12.12 Participant class

The Participant class enables the specification of the parties involved in the management of ArtifactAssets.

Superclass

ArtifactAsset

Semantics

Different parties can participate in an assurance case effort, such as specific people, organizations, and tools.

12.13 ArtifactAssetRelationship class

The ArtifactAssetRelationship class enables the ArtifactAssets of an AssuranceCase to be linked together. The linking together of ArtifactAssets allows a user to specify that a relationship exists between the assets.

Superclass

ArtifactAsset

Associations

[1..*] – the

source:ArtifactAsset[0..*]
~~The~~ source of the ArtifactRelationship

target:ArtifactAsset[0..*]
~~The~~ target of the ArtifactRelationship

Constraints

The source or target of an ArtifactAssetRelationship cannot be another ArtifactAssetRelationship.

Semantics

An ArtifactAsset can be related to other ArtifactAssets. This kind of information is specified by means of ArtifactAssetRelationships, which can also have a specific type depending on the ArtifactAssets being linked together.

~~12.14 ArtifactRelationship class~~

~~The ArtifactRelationship class enables two Artifacts to be linked together.~~

~~**Superclass**~~

~~ArtifactAssetRelationship~~

~~**Constraints**~~

~~The source and target of an ArtifactRelationship must be Artifacts.~~

~~**Semantics**~~

~~The Artifacts managed during a system's lifecycle do not exist in isolation, but relationships typically exist between them: the test cases that validate some requirement, the design standard followed in a design specification, etc. These relationships are specified by means of ArtifactRelationships.~~

~~12.15 ActivityRelationship class~~

~~The ActivityRelationship class enables two Activities to be related together.~~

~~**Superclass**~~

~~ArtifactAssetRelationship~~

~~**Constraints**~~

~~The source and target of an ActivityRelationship must be Activities.~~

~~**Semantics**~~

~~ActivityRelationships aim to support the specification of how Activities, and citations to them, relate each other: an Activity that precedes another, an Activity decomposed into others, etc.~~

12.16   ArtifactActivityRelationship class

The ArtifactActivityRelationships class enables an Artifact and an Activity to be linked together.

Superclass

ArtifactAssetRelationship

Constraints

The source of an ArtifactActivityRelationship must be an Artifact.

The target of an ArtifactActivityRelationship must be an Activity.

Semantics

Artifacts are managed in the scope of Activities, which usually use the Artifact as input and output. Such information is specified by means of ArtifactActivityRelationships.

12.17   ArtifactTechniqueRelationship class

The ArtifactTechniqueRelationship class enables an Artifact and a Technique to be linked together.

Superclass

ArtifactAssetRelationship

Constraints

The source of an ArtifactActivityRelationship must be an Artifact.

The target of an ArtifactActivityRelationship must be a Technique.

Semantics

Artifacts result from the application of Techniques, such as the application of UML for a design specification. ArtifactTechniqueRelationships are used to specify such a kind of information.

12.18   ParticipantRoleRelationship class

The ParticipantRoleRelationships class enables a Participant to be linked to other ArtifactAssets.

Superclass

ArtifactAssetRelationship

Constraints

The source of an ParticipantRoleRelationship must be a Participant.

Semantics

The information about the roles and functions that a Participant plays with regard to other ArtifactAssets is specified by means of ParticipantRoleRelationships. Examples of roles and functions include the owner of an Artifact, the executor of an Activity, and possible relationships between Participants (e.g., supervisor).

12.19   ArtifactResourceRelationship class

The ArtifactResourceRelationship class enables an Artifact and a Resource to be linked together.

Superclass

ArtifactAssetRelationship

Constraints

The source of an ArtifactActivityRelationship must be an Artifact.

The target of an ArtifactActivityRelationship must be a Resource.

Semantics

The specific Resources where an Artifact is located are specified by means of ArtifactResourceRelationships.