PÉCSI TUDOMÁNYEGYETEM
TERMÉSZETTUDOMÁNYI KAR

“Methodology of Programming I”

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PTE

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Generics

Generics allow you to abstract over types.

In a nutshell, generics enable types (classes and interfaces) to be parameters when defining classes, interfaces and methods.

Much like the more familiar formal parameters used in method declarations, type parameters provide a way for you to re-use the same code with different inputs. The difference is that the inputs to formal parameters are values, while the inputs to type parameters are types.

Advantages of Code with Generics:

- Stronger type checks at compile time
- Elimination of casts
- Enabling programmers to implement generic algorithms

Type Parameter Naming Conventions:

By convention, type parameter names are single, uppercase letters.

The most commonly used type parameter names are:

- E - Element (used extensively by the Java Collections Framework)
- K - Key
- N - Number
- T - Type
- V - Value
- S,U,V etc. - 2nd, 3rd, 4th types

References:

https://docs.oracle.com/javase/tutorial/tutorialLearningPaths.html