GLIF
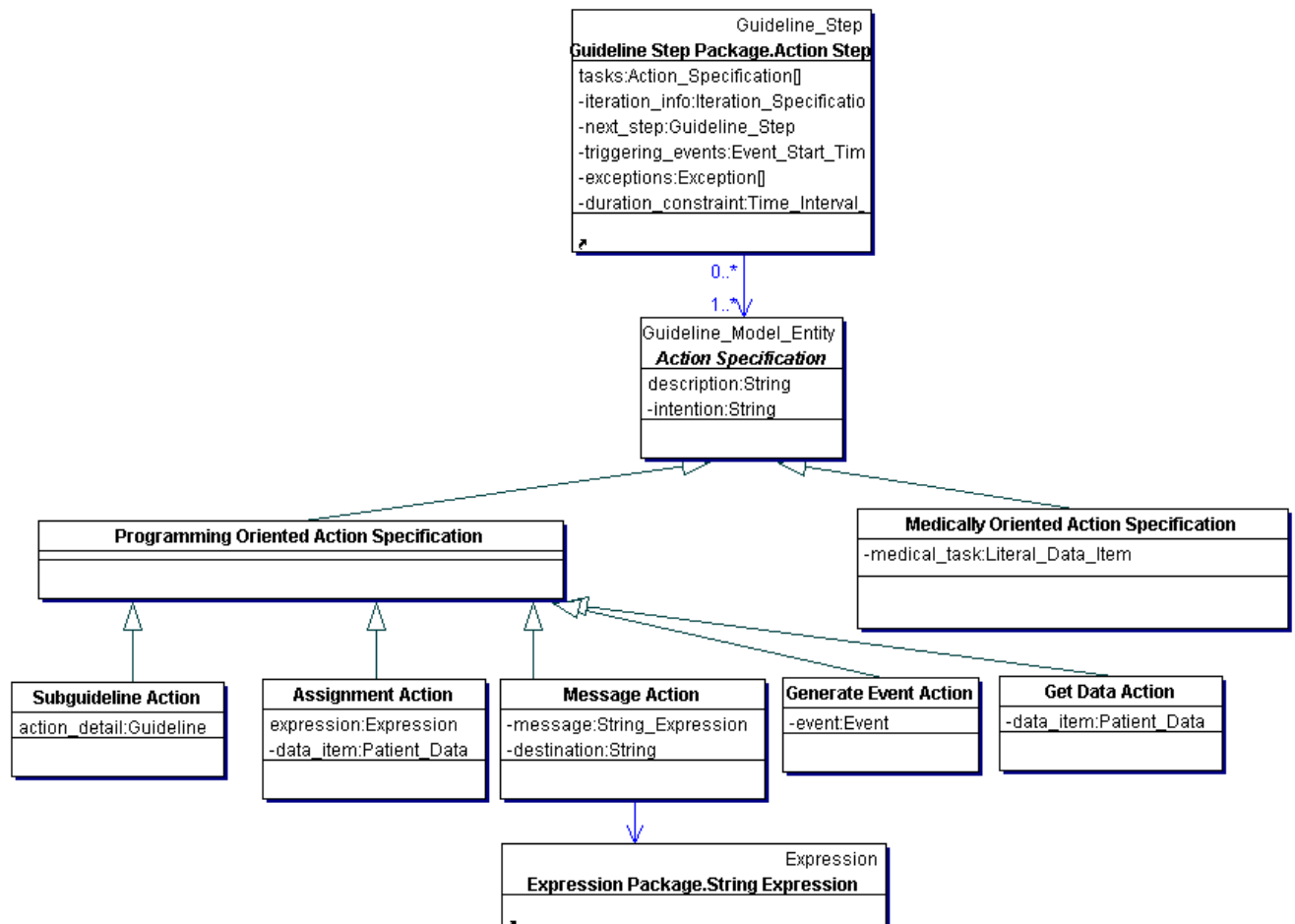
Package *Action_Specification_Package*

🗎 *Classes*

class Action_Specification_Package.Action_Specification

class Action_Specification_Package.Assignment_Action

class Action_Specification_Package.Generate_Event_Action

class Action_Specification_Package.Get_Data_Action

class Action_Specification_Package.Medically_Oriented_Action_Specification

class Action_Specification_Package.Message_Action

class Action_Specification_Package.Programming_Oriented_Action_Specification

class Action_Specification_Package.Subguideline_Action

Class Diagram

Class Detail

▤ **Class** *Action_Specification_Package.Action_Specification*

Inherits from:

Guideline_Model_Entity

Description:

The *Action_Specification* class is used to describe a clinical action in detail. This is an abstract base class. We expect that there will be a hierarchy of subclasses that describe different types of actions in a structured manner.

