Examples

Package in package ''

Examples
Version 1.0 Phase 1.0 Proposed
mitchella created on 23/05/2025. Last modified 23/05/2025

lump of clay

Package in package 'Examples'

lump of clay
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

Diagrams

Package in package 'lump of clay'

Diagrams
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

stage 1 - load (SDTM, STM)

Package in package 'Diagrams'

stage 1 - load (SDTM, STM)
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

Clay Statues diagram

Class diagram in package 'stage 1 - load (SDTM, STM)'

Clay Statues
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 1: Clay Statues

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

CONNECTORS

⬀ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Days diagram

Class diagram in package 'stage 1 - load (SDTM, STM)'

Days
Version 1.0
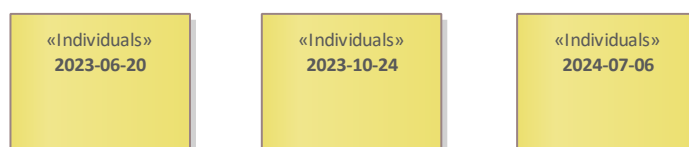mitchella created on 14/05/2025. Last modified 22/05/2025

«Individuals»	«Individuals»	«Individuals»
2023-06-20	**2023-10-24**	**2024-07-06**

Figure 2: Days

2023-06-20

Class «Individuals» in package 'stage 1 - load'

2023-06-20
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

CONNECTORS

⬀ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

2023-10-24

Class «Individuals» in package 'stage 1 - load'

2023-10-24
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡️ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

↗️ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

2024-07-06

Class «Individuals» in package 'stage 1 - load'

2024-07-06
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡️ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

CONNECTORS

↗️ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

Lumps of Clay diagram

Class diagram in package 'stage 1 - load (SDTM, STM)'

Lumps of Clay
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025

«Individuals»
Lump of Clay #1

Figure 3: Lumps of Clay

Lump of Clay #1

Class «Individuals» in package 'stage 1 - load'

Lump of Clay #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

Statue Existence Boundaries diagram

Class diagram in package 'stage 1 - load (SDTM, STM)'

Statue Existence Boundaries
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 4: Statue Existence Boundaries

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination

From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination

stage 2 - mereology (STM)

Package in package 'Diagrams'

stage 2 - mereology (STM)
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

mereology diagram

Class diagram in package 'stage 2 - mereology (STM)'

mereology
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025
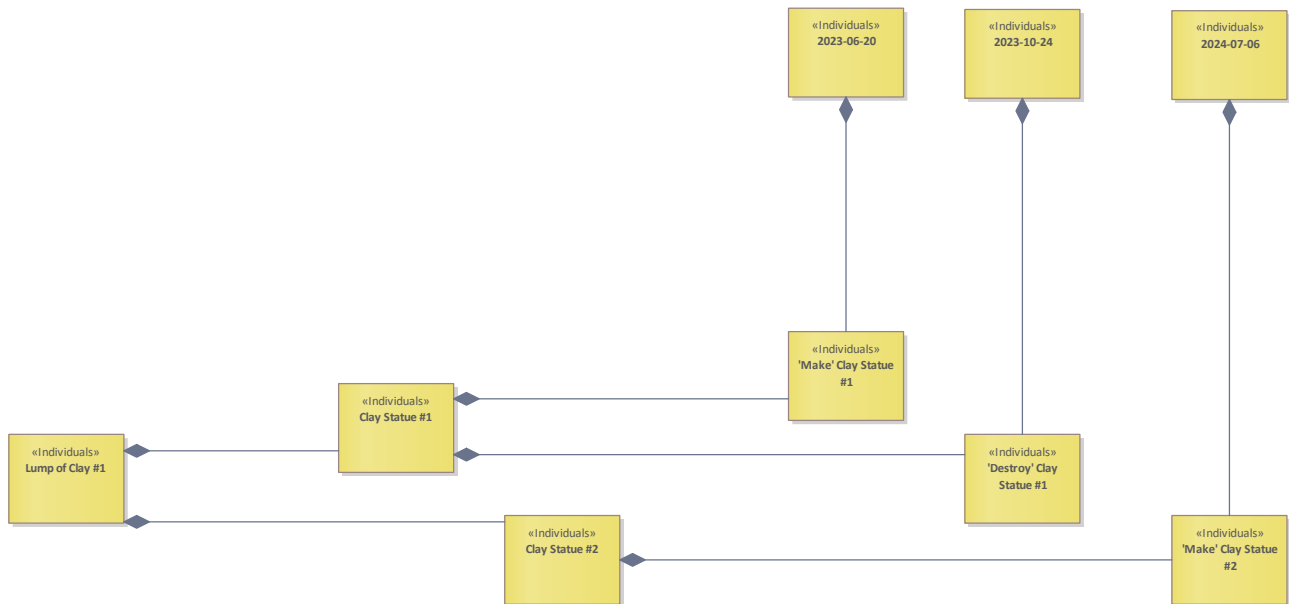
Figure 5: mereology

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1 [Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24 [Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

2023-06-20

Class «Individuals» in package 'stage 1 - load'

2023-06-20
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

2023-10-24

Class «Individuals» in package 'stage 1 - load'

2023-10-24
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

2024-07-06

Class «Individuals» in package 'stage 1 - load'

2024-07-06

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

CONNECTORS

⬈ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

⬈ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

⬈ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Lump of Clay #1

Class «Individuals» in package 'stage 1 - load'

Lump of Clay #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

stage 3 - simle order types

Package in package 'Diagrams'

<div align="right">

stage 3 - simle order types
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

</div>

Aesthetically Valuable Statues diagram

Class diagram in package 'stage 3 - simle order types'

<div align="right">

Aesthetically Valuable Statues
Version 1.0
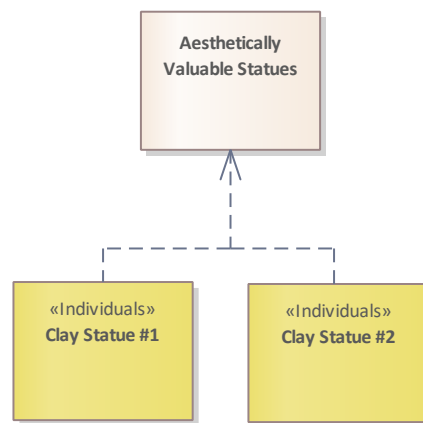mitchella created on 21/05/2025. Last modified 22/05/2025

</div>

Figure 6: Aesthetically Valuable Statues

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

<div align="right">

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
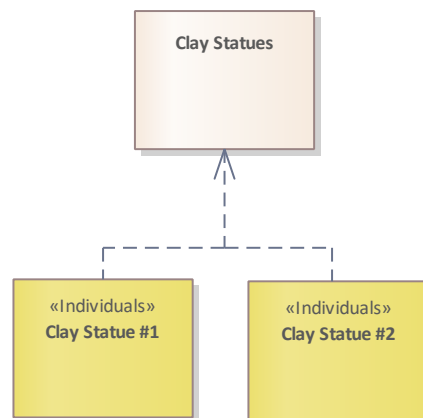From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Aesthetically Valuable Statues

Class in package 'stage 3 - simle order types'

Aesthetically Valuable Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 21/05/2025. Last modified 21/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination

From: Clay Statue #1 : Class, Public

To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination

From: Clay Statue #2 : Class, Public

To: Aesthetically Valuable Statues : Class, Public

Clay Statues diagram

Class diagram in package 'stage 3 - simle order types'

Clay Statues
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 7: Clay Statues

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

⇒ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Clay Statues

Class in package 'stage 3 - simile order types'

<div align="right">

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

🖊 Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Days diagram

Class diagram in package 'stage 3 - simile order types'

<div align="right">

Days
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025
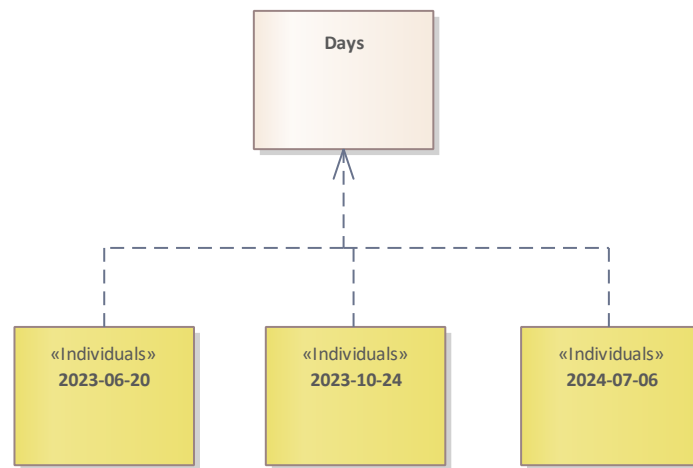
</div>

Figure 8: Days

2023-06-20

Class «Individuals» in package 'stage 1 - load'

2023-06-20
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS
⇒ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20 [Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination From: 2023-06-20 : Class, Public To: Days : Class, Public

2023-10-24

Class «Individuals» in package 'stage 1 - load'

2023-10-24
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS
⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24 [Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

🢅 **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

2024-07-06

Class «Individuals» in package 'stage 1 - load'

2024-07-06
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

CONNECTORS

🢅 **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

Days

Class in package 'stage 3 - simle order types'

Days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

Lumps of Clay diagram

Class diagram in package 'stage 3 - simle order types'

Lumps of Clay
Version 1.0
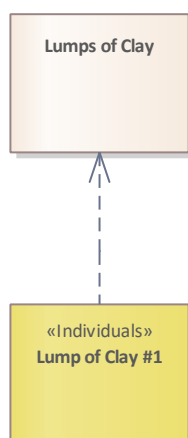mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 9: Lumps of Clay

Lump of Clay #1

Class «Individuals» in package 'stage 1 - load'

Lump of Clay #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

Lumps of Clay

Class in package 'stage 3 - simle order types'

Lumps of Clay
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

Statue Existence Boundaries diagram

Class diagram in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0
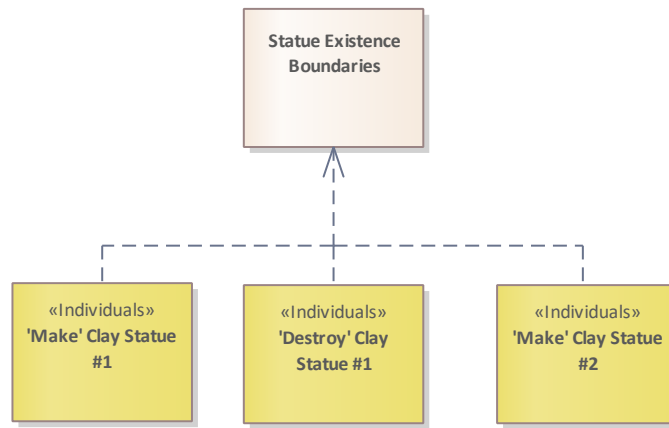mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 10: Statue Existence Boundaries

