Document

Project: POJO HTTP Data
Title: Class Diagram
Doc version: 0.2(Jun 5, 2020)
(Please refer to class_diagram_release_note.md file for version history)
Repo: https://github.com/911992/WAsys_pojo_http_data
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Meta Legends

X On-page reference

Note.. Note

Authors

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wasys::lib::pojo_http_data

exception

H

Bad_Type_Cache_Object_Ex

K

Unfillable_Object_Ex

api_ex

«interface»
Fillable_Object_Parse_Cache_Accelerator

+_api_ex_set_type_parse_result(:Object):void
+_api_ex_get_type_parse_result(void):Object

G

api_wrapper

A: Object

«abstract»
Request_Data_Handler_Adapter

+DEFAULT_BUFFER_SIZE:int:=1024{final}

+get_param(:String):String
+get_part_filename(:String):String
+get_part_mime_type(:String):String
+get_part_size(:String):long
+stream_part(:String,:OutputStream):long
+stream_part_at(:String,:int,:OutputStream):long
+get_part_stream(:String):InputStream
+fill_object(:Fillable_Object):void
#copy_stream(:InputStream,:OutputStream):long

A: Object

«abstract»
Poolable_Request_Data_Handler_Adapter

-pool:Object_Pool

+post_create(void):void
+pre_destroy(void):void
+set_pool(:Object_Pool):void
+close(void):void

F B

api

container

A: Object

«interface»
Request_Data_Handler

+get_param(:String):String
+get_param_at(:String,:int):String
+get_param_vals(:String):String[]
+param_count(:String):int
+is_multipart_request(void):boolean
+get_part_filename(:String):String
+get_part_filename_at(:String,:int):String
+get_part_mime_type(:String):String
+get_part_mime_type_at(:String,:int):String
+get_part_size(:String):long
+get_part_size_at(:String,:int):long
+stream_part(:String,:OutputStream):long
+stream_part_at(:String,:int,:OutputStream):long
+get_part_stream(:String):InputStream
+get_part_stream_at(:String,:int):InputStream
+fill_object(:Fillable_Object):void
+get_associated_request(void):A

E «throws» K

«interface»
Fillable_Object

+fill_mode(void):Object_Fill_Mode {const}
+part_io_stream_mode(void):Part_Field_Stream_Mode
+generate_result_err_msg(void):bool
+set_object_fill_result(:Object_Fill_Result):void
+set_field_fill_result(:String,:int,:Field_Fill_Result):void
+set_field_fill_result_err_msg(:String,:int,:String[]):void
+get_type_descriptor(void):Fillable_Object_Descriptor
+prepare_for_part(arg_param_name:String,
arg_param_idx:int,
arg_part_filename:String,
arg_part_size:long
arg_part_mime:String):boolean
+part_streaming_done(:String,:int:bool):void
+part_stream(:String,:int,:InputStream):void

I D

«enum»
Object_Fill_Mode

Reflection_Type_Fields
Type_Manipulator

«enum»
Part_Field_Stream_Mode

Stream_To_Field
Pass_Stream

M

«enum»
Object_Fill_Result

Ok
Ok_Missed_Values
Ignorred_Duplicated_Type
Failed

+set_if_overridable(:Object_Fill_Result):Object_Fill_Result

L

«interface»
_Err_Message_Setter
{private} {static}

~add_err_message(:Fillable_Object_Adapter,
:String):void

«abstract»
Fillable_Object_Adapter

_-DEFAULT_MSG_SETTER:_Err_Message_Setter_ {@No_Param}
_-SETTER_MSG_SETTER:_Err_Message_Setter_ {@No_Param}
-err_msg_need_nl:bool := false {@No_Param}
-err_msg:StringBuilder := null {@No_Param}
-msg_setter:_Err_Message_Setter := SETTER_MSG_SETTER {@No_Param}
+object_field_result:Object_Fill_Result := null {@No_Param}
-last_known_priority_fields_fill:Field_Fill_Result := null {@No_Param}

-set_msg_setter(:_Err_Message_Setter):void
+get_fields_fill_msg(void):StringBuilder
#err_msg_new_line(void):String
+was_object_filling_success(void):bool
+has_failed_field_happened(void):bool
+get_object_field_result(void):Object_Fill_Result
+set_object_fill_result(:Object_Fill_Result):void
#set_field_fill_result_child(:String,:int,:Field_Fill_Result):void
+set_field_fill_result(:String,:int,:Field_Fill_Result):void {final}
+set_field_fill_result_err_msg(:String,:int,:String[]):void
+get_type_descriptor(void):Fillable_Object_Descriptor
+get_field_signatures(void):Fillable_Object_Field_Signature[]
#child_reset_state(void):void
+reset_fill_state(void):void {final}
+close(void):void

Q J R

«interface»
Fillable_Object_Manipulator

+get_field_signatures(void):Fillable_Object_Field_Signature[] {const}
+field_set_mode():Object_Fill_Mode
+set_field_value(:String,:int,:Object):void

annotations

«annotation»
Field_Definition

+param_name:String := ""
+param_idx:int := 0
+nullable:bool := false
+min_len_val:double := Double.NEGATIVE_INFINITY
+max_len_val:double := Double.POSITIVE_INFINITY
+setter_method_name
:String := null

