Module java.base

Package java.util.concurrent

Interface StructuredTaskScope.Subtask<T>

Type Parameters:

T - the result type

All Superinterfaces:

Supplier<T>

Enclosing class:

StructuredTaskScope^{PREVIEW}<T>

public static sealed interface StructuredTaskScope.Subtask<T>
extends Supplier<T>

Subtask is a preview API of the Java platform.

Programs can only use Subtask when preview features are enabled.

Preview features may be removed in a future release, or upgraded to permanent features of the Java platform.

Represents a subtask forked with StructuredTaskScope.fork(Callable) PREVIEW.

Since:

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Nested Class Summary

Nested Classes

Modifier and Type Interface

Description

Represents the state of a subtask.

Method Summary

All Methods Instance Methods A	bstract Methods	
Modifier and Type	Method	Description
Throwable	<pre>exception()</pre>	Returns the exception thrown by the subtask.
Т	get()	Returns the result of the subtask.
StructuredTaskScope.Subtask.StatePREVIEW	state()	Returns the state of the subtask.
Callable extends T	task()	Returns the value returning task provided to the fork method.

Method Details

task

Callable<? extends T> task()

Returns the value returning task provided to the fork method.

API Note:

Task objects with unique identity may be used for correlation by implementations of handleComplete PREVIEW.

Returns:

the value returning task provided to the fork method

state

StructuredTaskScope.Subtask.State^{PREVIEW} state()

Returns the state of the subtask.

Returns:

the state of the subtask

get

T get()

Returns the result of the subtask.

To ensure correct usage, if the scope owner forks^{PREVIEW} a subtask, then it must join (with join^{PREVIEW} or joinUntil^{PREVIEW}) before it can obtain the result of the subtask.

Specified by:

get in interface Supplier<T>

Returns:

the possibly-null result

Throws:

IllegalStateException - if the subtask has not completed, did not complete successfully, or the current thread is the task scope owner and did not join after forking

See Also:

StructuredTaskScope.Subtask.State.SUCCESS^{PREVIEW}

exception

Throwable exception()

Returns the exception thrown by the subtask.

To ensure correct usage, if the scope owner forks^{PREVIEW} a subtask, then it must join (with join^{PREVIEW} or joinUntil^{PREVIEW}) before it can obtain the exception thrown by the subtask.

Returns:

the exception thrown by the subtask

Throws:

IllegalStateException - if the subtask has not completed, completed with a result, or the current thread is the task scope owner and did not join after forking

See Also:

StructuredTaskScope.Subtask.State.FAILEDPREVIEW

Report a bug or suggest an enhancement

For further API reference and developer documentation see the Java SE Documentation, which contains more detailed, developer-targeted descriptions with conceptual overviews, definitions of terms, workarounds, and working code examples. Other versions.

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