Victor Udeh  
CS 230  
[1-5 Assignment: UML Diagrams](https://learn.snhu.edu/d2l/le/content/1426358/viewContent/27484522/View)  
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A diagram of a vehicle

Description automatically generated

The UML diagram depicted above illustrates the inheritance relationships among the Vehicle, TwoWheeled, and Bicycle classes, symbolized by dashed lines and hollow arrows. In the Bicycle class, attributes and operations can be designated as either public or private, represented by “+” and “–” symbols respectively. This demonstrates the Object-Oriented Principle of Inheritance, where Bicycle is a subclass of TwoWheeled, which itself is a subclass of Vehicle, forming a hierarchical parent-child structure. Additionally, there is a composite association between the driver class and the other three classes, indicating that while the Bicycle class functions as an independent entity, it can also be identified as an instance of TwoWheeled or Vehicle, showcasing its dual nature of being both a whole and a part. The diagram as a whole can be categorized as a Composition Class Diagram.