# EasyBbk Documentation: data\_center API

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### Introduction

This is a documentation auto generated by doxygen V1.8.8 about the package "data\_center" in the software "Easy BBK". The documentation introduces all the source files in the package "data\_center" and extract the annotations in the source code into it, which may provide some help for the usage and further development of "data\_center".

"Easy BBK" is a trial to provide a standardized, visualized and user friendly access to bio-brick system by simplify and interassociate the searching, comparing, designing and uploading of bio-bricks. These four main functions constitute the "Easy BBK" client-side which is realized by pure java and supported by a remote server through the internet.

"data\_center" is the connector between the GUI and the remote server, it connect to the online database and program in server, as well as downloading, storing and providing the data to the GUI part of "Easy BBK". Having access to the source code or .jar file of the "data\_center", one can use most of the main functions of "Easy BBK" about searching, comparing and uploading through the API provided.

# **Table of Contents**

Table of contents

_		

# Namespace Index

P	ac	ka	ge	es

Here are the pack	ages with brief descriptions (if available):
data center	

# **Hierarchical Index**

# **Class Hierarchy**

This inheritance list is sorted roughly, but not completely, alphabe	tically:
data_center.BbkType.Sketch.BackBone	9
data_center.BbkOutline	24
data_center.BbkDetail	17
data_center.BbkProperties	30
data_center.BbkType	31
data_center.BbkUpload	38
data_center.BbkType.Sketch.BioBrick	43
data_center.BbkOutline.Blasting	59
data_center.BlastingSearcher	60
data_center.DBConsts.Header.Category	62
data_center.BbkProperties.Category	63
data_center.BbkDetail.Category	61
data_center.BbkUpload.Category	65
data_center.CompareCenter	67
data_center.SketchComponent.Component	69
data_center.SketchComponent.BackBone	10
data_center.SketchComponent.BioBrick	45
data_center.SketchComponent.BioVector	52
data_center.SketchComponent.Label	100
data_center.SketchComponent.Protein	130
data_center.SketchComponent.Relation	145
data_center.DatabaseConnector	75
data_center.DataCenter	76
data_center.DBConsts	78
data_center.DBConsts.Header.DeepSub	79
data_center.BbkProperties.DeepSubpart	83
data_center.BbkDetail.DeepSubpart	81
data_center.BbkUpload.DeepSubpart	85
data_center.DBConsts.Header.Feature	89
data_center.BbkProperties.Feature	94
data_center.BbkDetail.Feature	
data_center.BbkUpload.Feature	91
data_center.DBConsts.Header	97
data_center.HistoryList< T >	
data, cantar DR Canata Handar Main	107

data_center.SketchProject.Operation	114
data_center.BbkProperties.Parameter	118
data_center.BbkDetail.Parameter	123
data_center.BbkUpload.Parameter	126
data_center.DBConsts.Header.Parameter.	121
data_center.BbkType.Sketch.Protein	129
data_center.BbkOutline.Rating	137
data_center.DBConsts.Rating	141
data_center.BbkType.Sketch.Relation	144
data_center.SearchCenter	152
data_center.BbkType.Sketch	155
data_center.SketchCenter	157
data_center.SketchComponent	160
data_center.SketchProject	161
data_center.BbkProperties.SpecifiedSubpart	166
data_center.BbkDetail.SpecifiedSubpart	168
data_center.BbkUpload.SpecifiedSubpart	170
data_center.BbkProperties.SpecifiedSubscar	
data_center.BbkDetail.SpecifiedSubscar	178
data_center.BbkUpload.SpecifiedSubscar	172
data_center.DBConsts.Header.SpecScar	191
data_center.DBConsts.Header.SpecSub	
data_center.DBConsts.Table	
data_center.TimeTagGenerator	
data_center.BbkProperties.Twin	
data_center.BbkPoperties.Twin	
data_center.BbkUpload.Twin	
uata_center.bokopioau.1 wiii	191
data_center.DBConsts.Header.Twin	196
data_center.UploadCenter	197
data_center.BbkType.Sketch.Vector	199

