A diagram of a computer

Description automatically generated

This diagram demonstrates inheritance through the “extends” relationships, where TwoWheeled and Bicycle both inherit from Vehicle, reusing and building upon its attributes and methods. It shows encapsulation by keeping fields (brand, year, wheelSize, and hasBell) private and accessing them through public methods, ensuring data is hidden and controlled. Polymorphism is evident when subclasses like Bicycle override or specialize methods (for example, toString), allowing objects to behave differently while sharing a common interface. Finally, abstraction appears in methods like accelerate and brake, focusing on the high-level functionality rather than specifying how each subclass implements it.