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1
[Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24
[Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20
[Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1
[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

← Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

  ↗ **Dependency**   Source -> Destination

From: 'Make' Clay Statue #1 : Class, Public

To: Statue Existence Boundaries : Class, Public

  ↗ **Dependency**   Source -> Destination

From: 'Destroy' Clay Statue #1 : Class, Public

To: Statue Existence Boundaries : Class, Public

  ↗ **Dependency**   Source -> Destination

From: 'Make' Clay Statue #2 : Class, Public

To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

  ✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

  ✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

mereology diagram

Class diagram in package 'stage 3 - simle order types'

mereology
Version 1.0
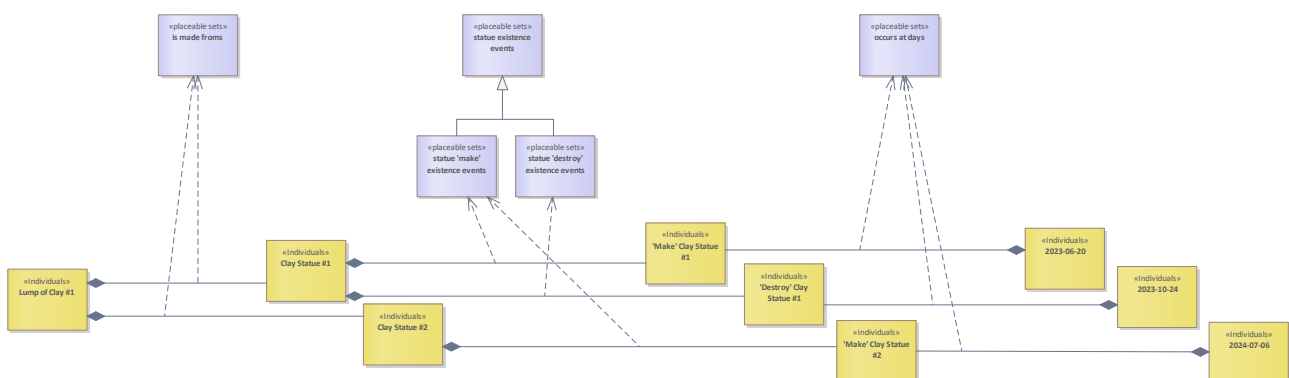mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 11: mereology

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

2023-06-20

Class «Individuals» in package 'stage 1 - load'

2023-06-20
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

2023-10-24

Class «Individuals» in package 'stage 1 - load'

2023-10-24
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

2024-07-06

Class «Individuals» in package 'stage 1 - load'

2024-07-06
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

⇒ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Lump of Clay #1

Class «Individuals» in package 'stage 1 - load'

Lump of Clay #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

Aggregation in package "

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Aggregation in package "

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Aggregation in package "

Version   Phase
created on . Last modified

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

---

is made froms

Class «placeable sets» in package 'stage 3 - simle order types'

is made froms
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

← Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

occurs at days

Class «placeable sets» in package 'stage 3 - simle order types'

occurs at days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

ASSOCIATIONS

ASSOCIATIONS

  ✏️ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

  ⬅ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

CONNECTORS

  ↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

  ↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

  ↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue 'make' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

  ⬅ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

CONNECTORS

CONNECTORS

↗ Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ Dependency   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

↗ Dependency   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes
<div align="right">[Direction is 'Source -> Destination'.]</div>

← Aggregation «whole» from «placeable sets» statue existence events to Clay Statues
<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events
<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

stage 4 - placeable sets

Package in package 'Diagrams'

stage 4 - placeable sets
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

placeable sets diagram

Class diagram in package 'stage 4 - placeable sets'

placeable sets
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025
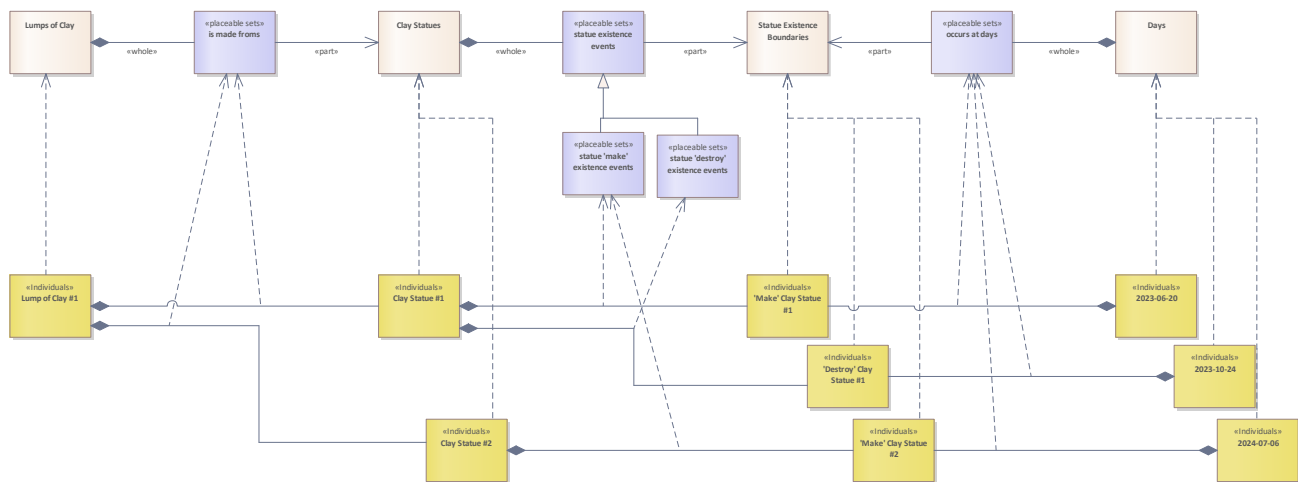
Figure 12: placeable sets

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1
[Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24
[Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20   [Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1   [Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination   From: 'Make' Clay Statue #1 : Class, Public   To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06   [Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2   [Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination   From: 'Make' Clay Statue #2 : Class, Public   To: Statue Existence Boundaries : Class, Public

2023-06-20

Class «Individuals» in package 'stage 1 - load'

2023-06-20
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

2023-10-24

Class «Individuals» in package 'stage 1 - load'

2023-10-24
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

2024-07-06

Class «Individuals» in package 'stage 1 - load'

2024-07-06
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Lump of Clay #1

Class «Individuals» in package 'stage 1 - load'

Lump of Clay #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

🡕 **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

🡕 **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

🡕 **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

🡕 **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Aggregation in package ''

Version   Phase

created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Clay Statues

Class in package 'stage 3 - simile order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

---

Days

Class in package 'stage 3 - simile order types'

Days
Version 1.0 Phase 1.0 Proposed

---

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Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

⬈ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

⬈ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

⬈ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

---

is made froms

Class «placeable sets» in package 'stage 3 - simle order types'

is made froms
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

⬈ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

⬈ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Lumps of Clay

Class in package 'stage 3 - simle order types'

Lumps of Clay
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

⬈ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

occurs at days

Class «placeable sets» in package 'stage 3 - simle order types'

occurs at days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination

From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination

From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination

From: : Aggregation, Public
To: occurs at days : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination

From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

CONNECTORS

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'destroy' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'destroy' existence events : Class, Public

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'make' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

   ⬅ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: : Aggregation, Public

To: statue 'make' existence events : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

⬅ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

stage 5 - sub-super-set hierarchies

Package in package 'Diagrams'

<div align="right">

stage 5 - sub-super-set hierarchies
Version 1.0 Phase 1.0 Proposed
mitchella created on 21/05/2025. Last modified 21/05/2025

</div>

Statue Temporal Stages diagram

Class diagram in package 'stage 5 - sub-super-set hierarchies'

<div align="right">

Statue Temporal Stages
Version 1.0
mitchella created on 21/05/2025. Last modified 22/05/2025

</div>

Figure 13: Statue Temporal Stages

Clay Statues

Class in package 'stage 3 - simle order types'

<div align="right">

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

⬈ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

⬈ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

⬈ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

CONNECTORS

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'destroy' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'destroy' existence events : Class, Public

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue 'make' existence events

Version 1.0 Phase 1.0 Proposed

mitchella created on 15/05/2025. Last modified 21/05/2025

Extends statue existence events

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

   ← Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

<div align="right">

[Direction is 'Source -> Destination'.]

</div>

CONNECTORS

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

   ↗ **Dependency**   Source -> Destination

From: : Aggregation, Public

To: statue 'make' existence events : Class, Public

CONNECTORS

➚ **Dependency**   Source -> Destination

From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

⬅ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

➚ **Dependency**   Source -> Destination

From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

➚ **Dependency**   Source -> Destination

From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

➚ **Dependency**   Source -> Destination

From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

⬅ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

➡ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

<div align="right">

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Temporal Stages to Worldbound Individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Statue Temporal Stages

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

➡ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

Statues diagram

Class diagram in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0
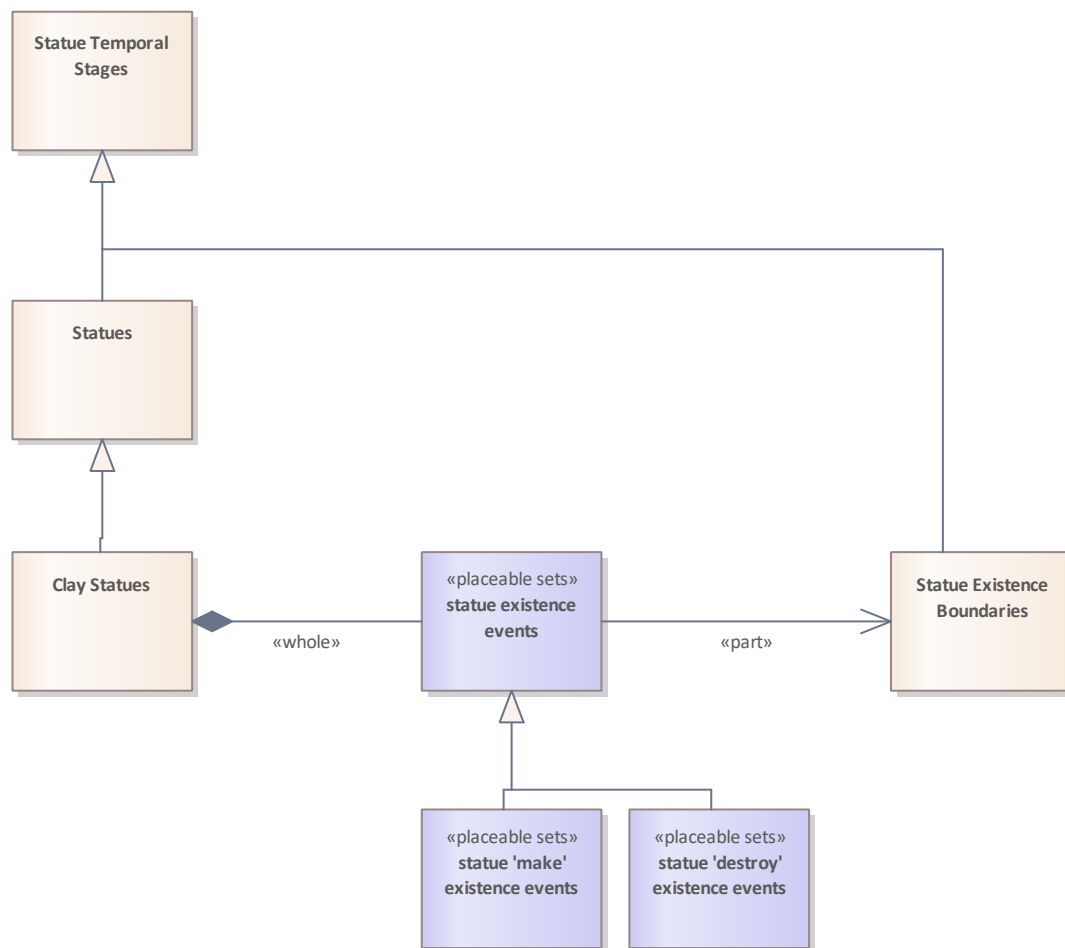mitchella created on 21/05/2025. Last modified 22/05/2025
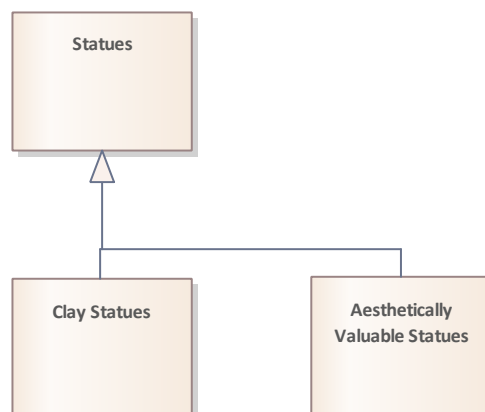
Figure 14: Statues

