# **Encapsulation**

C++: <a href="https://www.softwaretestinghelp.com/encapsulation-in-cpp/">https://www.softwaretestinghelp.com/encapsulation-in-cpp/</a>

Java: <a href="https://www.w3schools.com/java/java\_encapsulation.asp">https://www.w3schools.com/java/java\_encapsulation.asp</a>

Python: <a href="https://www.geeksforgeeks.org/encapsulation-in-python/">https://www.geeksforgeeks.org/encapsulation-in-python/</a>

#### Cheatsheets

C++: https://www.codecademy.com/learn/learn-c-plus-plus/modules/learn-cpp-classes-and-objects/cheatsheet

Java: https://www.codecademy.com/learn/learn-java/modules/java-access-encapsulation-and-static-methods/cheatsheet

https://www.codecademy.com/learn/learn-java/modules/learn-java-inheritance-and-polymorphism/cheatsheet

Python: https://www.codecademy.com/learn/learn-python-3/modules/learn-python3-classes/cheatsheet

# **OOPS Interview Questions**

https://www.interviewbit.com/oops-interview-questions/

# Inheritance:

C++: https://www.geeksforgeeks.org/inheritance-in-c/

Python: <a href="https://docs.python.org/3/tutorial/classes.html#inheritance">https://docs.python.org/3/tutorial/classes.html#inheritance</a>

Java: https://www.geeksforgeeks.org/inheritance-in-java/

#### Polymorphism:

C++: <a href="https://www.geeksforgeeks.org/polymorphism-in-c/">https://www.geeksforgeeks.org/polymorphism-in-c/</a>

Java: <a href="https://docs.oracle.com/javase/tutorial/java/IandI/polymorphism.html">https://docs.oracle.com/javase/tutorial/java/IandI/polymorphism.html</a>

Python: <a href="https://www.programiz.com/python-programming/polymorphism">https://www.programiz.com/python-programming/polymorphism</a>

 $\mathbb{C}++$ 

Copy Constructor vs Assignment Operator: <a href="https://www.geeksforgeeks.org/copy-constructor-vs-assignment-operator-in-c/">https://www.geeksforgeeks.org/copy-constructor-vs-assignment-operator-in-c/</a>

Emulating the super keyword: <a href="https://www.fluentcpp.com/2017/12/26/emulate-super-base/">https://www.fluentcpp.com/2017/12/26/emulate-super-base/</a>

Friend functions: <a href="https://www.section.io/engineering-education/introduction-to-friend-functions-in-c++/">https://www.section.io/engineering-education/introduction-to-friend-functions-in-c++/</a>

#### Java

Friend functions: <a href="https://stackoverflow.com/questions/14226228/implementation-of-friend-concept-in-java">https://stackoverflow.com/questions/14226228/implementation-of-friend-concept-in-java</a>

Interface: <a href="https://www.sanfoundry.com/java-program-make-shape-interface-implement-using-circle-rectangle-class/">https://www.sanfoundry.com/java-program-make-shape-interface-implement-using-circle-rectangle-class/</a>

#### **Design Problems**

Game of chess: <a href="https://inst.eecs.berkeley.edu/~cs162/sp07/Nachos/chess.shtml">https://inst.eecs.berkeley.edu/~cs162/sp07/Nachos/chess.shtml</a>