Purpose:

To specify details of an action.

Considerations:

This class was derived from the GLIF-2 Action_Spec class. The name was changed for consistency.

Attributes

description
intention

Attribute Detail

● **description**

Data type: String
Multiplicity: 0:1
Description: A brief human-readable description of the action to be performed.
Level: A

● **intention**

▤ **Class** *Action_Specification_Package.Assignment_Action*

Inherits from:

Action_Specification_Package.Programming_Oriented_Action_Specification

Description:

The *Assignment_Action* class is used to create/instantiate a new data item. This data item is assigned the value resulting from the evaluation of the expression.

Purpose:

To instantiate a new data item that is assigned the result from the expression evaluation.

Considerations:

- This class may need some modifications once the patient data items are better defined. The new data item that is created may need more definition in terms of its datatype or relationships with other data items.

- The datatype of data_item_name needs to be restricted to a type that allows only names which are legal (starts with letter, no +,-, etc.)

Attributes

data_item
expression

Attribute Detail

● **data_item**

Data type: Patient_Data
Multiplicity: 0:1
Description: The definition of the data that is output by this action.
Level: A

● **expression**

Data type: Expression
Multiplicity: 0:1
Description: The expression to be evaluated. If expression is null, a new data item with null value is created
Level: B

Class *Action_Specification_Package.Generate_Event_Action*

Inherits from:

Action_Specification_Package.Programming_Oriented_Action_Specification

Attributes

event

Attribute Detail

event

Class *Action_Specification_Package.Get_Data_Action*

Inherits from:

Action_Specification_Package.Programming_Oriented_Action_Specification

Attributes

data_item

Attribute Detail

data_item

Data type: Variable_Data_Item
Multiplicity: 0:1
Description: The data that is obtained by this action.
Level: A

Class *Action_Specification_Package.Medically_Oriented_Action_Specification*

Inherits from:

Action_Specification_Package.Action_Specification

MedicallyOrientedActionSpecification defines a medical_task, which is a concept defined in the RIM layer of GLIF's data model/ontology. Examples of MedicallyOrientedActionSpecification include Diagnostic_Test_Order, Drug_Prescription_Action, Refferal, and Scheduling.

Attributes

medical_task

Attribute Detail

medical_task

Class *Action_Specification_Package.Message_Action*

Inherits from:

Action_Specification_Package.Programming_Oriented_Action_Specification

Description:
The *Message_Action* class is used to send a message to a destination

Purpose:
similar to the "write" statement of Arden Syntax.
Considerations:

Attributes

destination
message

Attribute Detail

destination

Data type: String
Multiplicity: 0:1
Description: The message' destination
Level: C

🟣 message

Data type: String
Multiplicity: 1:1
Description: The message to be sent. the string can include text and variables (e.g., "patient age is: " || age || "\n"
Currently, the specification does not provide any formatting commands.
Level: C

📄 Class *Action_Specification_Package.Programming_Oriented_Action_Specification*

Inherits from:

Action_Specification_Package.Action_Specification

📄 Class *Action_Specification_Package.Subguideline_Action*

Inherits from:

Action_Specification_Package.Programming_Oriented_Action_Specification

Description:

The *Subguideline_Action* class is a specialization of the *Action_Specification* class. An object of this class when contained inside an action_step creates a nested action step.

Purpose:

The Subguideline_Action is used to describe nested actions.

Considerations:

A design consideration was to include a subguideline attribute in the Action_Step class rather than in an Action_Specification (as in GLIF-2). However, that option was not semantically clear in terms of the relationships amongst the subguideline and the other actions that are included in the Action_Step. the other actions that get inc

Attributes

action_detail

Attribute Detail

🟣 action_detail

Data type: Subguideline
Multiplicity: 0:1
Description: The nested subguideline that is called by the action specification.
Level: B