Aesthetically Valuable Statues

Class in package 'stage 3 - simle order types'

Aesthetically Valuable Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 21/05/2025. Last modified 21/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Clay Statues

Class in package 'stage 3 - simle order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

➡ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

stage 6 - top level model integration

Package in package 'Diagrams'

is made froms diagram

Class diagram in package 'stage 6 - top level model integration'

Figure 15: is made froms

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Clay Statues

Class in package 'stage 3 - simle order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

---

is made froms

Class «placeable sets» in package 'stage 3 - simle order types'

is made froms
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

← Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

---

Lumps of Clay

Class in package 'stage 3 - simle order types'

Lumps of Clay
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

---

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

---

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

ASSOCIATIONS

   ✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

   ⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

   ⬅ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

   ➡ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

   ➡ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

   ✎ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

parts-wholes

Class in package 'stage 6 - top level model integration'

parts-wholes
Version Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

➡ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues

Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

➡ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

occurs at days diagram

Class diagram in package 'stage 6 - top level model integration'

occurs at days
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025
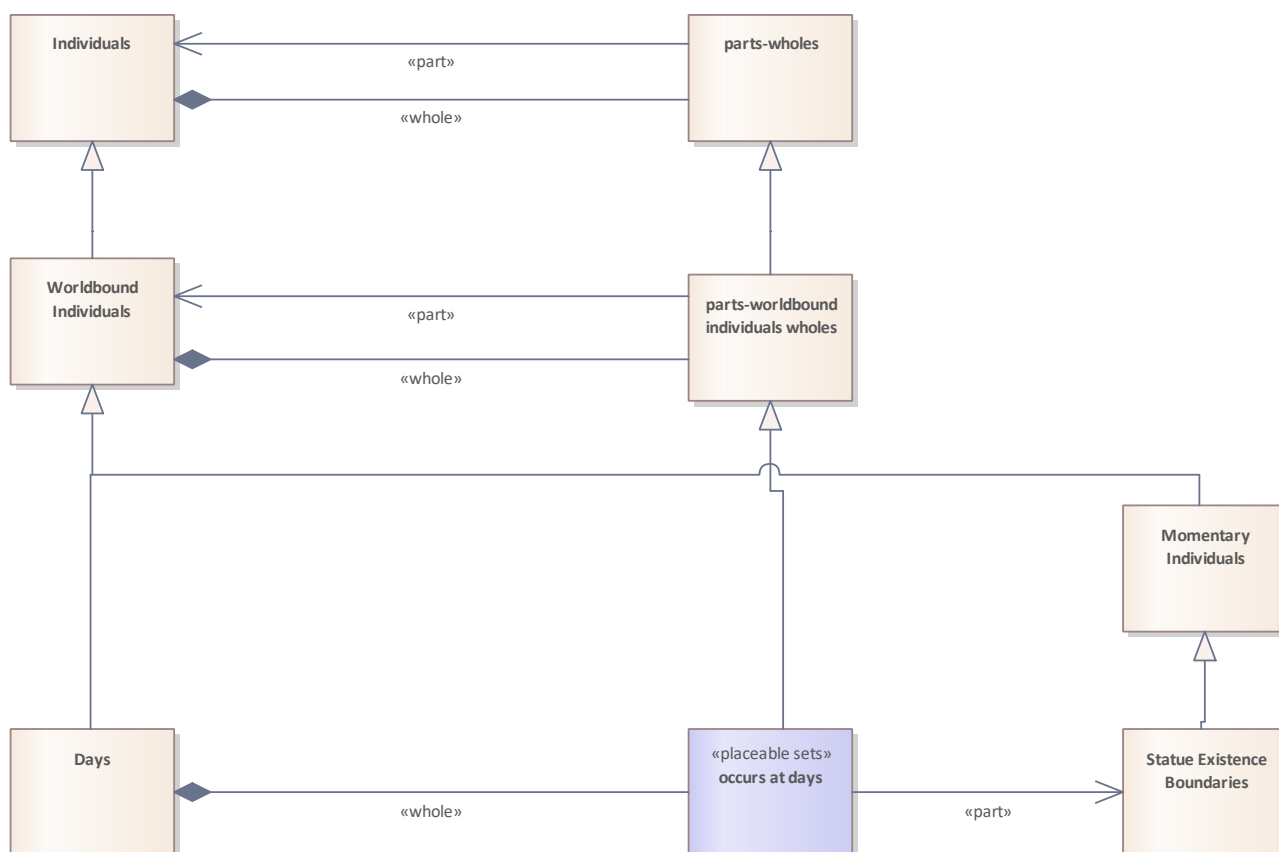
Figure 16: occurs at days

Aggregation in package "

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Aggregation in package "

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Aggregation in package "

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Days

Class in package 'stage 3 - simile order types'

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

⬀ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

⬀ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

⬀ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

occurs at days

Class «placeable sets» in package 'stage 3 - simle order types'

occurs at days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

← Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

⬀ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

CONNECTORS

⤴ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

⤴ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

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Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

⬅ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

⤴ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

⤴ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

⤴ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

<div align="right">

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

⬅ Generalization from parts-worldbound individuals wholes to parts-wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

➡ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

➡ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Worldbound Individuals to Individuals
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Statue Temporal Stages to Worldbound Individuals
[Direction is 'Source -> Destination'.]
➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals
[Direction is 'Source -> Destination'.]
➡ Generalization from Momentary Individuals to Worldbound Individuals
[Direction is 'Source -> Destination'.]
➡ Generalization from Lumps of Clay to Worldbound Individuals
[Direction is 'Source -> Destination'.]
➡ Generalization from Days to Worldbound Individuals
[Direction is 'Source -> Destination'.]

ASSOCIATIONS
✏ Association (direction: Source -> Destination) «part»
Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

⬅ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Momentary Individuals

Class in package 'stage 6 - top level model integration'

Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

parts-wholes

Class in package 'stage 6 - top level model integration'

parts-wholes

Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

---

statue existence events diagram

Class diagram in package 'stage 6 - top level model integration'

statue existence events
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 17: statue existence events

Clay Statues

Class in package 'stage 3 - simle order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events
[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

CONNECTORS

    ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'destroy' existence events : Class, Public

    ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'destroy' existence events : Class, Public

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'make' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

    ⬅ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

    ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

    ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

    ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

    ↗ **Dependency**   Source -> Destination

From: , Public

To: statue 'make' existence events : Class, Public

    ↗ **Dependency**   Source -> Destination

From: : Aggregation, Public

To: statue 'make' existence events : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

⬅ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

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statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

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statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

⬅ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

➡ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

<div align="right">

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

⬅ Generalization from parts-worldbound individuals wholes to parts-wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⇒ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⇒ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

temporal parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

temporal parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 26/03/2024. Last modified 22/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⇒ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

---

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⇒ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Momentary Individuals

Class in package 'stage 6 - top level model integration'

Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

parts-wholes

Class in package 'stage 6 - top level model integration'

parts-wholes
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

➡ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues

Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

➡ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

statue existence events - alternative option diagram

Class diagram in package 'stage 6 - top level model integration'

statue existence events - alternative option
Version 1.0
mitchella created on 15/05/2025. Last modified 22/05/2025

Figure 18: statue existence events - alternative option

Clay Statues

Class in package 'stage 3 - simle order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Clay Statues to Statues
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues
[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events
[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'make' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

Note in package 'stage 6 - top level model integration'

We could use boundaries for the statue existence events.

Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 15/05/2025
Extends

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

temporal parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

temporal parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 26/03/2024. Last modified 22/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Momentary Individuals

Class in package 'stage 6 - top level model integration'

Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS
← Generalization from Statue Temporal Stages to Worldbound Individuals [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
⇒ Generalization from Statue Existence Boundaries to Statue Temporal Stages [Direction is 'Source -> Destination'.]
⇒ Generalization from Statues to Statue Temporal Stages [Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS
← Generalization from Statues to Statue Temporal Stages [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
⇒ Generalization from Clay Statues to Statues [Direction is 'Source -> Destination'.]
⇒ Generalization from Aesthetically Valuable Statues to Statues [Direction is 'Source -> Destination'.]

end boundings of worldbound individuals

Class in package 'alternative option'

end boundings of worldbound individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 24/05/2024. Last modified 22/05/2025
Extends temporal boundings of worldbound individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from end boundings of worldbound individuals to temporal boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from end boundaries of worldbound individuals to end boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

---

start boundings of worldbound individuals

Class in package 'alternative option'

start boundings of worldbound individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 24/05/2024. Last modified 22/05/2025
Extends temporal boundings of worldbound individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from start boundings of worldbound individuals to temporal boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from start boundaries of worldbound individuals to start boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

---

temporal boundings of worldbound individuals

Class in package 'alternative option'

temporal boundings of worldbound individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 24/05/2024. Last modified 22/05/2025
Extends temporal parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

⟹ Generalization from start boundings of worldbound individuals to temporal boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

⟹ Generalization from end boundings of worldbound individuals to temporal boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

end boundaries of worldbound individuals

Class in package 'alternative option'

end boundaries of worldbound individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends end boundings of worldbound individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⟸ Generalization from end boundaries of worldbound individuals to end boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

start boundaries of worldbound individuals

Class in package 'alternative option'

start boundaries of worldbound individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends start boundings of worldbound individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⟸ Generalization from start boundaries of worldbound individuals to start boundings of worldbound individuals

[Direction is 'Source -> Destination'.]