N S

«annotation»
No_Type_Cache

«annotation»
No_Param

J

«annotation»
Field_Setter_Method

+name:String

C

Generic_Object_Filler

-FIELD_SET_IGNORED_FILLABLE_TYPE:int=0 {final}
-FIELD_SET_SUCCESS_WITH_DATA:int=1 {final}
-FIELD_SET_SUCCESS_NO_DATA:int=2 {final}
-FIELD_SET_FAILED:int=3 {final}
+ARRAYLIST_POOL_MAX_VAL_LOOKUP_KEY:String:="WAsys_Generic_Object_Filler_ARRAYLIST_POOL_MAX"{final}
-ARRAYLIST_DEFAULT_POOL_MAX_VAL:int:=8
-ARRAYLIST_POOL:Object_Pool{final}
<ARRAYLIST_POOL_init>:static{}

-Generic_Object_Filler(void):Generic_Object_Filler
-init_arraylist_pool(void):void
+process_request(:Request_Data_Handler,:Fillable_Object):void
-process_request_internal(:Request_Data_Handler,:Fillable_Object,:ArrayList<Class>):void
-read_and_set_param(:Request_Data_Handler,:Fillable_Object,:Fillable_Object_Field_Signature_Cache,:bool):int
-set_field_data(:Fillable_Object,:Fillable_Object_Field_Signature_Cache,:Object,:Object_Fill_Mode):bool
-result_event(:Fillable_Object,:Fillable_Object_Field_Signature,:Field_Fill_Result,:bool):void

M E I

A L P X Y Q D «throws» K

Poolable_ArrayList

B W

«creates»

«static»
Factory

T

api

«enum»
Field_Fill_Result

Ok
Ok_Missed_Data
Failed_IO_Error
Failed_Parse_Error
Failed_Outof_Range
Failed_Missed_Data

+set_if_overridable(:Field_Fill_Result):Field_Fill_Result

«entity»
Fillable_Object_Field_Signature
{immutable}

+param_name:String
+param_idx:int := 0
+entity_field_name:String
+type:Class
+nullable:boolean := false
+min_len_val:double := Double.NEGATIVE_INFINITY
+max_len_val:double := Double.POSITIVE_INFINITY

P

«abstract»
Poolable_Fillable_Object_Adapter

-pool:Object_Pool {@No_Param}

+back_to_pool(void):void
+post_create(void):void
+pre_destroy(void):void
+set_pool(:Object_Pool):void
+reset_state(void):void {final}
+close(void):void

B F R

«entity»
Fillable_Object_Parse_Result
{immutable}

~obj_type:Class
~fields:ArrayList<Fillable_Object_Field_Signature_Cache>

«entity»
Fillable_Object_Field_Signature_Cache
{immutable}

~field_signature:Fillable_Object_Field_Signature
~type_field:Field
~setter_method:Method

Field and Method points out to type-description level data. e.g. types are from "java::lang::reflection" package

«creates» «creates»

Fillable_Object_Parser

-FILLABLE_TYPES:Class[] {final}
-INHERITABLE_FILLABLE_TYPES:Class[] {final}
-ctx:Fillable_Object_Signature_Context:=Fillable_Object_Signature_Context::get_instance()

-Fillable_Object_Parser(void):Fillable_Object_Parser
~find_or_parse_object(:Fillable_Object):Fillable_Object_Parse_Result
-parse_object(:Fillable_Object):Fillable_Object_Parse_Result
-field_should_be_ignorred(:Field):bool
-is_field_fillable(:Field):bool
-parse_field(Field):Fillable_Object_Field_Signature
-setter_method_from_field(:Field,:Class):Method
-find_method(arg_type:Class,arg_method_name:String,arg_input_type:Class):Method
-find_marked_setter_method(arg_type:Class,arg_field:Field):Method
-find_field(arg_type:Class,arg_field_name:String):Field
-get_all_fields(:Class,arg_to_ctx:ArrayList<Field>):int

S G

«creates» A

I C J N

«holds»

«singleton» Fillable_Object_Signature_Context {immutable}

-INSTANCE:Fillable_Object_Signature_Context := new Fillable_Object_Signature_Context() {final}
-ctx:ArrayList<Fillable_Object_Parse_Result> := new ArrayList<Fillable_Object_Parse_Result>() {final}

+get_instance(void):Fillable_Object_Signature_Context
~Fillable_Object_Signature_Context(void):Fillable_Object_Signature_Context
~add_result_to_ctx(:Fillable_Object_Parse_Result):void {synchronized}
~find_result(:Fillable_Object):Fillable_Object_Parse_Result

G H «throws»

wasys::lib::generic_object_pool

WAsys Generic Object Pool

Poolable_Object_Adapter

Pool_Context

Poolable_Object B

X

Object_Factory T

Object_Pool X

W ArrayList<A:Object>

F java::lang AutoClosable

javax.naming

InitialContext

Y

Any :static{} referens to static initialize block in java as static{...}

Artifact repo:
https://github.com/911992/WAsys_simple_generic_object_pool