

Question: How does your design implement the four pillars of OOP (abstraction, encapsulation, inheritance and composition, and polymorphism).

Answer: Our classes used public and private variables appropriately to manage data, which implemented **encapsulation** into our scripts. We used **abstraction** techniques on our get_details and get_category functions. Our classes **inherit** certain attributes from each other to make our each of our scripts specialized/specific. We implemented **polymorphism** in our abstract_bike script. It can work on both electric and motor bikes.

Question: Why are your entity classes good abstractions (i.e., models) of the real-world entities?

Answer: Our electric_bike and motor_bike scripts are good abstractions because there are distinct difference between electric bikes and motorbikes. Our entity classes reflect this by introducing private variables and public functions that are specific for electric bikes or motorbikes(i.e. battery capacity vs fuel capacity or motor type vs engine displacement).