Top Level Model Stitching diagram

Class diagram in package 'stage 6 - top level model integration'

Top Level Model Stitching
Version 1.0
mitchella created on 22/05/2025. Last modified 22/05/2025
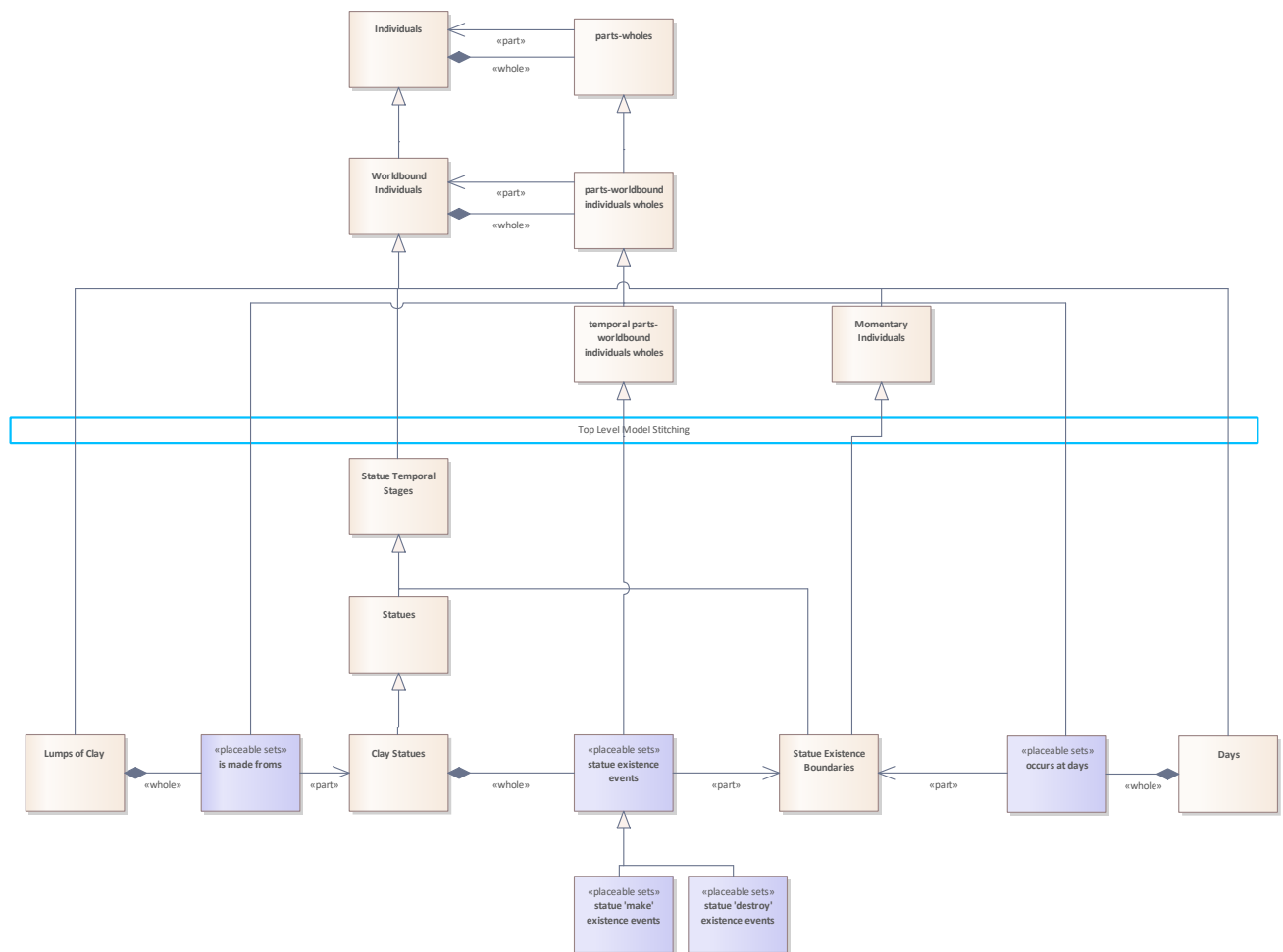
Figure 19: Top Level Model Stitching

Clay Statues

Class in package 'stage 3 - simle order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Clay Statues to Statues
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues
[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Days

Class in package 'stage 3 - simle order types'

Days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

is made froms

Class «placeable sets» in package 'stage 3 - simile order types'

is made froms
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Lumps of Clay

Class in package 'stage 3 - simile order types'

Lumps of Clay
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

occurs at days

Class «placeable sets» in package 'stage 3 - simle order types'

occurs at days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'make' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

⬅ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes
[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events
[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events
[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

ASSOCIATIONS
Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

Top Level Model Stitching

Boundary in package 'stage 6 - top level model integration'

Top Level Model Stitching
Version 1.0 Phase 1.0 Proposed
mitchella created on 22/05/2025. Last modified 22/05/2025
Extends

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

OUTGOING STRUCTURAL RELATIONSHIPS
⇐ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals
[Direction is 'Source -> Destination'.]
⇐ Generalization from parts-worldbound individuals wholes to parts-wholes
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
⇒ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes
[Direction is 'Source -> Destination'.]
⇒ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes
[Direction is 'Source -> Destination'.]
⇒ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes
[Direction is 'Source -> Destination'.]

ASSOCIATIONS
✎ Association (direction: Source -> Destination) «part»
Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

temporal parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

<div align="right">

temporal parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 26/03/2024. Last modified 22/05/2025
Extends parts-worldbound individuals wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

<div align="right">

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

⬅ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

<<part>>

ASSOCIATIONS	
Source: Public (Class) parts-wholes	Target: Public (Class) Individuals

Momentary Individuals

Class in package 'stage 6 - top level model integration'

Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Momentary Individuals to Worldbound Individuals   [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Statue Existence Boundaries to Momentary Individuals   [Direction is 'Source -> Destination'.]

parts-wholes

Class in package 'stage 6 - top level model integration'

parts-wholes
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Aggregation «whole» from parts-wholes to Individuals   [Direction is 'Source -> Destination'.]
⬅ Generalization from parts-wholes to grounding relations   [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from parts-worldbound individuals wholes to parts-wholes   [Direction is 'Source -> Destination'.]

ASSOCIATIONS
✏ Association (direction: Source -> Destination) «part»   <<part>>

ASSOCIATIONS	
Source: Public (Class) parts-wholes	Target: Public (Class) Individuals

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

➡ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

➡ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

Top Level Model

Package in package 'stage 6 - top level model integration'

Top Level Model
Version 1.0 Phase 1.0 Proposed
mitchella created on 22/05/2025. Last modified 22/05/2025

Top Level Model diagram

Class diagram in package 'Top Level Model'

Top Level Model
Version 1.0
mitchella created on 22/05/2025. Last modified 22/05/2025
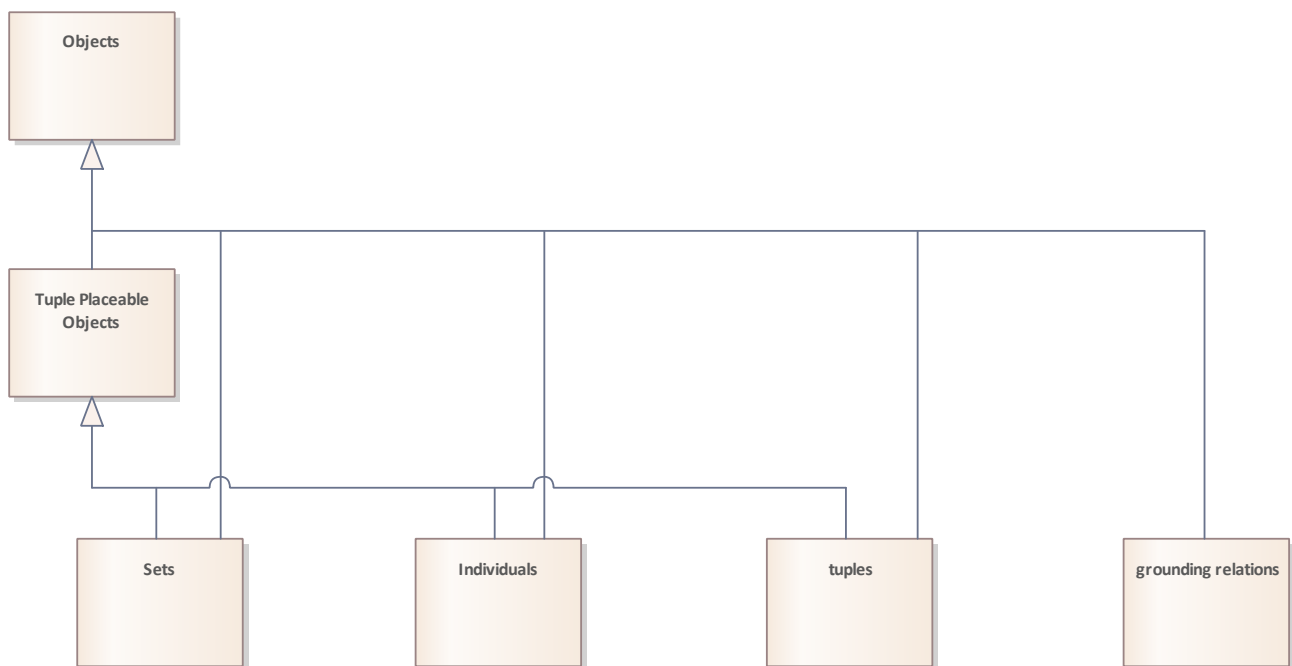
Figure 20: Top Level Model

grounding relations

Class in package 'stage 6 - top level model integration'

grounding relations
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from grounding relations to Objects (pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations") [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

⇒ Generalization from tuple places to grounding relations

[Direction is 'Source -> Destination'.]

⇒ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

[Direction is 'Source -> Destination'.]

⇒ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

⇐ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⇒ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

ASSOCIATIONS

Objects

Class in package 'stage 6 - top level model integration'

Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from Tuple Placeable Objects to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from tuples to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «element»

Source: Public (Class) elements-sets   Target: Public (Class) Objects

Sets

Class in package 'stage 6 - top level model integration'

Sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

⬅ Generalization from Sets to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «set»

Source: Public (Class) elements-sets   Target: Public (Class) Sets

✏ Association (direction: Source -> Destination) «sub-set»

Source: Public (Class) sub-super-sets   Target: Public (Class) Sets

✏ Association (direction: Source -> Destination) «super-set»

Source: Public (Class) sub-super-sets   Target: Public (Class) Sets

Tuple Placeable Objects

Class in package 'stage 6 - top level model integration'

Tuple Placeable Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Tuple Placeable Objects to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Sets to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from tuples to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "plurality of tuples")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «placed»

Source: Public (Class) tuple places   Target: Public (Class) Tuple Placeable Objects

---

tuples

Class in package 'stage 6 - top level model integration'

tuples
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Generalization from tuples to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "plurality of tuples")

[Direction is 'Source -> Destination'.]

