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Backend Software Development Course

8 October 2022

Week 5: Research

Prompts

What are the differences between checked and unchecked exceptions?

An exception is the method created to handle and hand off errors. Objects known as "exceptional objects" contain the error type, state of the program, and other information on the error. based on this information the runtime system checks list of methods known as a call stack to find an appropriate program, an "exception handler" to catch the exception. if no appropriate handler is found the system terminates. There are two types of exception: checked and unchecked. Checked exceptions are those that have gone wrong withing the code but are potentially recoverable. These exceptions are run at the time of compiling and corrections are enforced. Unchecked exceptions are those that are unrecoverable and, as they are not checked at the time of compilation, repair is not enforced. these unchecked exceptions are also known as runtime errors as they appear as the code runs.

What are the differences between abstract classes and interfaces? When should you use one over the other?

Abstract classes and interfaces are very similar in function as they cannot be instantiated, and both contain various methods that may or may not be implemented. However, their primary difference lies in encapsulation. Interfaces are, by nature, public. As they are used to provide a blueprint for the classes that implement them, they are fully accessible, as are any methods contained in them. Abstract methods, on the other hand, may be public or private, and may contain public or private methods. Additionally, as abstract classes are still classes, they fill the single slot for inheritance, while any number of interfaces can be implemented.

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