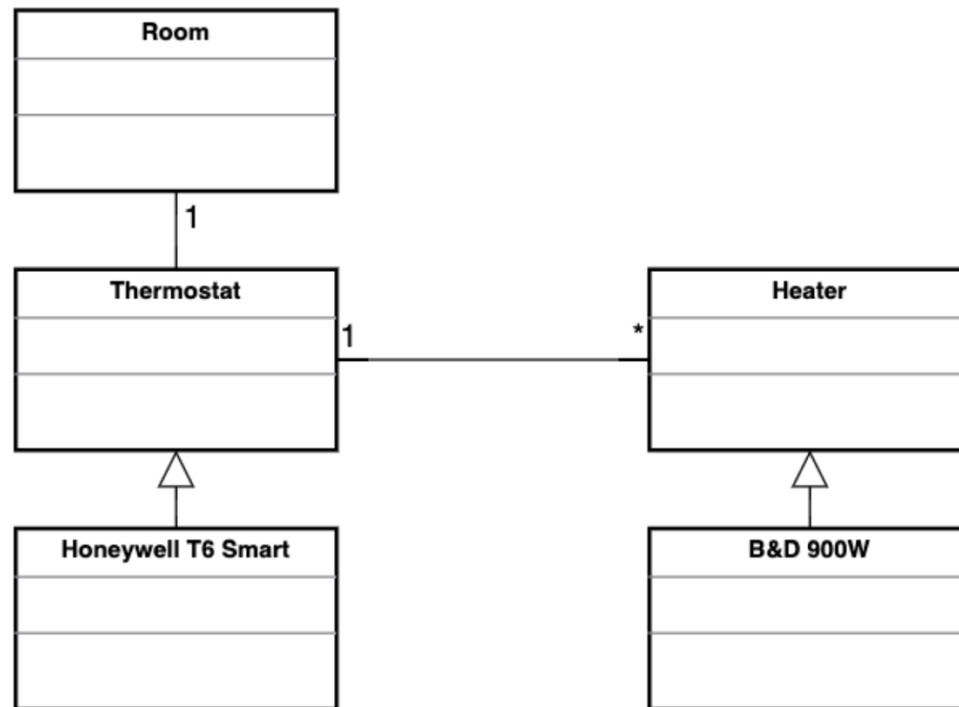


Week 2 Labs: UML and Classes

LCSCI5202: Object Oriented Design
Week 2

Task 1

- Complete the UML diagram.
 - Add field and methods relevant to provided UML diagram



Diagramming Tools

- Draw.io
- <https://app.diagrams.net>

Task 2

- Create an abstract class called Shape that contains:
 - An abstract method CalculateArea() which will return the area of the shape (type: double).
 - A regular method Display() that prints the type of shape being calculated.
- Create two derived classes:
 - Circle, which overrides the CalculateArea() method and computes the area of a circle ($\text{Area} = \pi * \text{radius}^2$).
 - Rectangle, which overrides the CalculateArea() method and computes the area of a rectangle ($\text{Area} = \text{width} * \text{height}$).
 - Instantiate both classes (Circle and Rectangle), call their methods, and display the areas.