⇐ Generalization from tuples to Objects

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «placing»

Source: Public (Class) tuple places   Target: Public (Class) tuples

---

elements-sets diagram

Class diagram in package 'Top Level Model'

elements-sets
Version 1.0
mitchella created on 22/05/2025. Last modified 22/05/2025
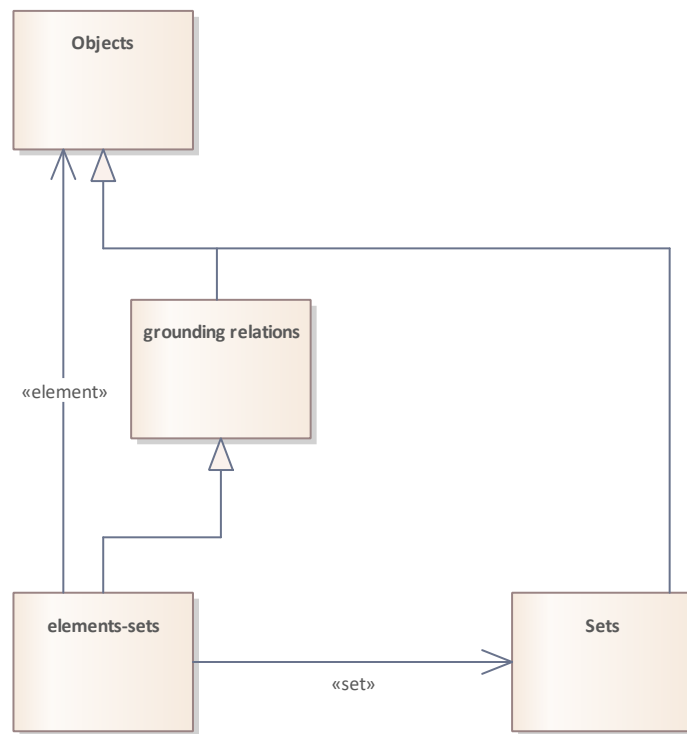
Figure 21: elements-sets

elements-sets

Class in package 'stage 6 - top level model integration'

elements-sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «set»

Source: Public (Class) elements-sets   Target: Public (Class) Sets

---

✏ Association (direction: Source -> Destination) «element»

Source: Public (Class) elements-sets   Target: Public (Class) Objects

---

grounding relations

Class in package 'stage 6 - top level model integration'

grounding relations

Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from tuple places to grounding relations

[Direction is 'Source -> Destination'.]

➡ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

Objects

Class in package 'stage 6 - top level model integration'

Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from Tuple Placeable Objects to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from tuples to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «element»

Source: Public (Class) elements-sets   Target: Public (Class) Objects

Sets

Class in package 'stage 6 - top level model integration'

Sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

⬅ Generalization from Sets to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «set»

Source: Public (Class) elements-sets   Target: Public (Class) Sets

✎ Association (direction: Source -> Destination) «sub-set»

Source: Public (Class) sub-super-sets   Target: Public (Class) Sets

✎ Association (direction: Source -> Destination) «super-set»

Source: Public (Class) sub-super-sets   Target: Public (Class) Sets

parts-wholes diagram

Class diagram in package 'Top Level Model'
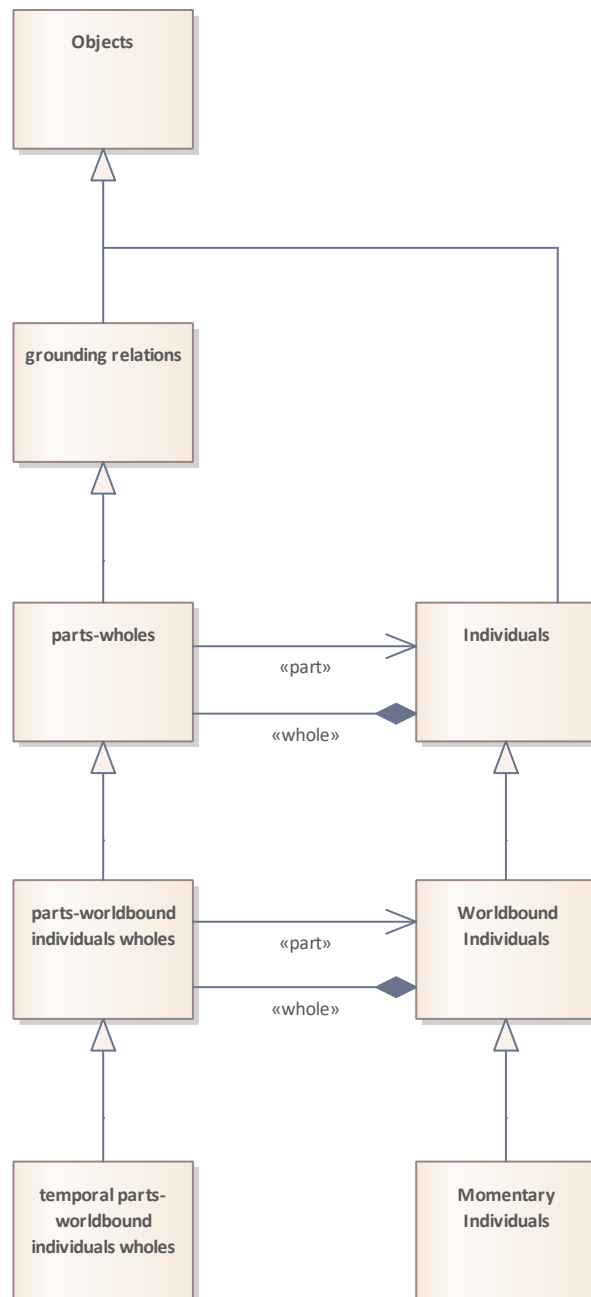
Figure 22: parts-wholes

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

<div align="right">

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

temporal parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

<div align="right">

temporal parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 26/03/2024. Last modified 22/05/2025
Extends parts-worldbound individuals wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

---

ASSOCIATIONS

grounding relations

Class in package 'stage 6 - top level model integration'

grounding relations
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from tuple places to grounding relations

[Direction is 'Source -> Destination'.]

➡ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⇒ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Momentary Individuals

Class in package 'stage 6 - top level model integration'

Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

Objects

Class in package 'stage 6 - top level model integration'

Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

⇒ Generalization from Tuple Placeable Objects to Objects

[Direction is 'Source -> Destination'.]

⇒ Generalization from tuples to Objects

[Direction is 'Source -> Destination'.]

⇒ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

⇒ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «element»

Source: Public (Class) elements-sets   Target: Public (Class) Objects

parts-wholes

Class in package 'stage 6 - top level model integration'

parts-wholes
Version Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⇐ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⇐ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

   ✏ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

---

sub-super-sets diagram

Class diagram in package 'Top Level Model'

sub-super-sets
Version 1.0
mitchella created on 22/05/2025. Last modified 22/05/2025
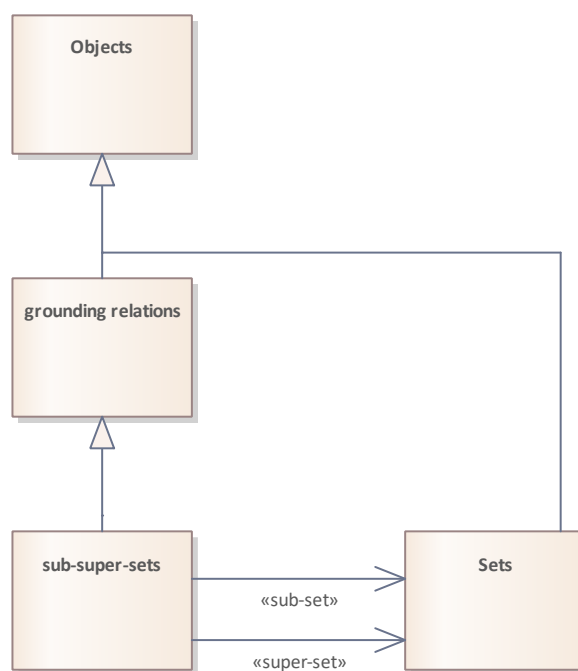
Figure 23: sub-super-sets

grounding relations

Class in package 'stage 6 - top level model integration'

grounding relations
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

   ⬅ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

                     [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from tuple places to grounding relations

[Direction is 'Source -> Destination'.]

➡ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

Objects

Class in package 'stage 6 - top level model integration'

Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from Tuple Placeable Objects to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from tuples to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «element»

ASSOCIATIONS

Source: Public (Class) elements-sets	Target: Public (Class) Objects

Sets

Class in package 'stage 6 - top level model integration'

<div align="right">

Sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

<div align="right">[Direction is 'Source -> Destination'.]</div>

← Generalization from Sets to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "Plurality Of Sets")

<div align="right">[Direction is 'Source -> Destination'.]</div>

ASSOCIATIONS

Association (direction: Source -> Destination) «set»

Source: Public (Class) elements-sets	Target: Public (Class) Sets

Association (direction: Source -> Destination) «sub-set»

Source: Public (Class) sub-super-sets	Target: Public (Class) Sets

Association (direction: Source -> Destination) «super-set»

Source: Public (Class) sub-super-sets	Target: Public (Class) Sets

sub-super-sets

Class in package 'stage 6 - top level model integration'

<div align="right">

sub-super-sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «sub-set»

Source: Public (Class) sub-super-sets   Target: Public (Class) Sets

✏ Association (direction: Source -> Destination) «super-set»

Source: Public (Class) sub-super-sets   Target: Public (Class) Sets

tuple places diagram

Class diagram in package 'Top Level Model'

tuple places
Version 1.0
mitchella created on 22/05/2025. Last modified 22/05/2025
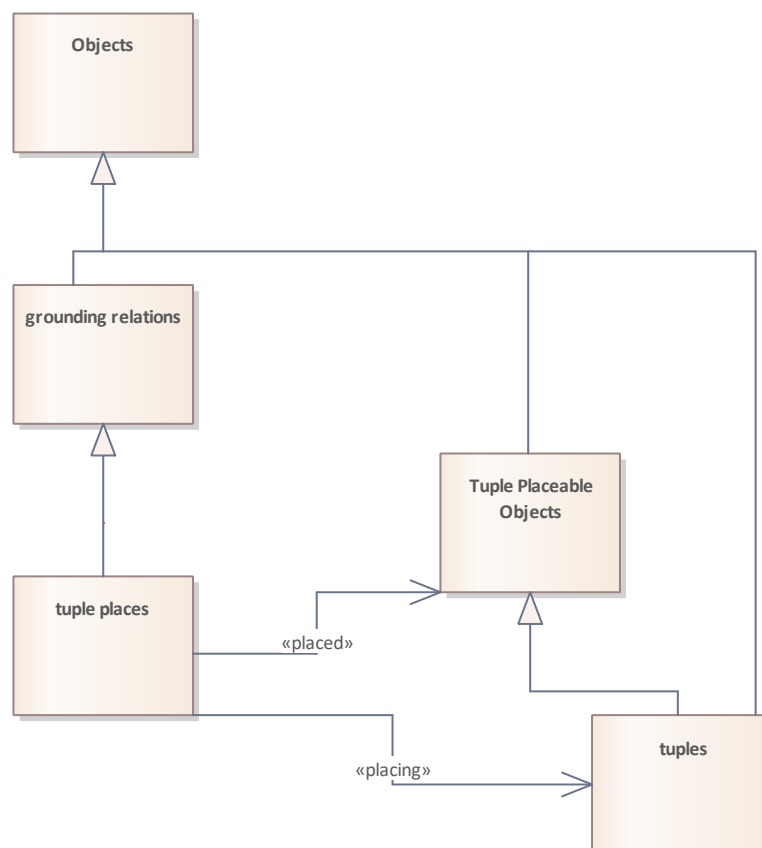
Figure 24: tuple places

grounding relations

Class in package 'stage 6 - top level model integration'

grounding relations
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from tuple places to grounding relations

[Direction is 'Source -> Destination'.]

