

Entities and Objects are similar in some ways, and they are different in other ways. We begin with the similarities. A semantic object is a representation of some identifiable things in the users work environment. More formally, a semantic object is a *named collection of attributes that sufficiently describes a distinct identity*.

Like entities, semantic objects are grouped into classes. An object class has a *name* that distinguishes from other classes and that corresponds to the names of the things it represents. Thus a database that supports users who work with student records has an object class called STUDENT. Note that object class names like entity class names, are spelled with capital letters. A particular semantic object is an instance of the class.

Like entities an object has a *collection of attributes*. Each attribute represents a characteristic of the identity being represented. for instance, the STUDENT object could have attributes like Name, HomeAddress, CampusAddress, DateOfBirth, DateOfGraduation, and Major. This collection of attributes also is a *sufficient description*, which means that the attributes represent all of the characteristics that the users need an order to do their work. Objects represent *distinct identities*; that is, they are something that users recognize as dependent and separate and that users want to track and report.

Finally note that the identities that the objects represent may or may not have a physical existence. Thus something need not be physical in order to be considered an object; it need only be identifiable in its own right in the minds of the users.