

Overview of Java Programming AP Edition

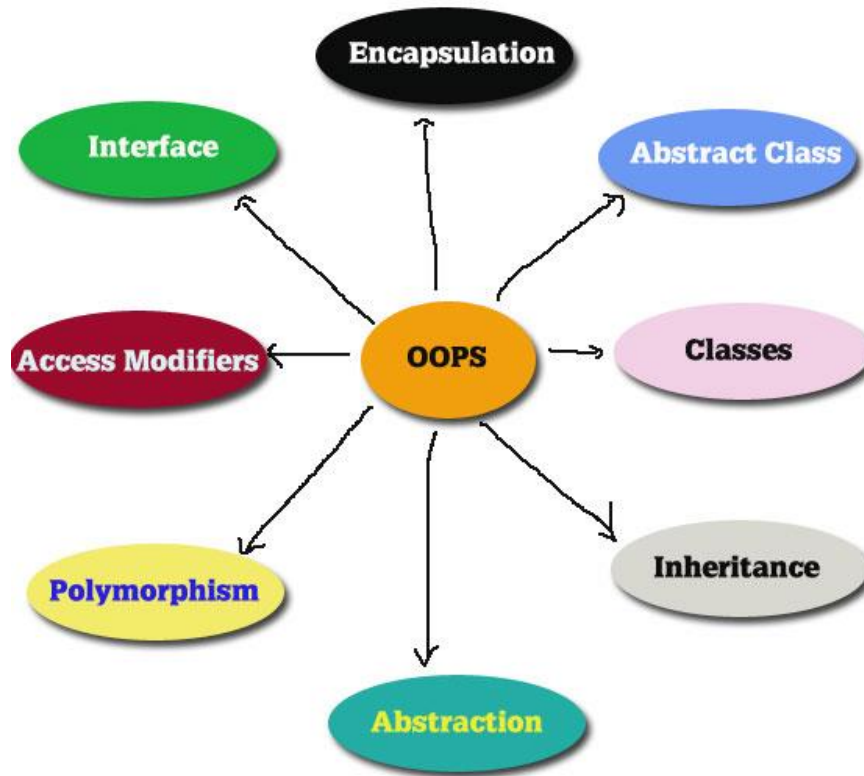
OVERVIEW OF JAVA OBJECT-ORIENTED PROGRAMMING (APCSB)

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Topics in Object-Oriented Programming



Classes: Chapter 9 (part 1)

Access Modifiers: Chapter 9 (part 1)

Encapsulation: Chapter 9 (part 1)

Abstraction: Chapter 9 (part 1)

API Classes/Class Hierarchy: Chapter 10 (part 2)

Inheritance: Chapter 11 (part 2)

Polymorphism: Chapter 11 (part 2)

Exception: Chapter 12 (part 2)

Abstract Class: Chapter 13 (part 2)

Interface: Chapter 13 (part2)



