

PMR: This project was much easier than the previous programs of module 12. I enjoyed this assignment because I like to see how all the get requests mesh together. I hope I get to code like this more in the future.

**Forest**

/\*\*

\* Forest terrain.

\*

\* @author Anika Jallipalli

\* @version 1/29/2020

\*/

public class Forest extends Terrain

{

private int trees;

public Forest(int l, int w, int t)

{

super(l, w);

trees = t;

}

public int getTrees()

{

return trees;

}

}

**Mountain**

/\*\*

\* Mountainous terrain.

\*

\* @author Anika Jallipalli

\* @version 1/29/2020

\*/

public class Mountain extends Terrain

{

private int mountains;

public Mountain(int l, int w, int m)

{

super(l, w);

mountains = m;

}

public int getMountains()

{

return mountains;

}

}

**Terrain**

/\*\*

\* This class defines a basic Terrain.

\*

\* @author Anika Jallipalli

\* @version 1/29/2020

\*/

public class Terrain

{

// instance variables

private int length, width;

// Constructor for objects of class Terrain

public Terrain(int l, int w)

{

// initialize instance variables

length = l;

width = w;

}

public String getTerrainSize()

{

return "Land has dimensions " + length + " X " + width;

}

}

**WinterMountain**

/\*\*

\* Winter Mountain terrain.

\*

\* @author Anika Jallipalli

\* @version 1/29/2020

\*/

public class WinterMountain extends Mountain

{

private double temperature;

public WinterMountain(int l, int w, int m, double temp)

{

super(l, w, m);

temperature = temp;

}

public double getTemp()

{

return temperature;

}

}

**TestTerrain**

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\*

\* Tests all of the terrains and their specs.

\* @author Anika Jallipalli

\* @version 1/29/2020

\*/

public class TestTerrain

{

public static void main(String[] args)

{

Terrain t1 = new Terrain(50, 50);

Forest f1 = new Forest(100, 200, 100);

Mountain m1 = new Mountain(300, 400, 25);

WinterMountain wm1 = new WinterMountain(500, 600, 15, 10.0);

System.out.println(t1.getTerrainSize());

System.out.println("Forest " + f1.getTerrainSize() + " and has " + f1.getTrees() + " trees.");

System.out.println("Mountain " + m1.getTerrainSize() + " and has " + m1.getMountains() + " mountains.");

System.out.println("Forest " + wm1.getTerrainSize() + " and has temperature " +wm1.getTemp()+ " and " + wm1.getMountains() + " mountains.");

}

}