➡ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

Objects

Class in package 'stage 6 - top level model integration'

Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from Tuple Placeable Objects to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from tuples to Objects

➡ Generalization from Individuals to Objects

➡ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «element»

Source: Public (Class) elements-sets   Target: Public (Class) Objects

---

Tuple Placeable Objects

Class in package 'stage 6 - top level model integration'

Tuple Placeable Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Tuple Placeable Objects to Objects

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Sets to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "Plurality Of Sets")

➡ Generalization from Individuals to Tuple Placeable Objects

➡ Generalization from tuples to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "plurality of tuples")

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «placed»

ASSOCIATIONS	
Source: Public (Class) tuple places	Target: Public (Class) Tuple Placeable Objects

tuple places

Class in package 'stage 6 - top level model integration'

tuple places
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from tuple places to grounding relations
[Direction is 'Source -> Destination'.]

ASSOCIATIONS	
✏ Association (direction: Source -> Destination) «placing»	
Source: Public (Class) tuple places	Target: Public (Class) tuples
✏ Association (direction: Source -> Destination) «placed»	
Source: Public (Class) tuple places	Target: Public (Class) Tuple Placeable Objects

tuples

Class in package 'stage 6 - top level model integration'

tuples
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from tuples to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "plurality of tuples")
[Direction is 'Source -> Destination'.]
⬅ Generalization from tuples to Objects
[Direction is 'Source -> Destination'.]

ASSOCIATIONS
✏ Association (direction: Source -> Destination) «placing»

ASSOCIATIONS

Source: Public (Class) tuple places   Target: Public (Class) tuples

ASSOCIATIONS

Source: Public (Class) tuple places   Target: Public (Class) tuples

full

Package in package 'Diagrams'

full
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 22/05/2025

Aesthetically Valuable Statues diagram

Class diagram in package 'full'

Aesthetically Valuable Statues
Version 1.0
mitchella created on 21/05/2025. Last modified 22/05/2025
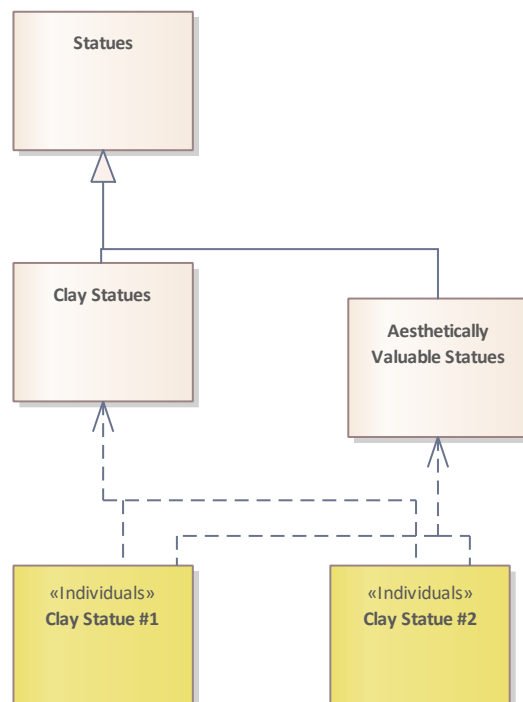
Figure 25: Aesthetically Valuable Statues

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1 [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Aesthetically Valuable Statues

Class in package 'stage 3 - simle order types'

Aesthetically Valuable Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 21/05/2025. Last modified 21/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

🡕 **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

🡕 **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Clay Statues

Class in package 'stage 3 - simle order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

🡕 **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

---

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

➡ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

---

is made froms diagram

Class diagram in package 'full'

is made froms
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025

Figure 26: is made froms

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

⇒ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

CONNECTORS

   ↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Lump of Clay #1

Class «Individuals» in package 'stage 1 - load'

Lump of Clay #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

   ⇒ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

   ⇒ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

CONNECTORS

   ↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

   ↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Aggregation in package ''

Version   Phase
created on . Last modified

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

Clay Statues

Class in package 'stage 3 - simle order types'

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

is made froms

Class «placeable sets» in package 'stage 3 - simle order types'

is made froms
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Lumps of Clay

Class in package 'stage 3 - simle order types'

Lumps of Clay
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⮕ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination

From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

<div align="right">

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

← Generalization from parts-worldbound individuals wholes to parts-wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

→ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

→ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

ASSOCIATIONS

⚙ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.

They will be in a parts-world wholes relationship with a World

<div align="right">

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

🖊 Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Individuals

Class in package 'stage 6 - top level model integration'

<div align="right">

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

parts-wholes

Class in package 'stage 6 - top level model integration'

parts-wholes
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

<<part>>

ASSOCIATIONS	
Source: Public (Class) parts-wholes	Target: Public (Class) Individuals

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Statue Temporal Stages to Worldbound Individuals
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Statue Existence Boundaries to Statue Temporal Stages
[Direction is 'Source -> Destination'.]
➡ Generalization from Statues to Statue Temporal Stages
[Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Statues to Statue Temporal Stages
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Clay Statues to Statues
[Direction is 'Source -> Destination'.]
➡ Generalization from Aesthetically Valuable Statues to Statues
[Direction is 'Source -> Destination'.]

occurs at days diagram

Class diagram in package 'full'

occurs at days
Version 1.0
mitchella created on 14/05/2025. Last modified 22/05/2025

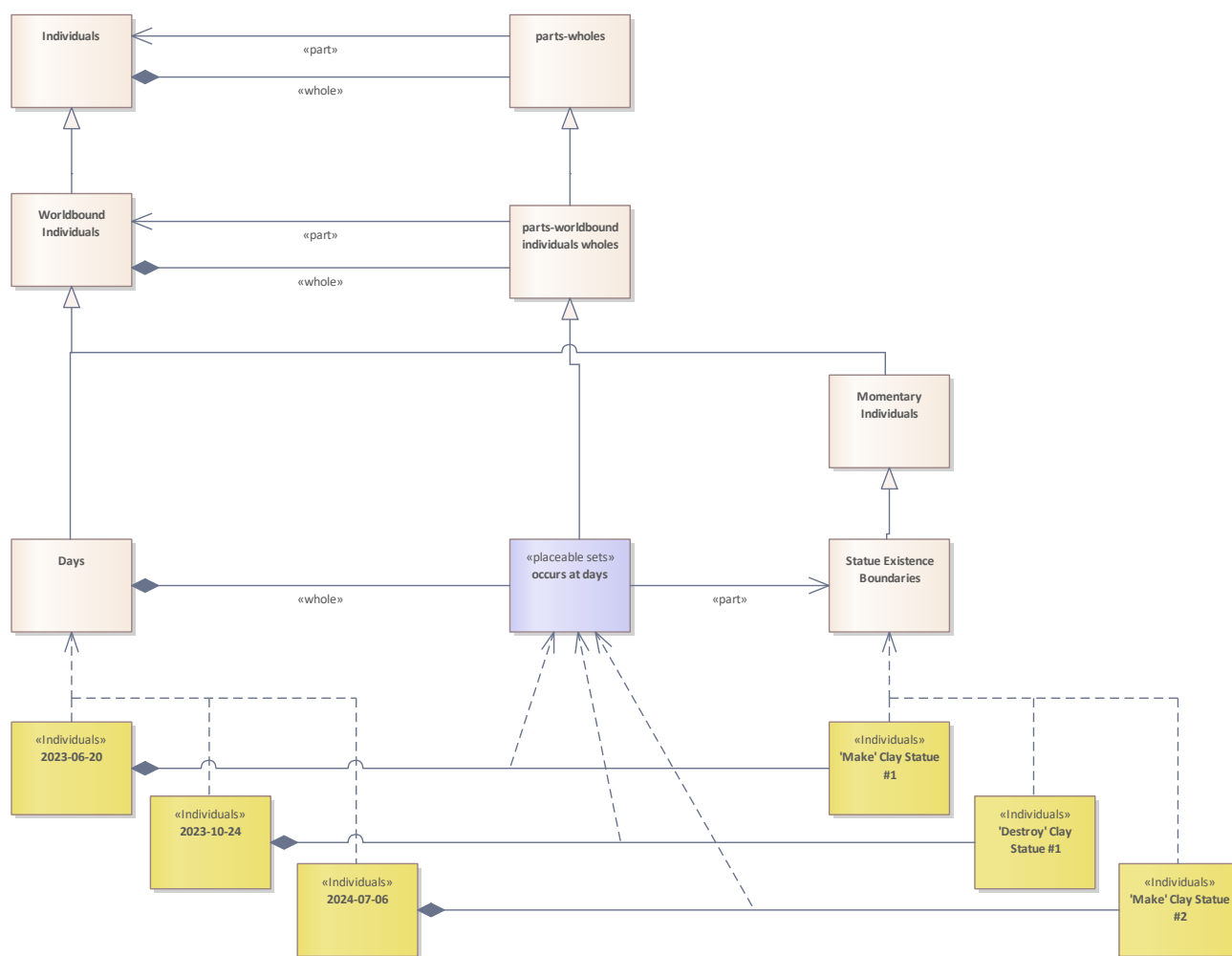Figure 27: occurs at days

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1 [Direction is 'Source -> Destination'.]

