

Intro to Web Programming with PHP

Lesson 3

Intro to Object Oriented Programming

- All the programming we've done so far are procedural (read & interpreted from top to bottom)
- OOP = breaking your huge software into small independent blocks of software code (objects).



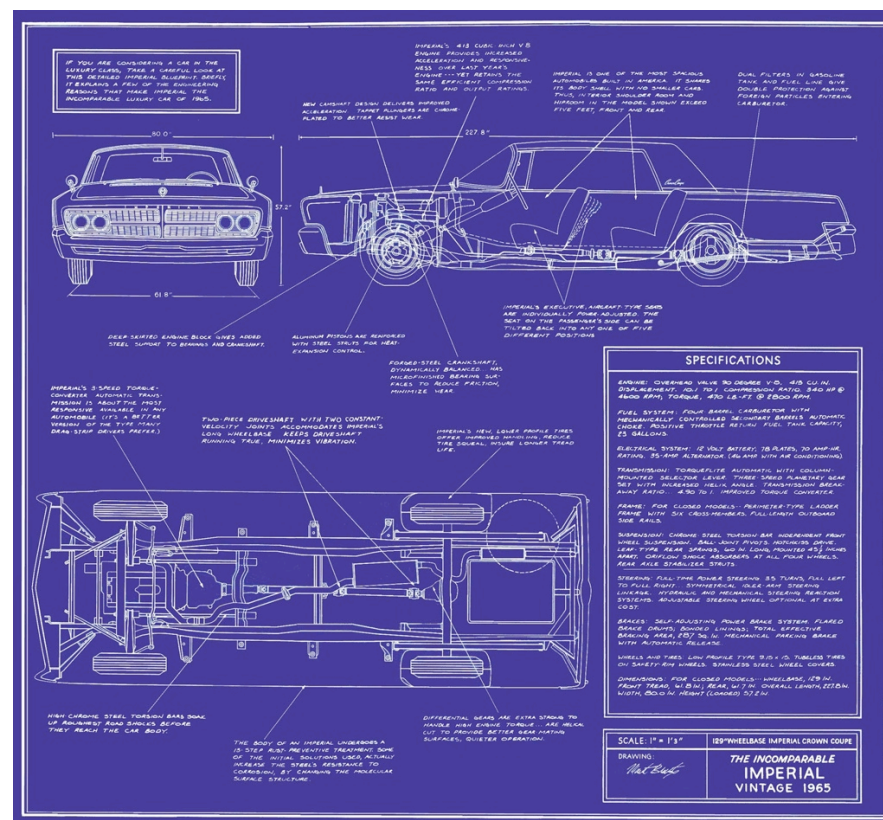
Intro to Object Oriented Programming

- A simple way of looking at it is that each block of software code (object) is a collection of PHP functions and variables.
- Characteristics of an Object are defined in a **Class** (classification of objects).
- It's a **blue print** of what kind of functions and attributes an Object of this class will have.