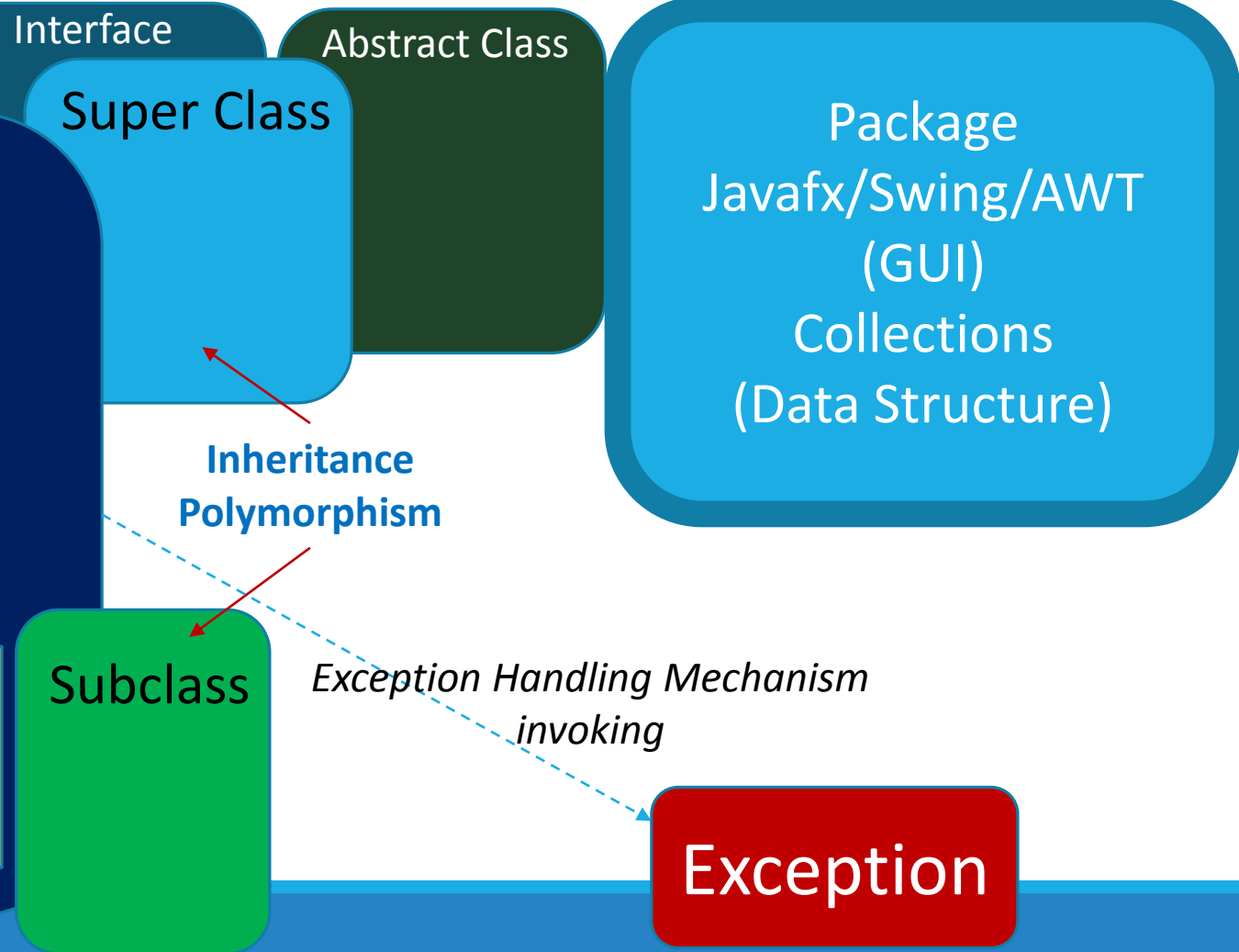
Part 1 Deals with Design inside a Class

Part 2 Deals with the Relationships among Classes

Topics inside a class/object (Part 1):

- .data types
- .program structures
- .data carriers (array/arraylists)
- .classes and objects
- static versus instance
- visibility
- local versus global
- data encapsulation
- .abstraction

Part 2:
Algorithms
(Recursion/Sorting)





AP Exam Test More on Ideas, Not Syntax

Topics inside a class/object (Part 1):

- .data types
- .program structures
- .data carriers (array/arraylists)
- .classes and objects
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Interface

Abstract Class

Super Class

Part 2:

Data Structures
(List/StackQueue)

Inheritance
Polymorphism

Subclass

Part 2:

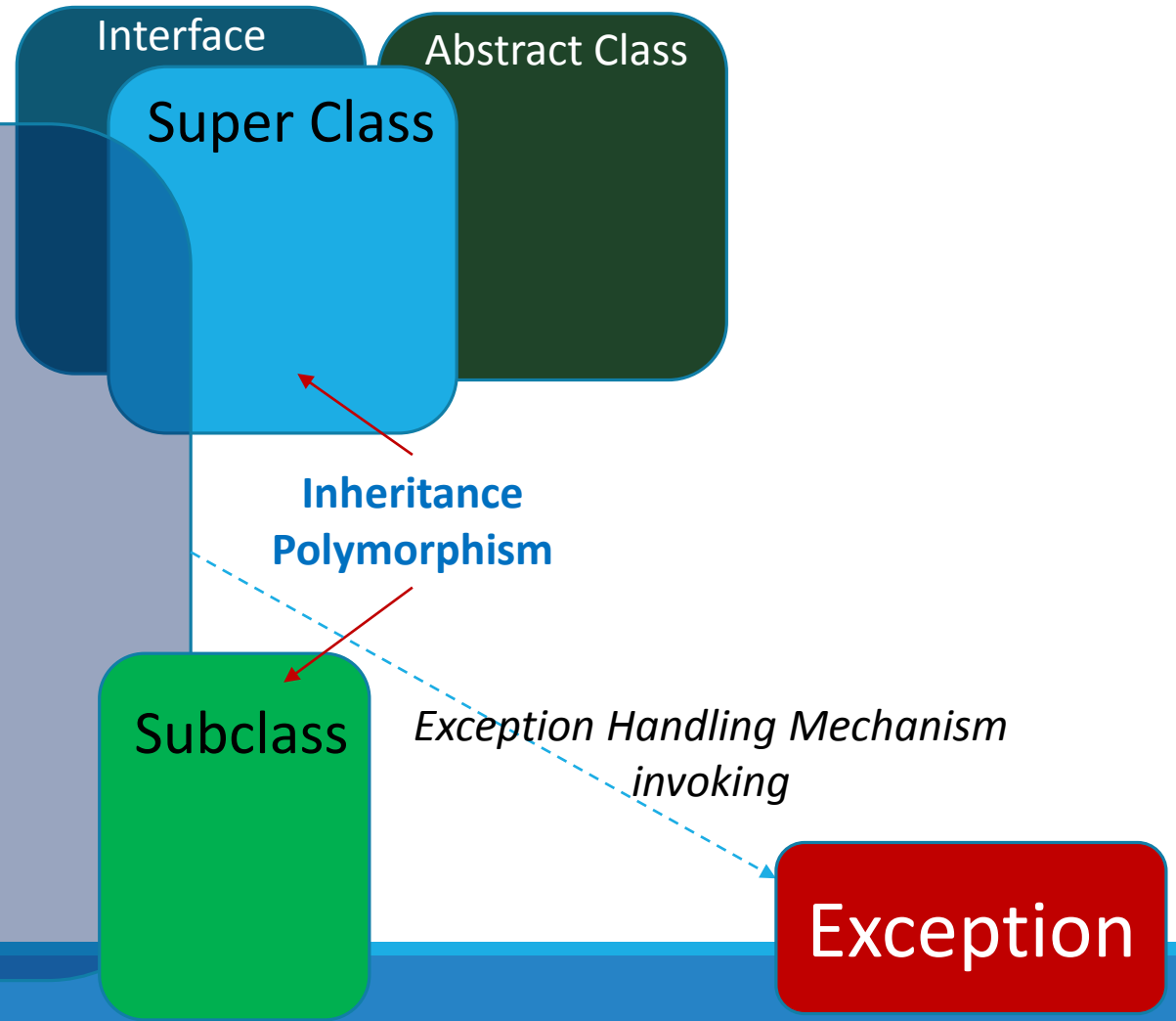
Algorithms
(Recursion/Sorting)



Unit 4

Topics inside a class/object (Part 1):

- .data types
- .program structures
- .data carriers (array/arraylists)
- .classes and objects
- static versus instance
- visibility
- local versus global
- data encapsulation
- .abstraction





Unit 5

Topics inside a class/object (Part 1):

- .data types
- .program structures
- .data carriers (array/arraylists)
- .classes and objects
- static versus instance
- visibility
- local versus global
- data encapsulation
- .abstraction

Part 2:
Algorithms
(Recursion/Sorting)

Package
Collections
(Data Structure)



Unit 6

AP Computer Science Labs:

(1) ChatBot Lab

(2) Picture Lab

(3) Elevens Lab (Card Game)



Unit 7 AP Exam Review

- (1) Multiple Choice Question Review
- (2) Free Response Question Review
- (3) Practice Exams
- (4) Past FRQ Practice



JavaFX Course

Topics inside a class/object (Part 1):

- .data types
- .program structures
- .data carriers (array/arraylists)
- .classes and objects
 - static versus instance
 - visibility
 - local versus global
 - data encapsulation
- .abstraction

Package
Javafx/Swing/AWT
(GUI)

Separate JavaFX
Course