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

2023-06-20

Class «Individuals» in package 'stage 1 - load'

2023-06-20
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

2023-10-24

Class «Individuals» in package 'stage 1 - load'

2023-10-24
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

2024-07-06

Class «Individuals» in package 'stage 1 - load'

<div align="right">
2024-07-06

Version 1.0 Phase 1.0 Proposed

mitchella created on 14/05/2025. Last modified 21/05/2025
</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

<div align="right">[Direction is 'Source -> Destination'.]</div>

CONNECTORS

   ↗ **Dependency**   Source -> Destination

From: 2024-07-06 : Class, Public

To: Days : Class, Public

Aggregation in package "

<div align="right">
Version   Phase

created on . Last modified
</div>

CONNECTORS

   ↗ **Dependency**   Source -> Destination

From: : Aggregation, Public

To: occurs at days : Class, Public

Aggregation in package "

<div align="right">
Version   Phase

created on . Last modified
</div>

CONNECTORS

   ↗ **Dependency**   Source -> Destination

From: : Aggregation, Public

To: occurs at days : Class, Public

Aggregation in package "

<div align="right">
Version   Phase

created on . Last modified
</div>

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

Days

Class in package 'stage 3 - simle order types'

Days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

occurs at days

Class «placeable sets» in package 'stage 3 - simle order types'

occurs at days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

← Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

Statue Existence Boundaries

Class in package 'stage 3 - simile order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

← Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

⬅ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Momentary Individuals

Class in package 'stage 6 - top level model integration'

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Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

parts-wholes

Class in package 'stage 6 - top level model integration'

<div align="right">

parts-wholes
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

🖊 Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

statue existence events diagram

Class diagram in package 'full'

statue existence events

Version 1.0

mitchella created on 14/05/2025. Last modified 22/05/2025

statue existence events diagram

Class diagram in package 'full'
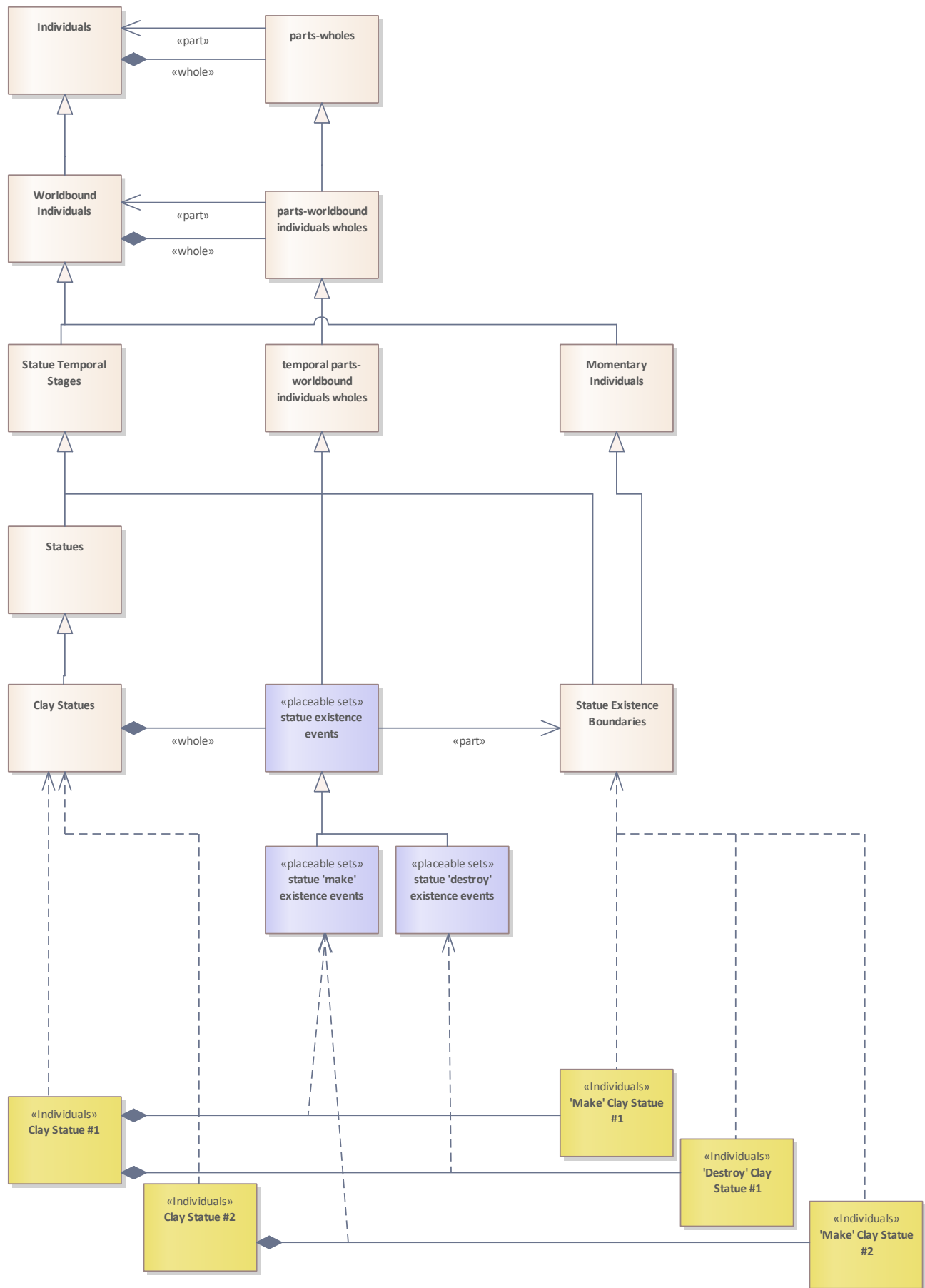
Figure 28: statue existence events

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1
[Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24
[Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20
[Direction is 'Source -> Destination'.]
← Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1
[Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

← Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

⇒ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

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Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Clay Statues

Class in package 'stage 3 - simle order types'

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Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events
[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue 'make' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

CONNECTORS

Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

Dependency   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

Dependency   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Dependency   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

← Aggregation «whole» from «placeable sets» statue existence events to Clay Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

ASSOCIATIONS	
Source: Public (Class) parts-worldbound individuals wholes	Target: Public (Class) Worldbound Individuals

temporal parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

temporal parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 26/03/2024. Last modified 22/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

⬅ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Momentary Individuals

Class in package 'stage 6 - top level model integration'

Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

parts-wholes

Class in package 'stage 6 - top level model integration'

parts-wholes
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⬅ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

➡ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statues to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Clay Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

Aggregation in package "

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Aggregation in package "

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Aggregation in package "

Version   Phase
created on . Last modified

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

Model

Package in package 'lump of clay'

Model
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

stage 1 - load

Package in package 'Model'

stage 1 - load
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

'Destroy' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Destroy' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1
[Direction is 'Source -> Destination'.]
⬅ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24
[Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20
[Direction is 'Source -> Destination'.]

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

'Make' Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

'Make' Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

⬅ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

2023-06-20

Class «Individuals» in package 'stage 1 - load'

2023-06-20
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» 2023-06-20

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

    ↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

2023-10-24

Class «Individuals» in package 'stage 1 - load'

2023-10-24
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

    ⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» 2023-10-24

[Direction is 'Source -> Destination'.]

CONNECTORS

    ↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

2024-07-06

Class «Individuals» in package 'stage 1 - load'

2024-07-06
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

    ⇒ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» 2024-07-06

[Direction is 'Source -> Destination'.]

CONNECTORS

    ↗ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

Clay Statue #1

Class «Individuals» in package 'stage 1 - load'

Clay Statue #1

Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Destroy' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

⇒ Aggregation from «Individuals» 'Make' Clay Statue #1 to «Individuals» Clay Statue #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

Clay Statue #2

Class «Individuals» in package 'stage 1 - load'

Clay Statue #2
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation from «Individuals» 'Make' Clay Statue #2 to «Individuals» Clay Statue #2

[Direction is 'Source -> Destination'.]

CONNECTORS

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Lump of Clay #1

Class «Individuals» in package 'stage 1 - load'

Lump of Clay #1
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation from «Individuals» Clay Statue #2 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

➡ Aggregation from «Individuals» Clay Statue #1 to «Individuals» Lump of Clay #1

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

stage 2 - mereology (STM)

Package in package 'Model'

<div align="right">

stage 2 - mereology (STM)
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

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stage 3 - simle order types

Package in package 'Model'

<div align="right">

stage 3 - simle order types
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025

</div>

Aesthetically Valuable Statues

Class in package 'stage 3 - simle order types'

<div align="right">

Aesthetically Valuable Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 21/05/2025. Last modified 21/05/2025
Extends Statues

</div>

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Aesthetically Valuable Statues to Statues
[Direction is 'Source -> Destination'.]

CONNECTORS
↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Aesthetically Valuable Statues : Class, Public
↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Aesthetically Valuable Statues : Class, Public

Clay Statues

Class in package 'stage 3 - simle order types'

<div align="right">

Clay Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Statues

</div>

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Clay Statues to Statues
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues
[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Clay Statue #1 : Class, Public
To: Clay Statues : Class, Public

↗ **Dependency**   Source -> Destination
From: Clay Statue #2 : Class, Public
To: Clay Statues : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Days

Class in package 'stage 3 - simle order types'

Days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 16/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: 2023-10-24 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2024-07-06 : Class, Public
To: Days : Class, Public

↗ **Dependency**   Source -> Destination
From: 2023-06-20 : Class, Public
To: Days : Class, Public

is made froms

Class «placeable sets» in package 'stage 3 - simle order types'

is made froms
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

  ⬅ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

  ⬅ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

<div align="right">[Direction is 'Source -> Destination'.]</div>

CONNECTORS

  ↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

  ↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: is made froms : Class, Public

ASSOCIATIONS

  ✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) is made froms «placeable sets»   Target: Public (Class) Clay Statues

Lumps of Clay

Class in package 'stage 3 - simle order types'

Lumps of Clay
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 14/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS

  ⬅ Generalization from Lumps of Clay to Worldbound Individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

➡ Aggregation «whole» from «placeable sets» is made froms to Lumps of Clay

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: Lump of Clay #1 : Class, Public
To: Lumps of Clay : Class, Public

occurs at days

Class «placeable sets» in package 'stage 3 - simle order types'

occurs at days
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» occurs at days to Days

[Direction is 'Source -> Destination'.]

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: occurs at days : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

statue 'destroy' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue 'destroy' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

CONNECTORS

↗ **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'destroy' existence events : Class, Public

---

statue 'make' existence events

Class «placeable sets» in package 'stage 3 - simle order types'

<div align="right">

statue 'make' existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends statue existence events

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events

<div align="right">[Direction is 'Source -> Destination'.]</div>

CONNECTORS

↗ **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

CONNECTORS

📈 **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

📈 **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

📈 **Dependency**   Source -> Destination
From: , Public
To: statue 'make' existence events : Class, Public

📈 **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

📈 **Dependency**   Source -> Destination
From: : Aggregation, Public
To: statue 'make' existence events : Class, Public

Statue Existence Boundaries

Class in package 'stage 3 - simle order types'

Statue Existence Boundaries
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends Momentary Individuals, Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Statue Existence Boundaries to Statue Temporal Stages

[Direction is 'Source -> Destination'.]