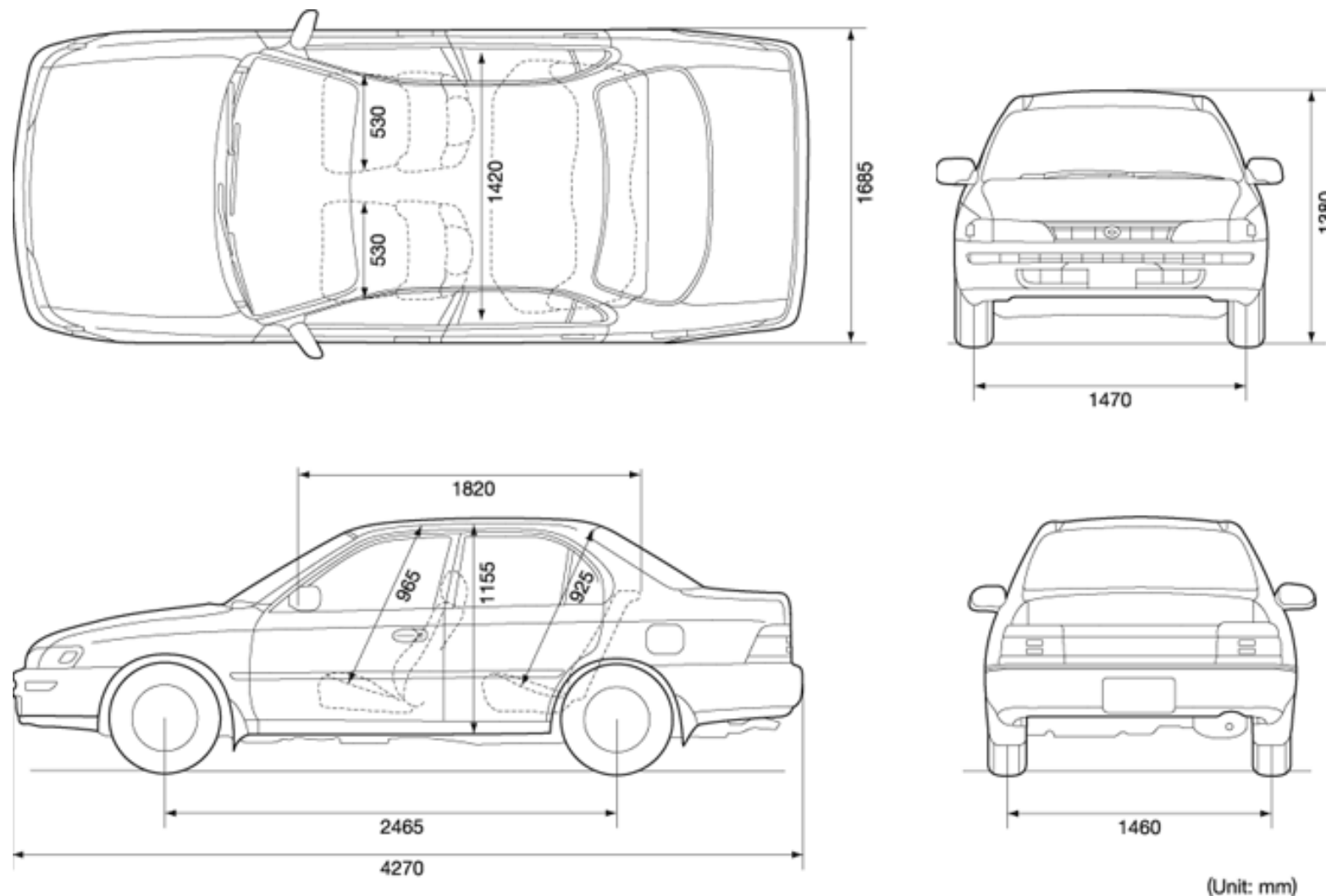
Intro to Object Oriented Programming

- Once a class is defined, you can create many objects that has the same characteristics.
- Classes can inherit characteristics from other Classes.



Real World Example of Class & Objects

- A **Class** is like the blue print of a Toyota Corolla car.



Real World Example of Class & Objects

- Example:
 - It should have 4 wheels and 2 head lamps.
It should run on petrol.
 - It should be able to carry 1 driver & some passengers.



Real World Example of Class & Objects

- Every Toyota Corolla the factory manufactures is an **instance** of the Toyota Corolla Class.
- Say the factory churns out 50 cars. These are assembled with the same specs, they roll off the factory floor with the same starting attributes.



Real World Example of Class & Objects

- Each vehicle is an independent unit. And you can customize each one individually.
- Changes u make to each one only affects that car.



Real World Example of Class & Objects

- These cars are the programming equivalent of an Object.
- Each are constructed from the same blue print and starts out the same.
- Changes you make to each object is contained within itself and does not affect the blue print (Class) or other objects of the same class.



Let's code some objects!

- Defining a class
- Creating an Object
- The act of creating an object is called **instantiating**.
- Class inheritance



Using an online Database (MySQL)

- Database used for the web are usually relational databases (define relationship between the tables).
- Database table is like an excel spreadsheet (each column contains 1 type of data).
- The act of retrieving records from the database is called querying (filtering, sorting and calculating).
- We talk to a relational DB is by a **Structured Query Language (SQL)**.
- Action, columns, table, filtering method, sort order.



Using an online Database (MySQL)

- Create DB
- Create table
 - “Books” table
 - Title, Author, Publisher



Using an online Database (MySQL)

- Connect to DB
- Send query through the connection
- Retrieve results and act on it
- Close connection



Uploading your website via FTP

- Connect to server
- Software to connect to FTP server:
 - <http://filezilla-project.org/>
- List files
- Upload files



End of Lesson 3

