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Week 9

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Week 9 Lecture Notes

Composition

Composition is a relationship between classes. With composition, a class has a HAS A relationship, or it is COMPOSED of other classes. A real-life example of composition is a school; a school HAS or IS COMPOSED OF students, teachers, staff, and more. To use composition, you need to declare an object of one class in another to compose that class of that object, and then call its methods.

Ex:

//In Whole class

Private PartClass part1 = new PartClass(); //Instantiate partclass that composes whole class

Public WholeClass() {part1.setX(2);} //Call part method in constructor

//In Main class

WholeClass whole1 = new WholeClass(); //WholeClass instantiation - calls setX from constructor.

whole1.part1.getX(); //returns X from method in part class which is accessed through whole/composed class