⬅ Generalization from Statue Existence Boundaries to Momentary Individuals

[Direction is 'Source -> Destination'.]

CONNECTORS

📈 **Dependency**   Source -> Destination
From: 'Make' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

CONNECTORS

➚ **Dependency**   Source -> Destination
From: 'Destroy' Clay Statue #1 : Class, Public
To: Statue Existence Boundaries : Class, Public

➚ **Dependency**   Source -> Destination
From: 'Make' Clay Statue #2 : Class, Public
To: Statue Existence Boundaries : Class, Public

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) occurs at days «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

---

statue existence events

Class «placeable sets» in package 'stage 3 - simle order types'

statue existence events
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 15/05/2025
Extends temporal parts-worldbound individuals wholes

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes
[Direction is 'Source -> Destination'.]

⬅ Aggregation «whole» from «placeable sets» statue existence events to Clay Statues
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue 'destroy' existence events to «placeable sets» statue existence events
[Direction is 'Source -> Destination'.]

➡ Generalization from «placeable sets» statue 'make' existence events to «placeable sets» statue existence events
[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

ASSOCIATIONS

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

ASSOCIATIONS

Source: Public (Class) statue existence events «placeable sets»   Target: Public (Class) Statue Existence Boundaries

stage 4 - placeable sets

Package in package 'Model'

<div align="right">

stage 4 - placeable sets
Version 1.0 Phase 1.0 Proposed
mitchella created on 14/05/2025. Last modified 21/05/2025

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stage 4 - placeable sets

Package in package 'Model'

stage 5 - sub-super-set hierarchies

Package in package 'Model'

stage 5 - sub-super-set hierarchies
Version 1.0 Phase 1.0 Proposed
mitchella created on 21/05/2025. Last modified 21/05/2025

Statue Temporal Stages

Class in package 'stage 5 - sub-super-set hierarchies'

Statue Temporal Stages
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Statue Temporal Stages to Worldbound Individuals
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Statue Existence Boundaries to Statue Temporal Stages
[Direction is 'Source -> Destination'.]
➡ Generalization from Statues to Statue Temporal Stages
[Direction is 'Source -> Destination'.]

Statues

Class in package 'stage 5 - sub-super-set hierarchies'

Statues
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 21/05/2025
Extends Statue Temporal Stages

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Statues to Statue Temporal Stages
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Clay Statues to Statues
[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from Aesthetically Valuable Statues to Statues

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from Aesthetically Valuable Statues to Statues

stage 6 - top level model integration

Package in package 'Model'

stage 6 - top level model integration
Version 1.0 Phase 1.0 Proposed
mitchella created on 15/05/2025. Last modified 22/05/2025

alternative option

Package in package 'stage 6 - top level model integration'

alternative option
Version 1.0 Phase 1.0 Proposed
mitchella created on 22/05/2025. Last modified 22/05/2025

end boundaries of worldbound individuals

Class in package 'alternative option'

end boundaries of worldbound individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends end boundings of worldbound individuals

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from end boundaries of worldbound individuals to end boundings of worldbound individuals [Direction is 'Source -> Destination'.]

end boundings of worldbound individuals

Class in package 'alternative option'

end boundings of worldbound individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 24/05/2024. Last modified 22/05/2025
Extends temporal boundings of worldbound individuals

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from end boundings of worldbound individuals to temporal boundings of worldbound individuals [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from end boundaries of worldbound individuals to end boundings of worldbound individuals [Direction is 'Source -> Destination'.]

start boundaries of worldbound individuals

Class in package 'alternative option'

<div align="right">

start boundaries of worldbound individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends start boundings of worldbound individuals
</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from start boundaries of worldbound individuals to start boundings of worldbound individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

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start boundings of worldbound individuals

Class in package 'alternative option'

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start boundings of worldbound individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 24/05/2024. Last modified 22/05/2025
Extends temporal boundings of worldbound individuals
</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from start boundings of worldbound individuals to temporal boundings of worldbound individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from start boundaries of worldbound individuals to start boundings of worldbound individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

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temporal boundings of worldbound individuals

Class in package 'alternative option'

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temporal boundings of worldbound individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 24/05/2024. Last modified 22/05/2025
Extends temporal parts-worldbound individuals wholes
</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from start boundings of worldbound individuals to temporal boundings of worldbound individuals

<div align="right">[Direction is 'Source -> Destination'.]</div>

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from end boundings of worldbound individuals to temporal boundings of worldbound individuals

elements-sets

Class in package 'stage 6 - top level model integration'

elements-sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «set»

Source: Public (Class) elements-sets   Target: Public (Class) Sets

✎ Association (direction: Source -> Destination) «element»

Source: Public (Class) elements-sets   Target: Public (Class) Objects

grounding relations

Class in package 'stage 6 - top level model integration'

grounding relations
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from grounding relations to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations")

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

INCOMING STRUCTURAL RELATIONSHIPS

⇨ Generalization from elements-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of elements-sets")

[Direction is 'Source -> Destination'.]

⇨ Generalization from tuple places to grounding relations

[Direction is 'Source -> Destination'.]

⇨ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

[Direction is 'Source -> Destination'.]

⇨ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

Individuals

Class in package 'stage 6 - top level model integration'

Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⇦ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

⇦ Generalization from Individuals to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇨ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⇨ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

ASSOCIATIONS

Momentary Individuals

Class in package 'stage 6 - top level model integration'

Momentary Individuals
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Worldbound Individuals

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Momentary Individuals to Worldbound Individuals [Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Statue Existence Boundaries to Momentary Individuals [Direction is 'Source -> Destination'.]

Objects

Class in package 'stage 6 - top level model integration'

Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025

INCOMING STRUCTURAL RELATIONSHIPS
➡ Generalization from Sets to Objects (pluralityHasSubPlurality "Objects" "Plurality Of Sets") [Direction is 'Source -> Destination'.]
➡ Generalization from Tuple Placeable Objects to Objects [Direction is 'Source -> Destination'.]
➡ Generalization from tuples to Objects [Direction is 'Source -> Destination'.]
➡ Generalization from Individuals to Objects [Direction is 'Source -> Destination'.]
➡ Generalization from grounding relations to Objects (pluralityHasSubPlurality "Objects" "Plurality Of Grounding Relations") [Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏️ Association (direction: Source -> Destination) «element»

Source: Public (Class) elements-sets   Target: Public (Class) Objects

parts-wholes

Class in package 'stage 6 - top level model integration'

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parts-wholes
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅️ Aggregation «whole» from parts-wholes to Individuals

[Direction is 'Source -> Destination'.]

⬅️ Generalization from parts-wholes to grounding relations

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡️ Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏️ Association (direction: Source -> Destination) «part»

<<part>>

Source: Public (Class) parts-wholes   Target: Public (Class) Individuals

parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

Note: a part of a worldbound individual is also, by definition, also worldbound to the same world and so a worldmate.

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parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 18/01/2024. Last modified 22/05/2025
Extends parts-wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

← Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

← Generalization from parts-worldbound individuals wholes to parts-wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

⇒ Generalization from «placeable sets» occurs at days to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⇒ Generalization from «placeable sets» is made froms to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

⇒ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals

Sets

Class in package 'stage 6 - top level model integration'

Sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

← Generalization from Sets to Objects
(pluralityHasSubPlurality "Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

← Generalization from Sets to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination) «set»

ASSOCIATIONS	
Source: Public (Class) elements-sets	Target: Public (Class) Sets

✏ Association (direction: Source -> Destination) «sub-set»

Source: Public (Class) sub-super-sets	Target: Public (Class) Sets

✏ Association (direction: Source -> Destination) «super-set»

Source: Public (Class) sub-super-sets	Target: Public (Class) Sets

sub-super-sets

Class in package 'stage 6 - top level model integration'

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sub-super-sets
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from sub-super-sets to grounding relations
(pluralityHasSubPlurality "Plurality Of Grounding Relations" "plurality of sub-super-sets")

<div align="right">[Direction is 'Source -> Destination'.]</div>

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «sub-set»

Source: Public (Class) sub-super-sets	Target: Public (Class) Sets

✏ Association (direction: Source -> Destination) «super-set»

Source: Public (Class) sub-super-sets	Target: Public (Class) Sets

temporal parts-worldbound individuals wholes

Class in package 'stage 6 - top level model integration'

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temporal parts-worldbound individuals wholes
Version 1.0 Phase 1.0 Proposed
mitchella created on 26/03/2024. Last modified 22/05/2025
Extends parts-worldbound individuals wholes

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from temporal parts-worldbound individuals wholes to parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from «placeable sets» statue existence events to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

➡ Generalization from temporal boundings of worldbound individuals to temporal parts-worldbound individuals wholes

[Direction is 'Source -> Destination'.]

Tuple Placeable Objects

Class in package 'stage 6 - top level model integration'

Tuple Placeable Objects
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Tuple Placeable Objects to Objects

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Sets to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "Plurality Of Sets")

[Direction is 'Source -> Destination'.]

➡ Generalization from Individuals to Tuple Placeable Objects

[Direction is 'Source -> Destination'.]

➡ Generalization from tuples to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "plurality of tuples")

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «placed»

Source: Public (Class) tuple places   Target: Public (Class) Tuple Placeable Objects

tuple places

Class in package 'stage 6 - top level model integration'

tuple places
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends grounding relations

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from tuple places to grounding relations

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «placing»

Source: Public (Class) tuple places   Target: Public (Class) tuples

✏ Association (direction: Source -> Destination) «placed»

Source: Public (Class) tuple places   Target: Public (Class) Tuple Placeable Objects

tuples

Class in package 'stage 6 - top level model integration'

tuples
Version   Phase
created on 05/04/2022. Last modified 22/05/2025
Extends Objects, Tuple Placeable Objects

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from tuples to Tuple Placeable Objects
(pluralityHasSubPlurality "Plurality Of Tuple Placeable Objects" "plurality of tuples")

[Direction is 'Source -> Destination'.]

⬅ Generalization from tuples to Objects

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «placing»

Source: Public (Class) tuple places   Target: Public (Class) tuples

Worldbound Individuals

Class in package 'stage 6 - top level model integration'

AKA World Parts
Worldbound Individuals are all the parts of Worlds including the improper parts.
They will be in a parts-world wholes relationship with a World

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Worldbound Individuals
Version 1.0 Phase 1.0 Proposed
mitchella created on 09/01/2024. Last modified 22/05/2025
Extends Individuals

</div>

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Worldbound Individuals to Individuals

[Direction is 'Source -> Destination'.]

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from Statue Temporal Stages to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Aggregation «whole» from parts-worldbound individuals wholes to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Momentary Individuals to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Lumps of Clay to Worldbound Individuals

[Direction is 'Source -> Destination'.]

➡ Generalization from Days to Worldbound Individuals

[Direction is 'Source -> Destination'.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination) «part»

Source: Public (Class) parts-worldbound individuals wholes   Target: Public (Class) Worldbound Individuals