### Class Index

### Class List

Here are the classes, structs, unions and interfaces with brief descriptions: data center.BbkType.Sketch.BackBone 9 data\_center.BbkDetail data\_center.BbkProperties 30 data\_center.BbkType 31 data center.BbkType.Sketch.BioBrick 43 data\_center.SketchComponent.BioBrick 45 data\_center.SketchComponent.BioVector 52 data\_center.BlastingSearcher \_\_\_\_\_\_\_\_60 data center.BbkDetail.DeepSubpart ......81 data\_center.BbkUpload.DeepSubpart 85 data center.BbkDetail.Feature ......87 data center.DBConsts.Header.Feature 89 data center.BbkUpload.Feature 91 data center.DBConsts.Header.Main 107 data center.SketchProject.Operation 114 data center.BbkDetail.Parameter data\_center.SketchComponent.Protein 130

data_center.BbkOutline.Rating	137
data_center.DBConsts.Rating	141
data_center.BbkType.Sketch.Relation	144
data_center.SketchComponent.Relation	145
data center.SearchCenter	152
data_center.BbkType.Sketch	155
data_center.SketchCenter	157
data_center.SketchComponent	160
data_center.SketchProject	161
data_center.BbkProperties.SpecifiedSubpart	166
data center.BbkDetail.SpecifiedSubpart	168
data center.BbkUpload.SpecifiedSubpart	170
data center.BbkUpload.SpecifiedSubscar	172
data_center.BbkProperties.SpecifiedSubscar	175
data_center.BbkDetail.SpecifiedSubscar	178
data_center.DBConsts.Header.SpecScar	181
data_center.DBConsts.Header.SpecSub	183
data center.DBConsts.Table	185
data_center.TimeTagGenerator	189
data_center.BbkUpload.Twin	191
data_center.BbkProperties.Twin	193
data_center.BbkDetail.Twin	195
data center.DBConsts.Header.Twin	196
data_center.UploadCenter	197
data center.BbkType.Sketch.Vector	199

# **File Index**

### File List

Here is a list of all files with brief descriptions:

BbkDetail.java	201
BbkOutline,java	202
BbkProperties,java	203
BbkType.java	204
BbkUpload.java	205
BlastingSearcher.java	206
CompareCenter.java	207
<u>DatabaseConnector.java</u>	208
<u>DataCenter.java</u>	209
DBConsts.java	210
DBDataFiller.java	211
DetailPageCenter.java	212
HistoryList.java	213
SearchCenter.java	214
SearchResultList.java	215
SketchCenter.java	216
SketchComponent.java	217
SketchProject.java	218
Testing.java	
TimeTagGenerator.java	220
UploadCenter.java	221

## **Namespace Documentation**

### Package data\_center

### **Classes**

class **BbkDetail** 

class **BbkOutline** 

class **BbkProperties** 

class BbkType

class BbkUpload

class BlastingSearcher

class CompareCenter

class <u>DatabaseConnector</u>

class <u>DataCenter</u>

class **DBConsts** 

class DBDataFiller

class DetailPageCenter

class HistoryList< T >

class SearchCenter

class **SketchCenter** 

class SketchComponent

class SketchProject

class <u>TimeTagGenerator</u>

class <u>UploadCenter</u>

### **Class Documentation**

### data\_center.BbkType.Sketch.BackBone Class Reference

Static Public Attributes
static final int <u>LINEAR</u> = 1 static final int <u>CIRCULAR</u> = 2

### **Detailed Description**

Definition at line 68 of file BbkType.java.

### **Member Data Documentation**

final int data\_center.BbkType.Sketch.BackBone.CIRCULAR = 2[static]

Definition at line 71 of file BbkType.java.

final int data\_center.BbkType.Sketch.BackBone.LINEAR = 1 [static]

Definition at line 70 of file BbkType.java.

The documentation for this class was generated from the following file:

BbkType.java

### data\_center.SketchComponent.BackBone Class Reference

Inheritance diagram for data\_center.SketchComponent.BackBone:

data\_center.SketchComponent.Component

data\_center.SketchComponent.BackBone

### **Public Member Functions**

BackBone (int theID, Point pos, int length)

<u>BackBone</u> (int theID, Point pos, int <u>length</u>, ArrayList< Integer > childIDList)

BackBone toSubclass ()

Point getCenter ()

void setCenter (Point pos)

Double getSize ()

void setSize (double length)

ArrayList< Integer > getChildren ()

void <a href="mailto:setChildren">setChildren</a> (ArrayList< Integer > children)

void display ()

Label to Label ()

