

PHP OOP Principles

Pentalog 2018



A close-up of Morpheus from the movie The Matrix, wearing his iconic black sunglasses. The background is a blurred outdoor setting.

WHAT IF I TOLD YOU

**THAT AN OBJECT IS AN ABSTRACTION
WITH STATE IDENTITY AND BEHAVIOUR**

A young man with curly brown hair and a wide-eyed, open-mouthed expression of shock or panic is the central focus. He is wearing a white t-shirt with a red and black graphic that partially reads "BILL". He is surrounded by a dense crowd of people in a dimly lit nightclub or party setting. Other people in the background include a man in a white tank top to the left, a woman with a white flower in her hair behind him, and a man in a red tank top to the right. The lighting is warm and low, typical of a club atmosphere.

"OBJECT"

**AN ITEM WE CREATE IN SOFTWARE THAT HAS PROPERTIES
AND CAN PERFORM PREDEFINED BEHAVIOURS**

A close-up of Yoda's face from Star Wars. He has a smug, knowing expression, looking slightly to the right. His green skin is wrinkled, and he has large, pointed ears. He is wearing his characteristic brown robe.

PEDIA WIKI

**A COMBINATION OF VARIABLES,
FUNCTIONS, AND DATA STRUCTURES
AN OBJECT CAN BE. IF
ABOUT THE CLASS BASED OBJECT-ORIENTED
PROGRAMING WE ARE TALKING**

Abstraction

The act of simplifying something that is complex.

Method

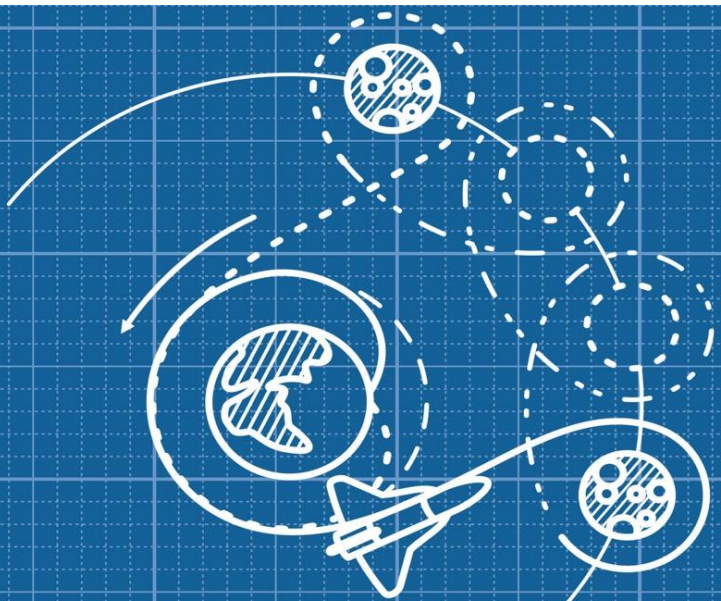
A behaviour associated with an object. May accept input and may provide output.

Instance

Objects are created from classes. Classes are like blueprints. Each object is unique and independent.

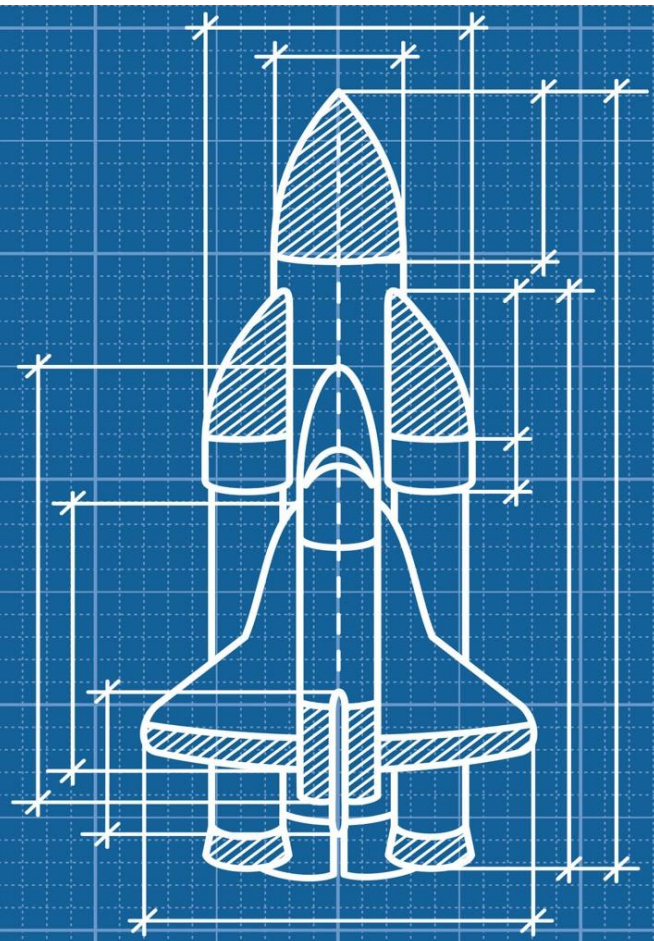
Class

Defines what an object may be. An object is built with a **new** operator.

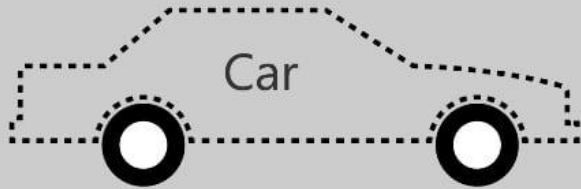


$$\frac{v^2}{r} = g$$

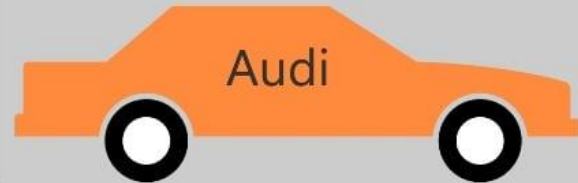
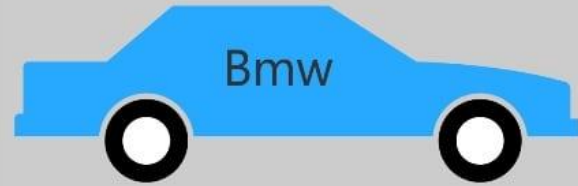
$$v = \sqrt{G \frac{M}{r}}$$



class



objects



YOU CAN'T GET CALLED ON IN CLASS

IF YOU DON'T RAISE YOUR HAND

- Objects are instantiated (created) using the **new** operator.
- Objects are defined by classes but do not exist until instantiated.
- Objects are independent.
- Objects have properties and can perform behaviours also referred to as methods.

Simple Class

```
class BankAccount  
{  
}
```

