own section.

I construct a new circle graphic and draw it onto the JFrame

## Output

1. What will this program display to the users?

A Circle

1. What kind of formatting this output will use (Currency with $ …)?

None

1. Pseudocode: Briefly explain how this section will look like

Its just a circle

## Library

What Libraries do you need for this program?

import java.awt.Graphics;

import java.awt.Graphics2D;

import java.awt.Shape;

import java.awt.event.MouseEvent;

import java.awt.event.MouseListener;

import java.awt.geom.Ellipse2D;

import javax.swing.JFrame;

import javax.swing.JOptionPane;

## Initialization and constant variables

1. What variables need to be initialized?

private double \_radius = 1.5;

private Shape \_circle;

1. What variables need to be defined as constant

None