BioBrick toBioBrick ()

Protein toProtein ()

BackBone toBackBone ()

Relation to Relation ()

BioVector toBioVictor ()

Integer getSecondaryType ()

void <a href="mailto:setSecondaryType">setSecondaryType</a> (Integer type)

String getString ()

void setString (String str)

Font getFont ()

void setFont (Font font)

Color getColor ()

void setColor (Color color)

ArrayList< Point > getCurve ()

void setCurve (ArrayList< Point > curve)

### **Public Attributes**

Point center

int length

 $ArrayList < Integer > \underline{bbkChildren}$ 

int <u>ID</u>

String <a href="mailto:primaryType">primaryType</a>

### **Detailed Description**

Definition at line 297 of file SketchComponent.java.

Constructor & Destructor Documentation
data_center.SketchComponent.BackBone.BackBone (int thelD, Point pos, int length)
Definition at line 303 of file SketchComponent.java.
data_center.SketchComponent.BackBone.BackBone (int <i>thelD</i> , Point <i>pos</i> , int <i>length</i> , ArrayList< Integer > <i>childlDList</i> )
Definition at line 311 of file SketchComponent.java.
Member Function Documentation
void data_center.SketchComponent.BackBone.display ()
Definition at line 347 of file SketchComponent.java.
Point data_center.SketchComponent.BackBone.getCenter ()
Definition at line 324 of file SketchComponent.java.
ArrayList <integer> data_center.SketchComponent.BackBone.getChildren ()</integer>

Definition at line 340 of file SketchComponent.java.

Color data\_center.SketchComponent.Component.getColor ()[inherited]

Definition at line 71 of file SketchComponent.java.
ArrayList <point> data_center.SketchComponent.Component.getCurve () [inherited]</point>
Definition at line 82 of file SketchComponent.java.
Font data_center.SketchComponent.Component.getFont () [inherited]
Definition at line 66 of file SketchComponent.java.
Integer data_center.SketchComponent.Component.getSecondaryType ()[inherited]
Definition at line 48 of file SketchComponent.java.
Double data_center.SketchComponent.BackBone.getSize ()
Definition at line 332 of file SketchComponent.java.

### String data\_center.SketchComponent.Component.getString ()[inherited]

text for <u>Label</u>, and bbkName for <u>BioBrick</u>

Definition at line 55 of file SketchComponent.java.

### void data\_center.SketchComponent.BackBone.setCenter (Point pos)

Definition at line 328 of file SketchComponent.java.

void data_center.SketchComponent.BackBone.setChildren (ArrayList< Integer > children)
Definition at line 344 of file SketchComponent.java.
void data_center.SketchComponent.Component.setColor (Color color)[inherited]
Definition at line 74 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setCurve (ArrayList&lt; Point &gt; curve)[inherited]</pre>
Definition at line 85 of file SketchComponent.java.
void data_center.SketchComponent.Component.setFont (Font font)[inherited]
Definition at line 69 of file SketchComponent.java.
void data_center.SketchComponent.Component.setSecondaryType (Integer type)[inherited]
Secondary type is defined in BbkType.Sketch
Definition at line 52 of file SketchComponent.java.
void data_center.SketchComponent.BackBone.setSize (double <i>length</i> )
Definition at line 336 of file SketchComponent.java.

void data_center.SketchComponent.Component.setString (String str)[inherited] text for <u>Label</u> , and bbkName for <u>BioBrick</u>
Definition at line 59 of file SketchComponent.java.
BackBone data_center.SketchComponent.Component.toBackBone ()[inherited]
Definition at line 35 of file SketchComponent.java.
BioBrick data_center.SketchComponent.Component.toBioBrick ()[inherited]
Definition at line 29 of file SketchComponent.java.
BioVector data_center.SketchComponent.Component.toBioVictor () [inherited]
Definition at line 41 of file SketchComponent.java.
<u>Label</u> data_center.SketchComponent.Component.toLabel ()[inherited]
Definition at line 26 of file SketchComponent.java.
Protein data_center.SketchComponent.Component.toProtein ()[inherited]
Definition at line 32 of file SketchComponent.java.

Rela	ntion data_center.SketchComponent.Component.toRelation ()[inherited]
]	Definition at line 38 of file SketchComponent.java.
Bac	k <u>Bone</u> data_center.SketchComponent.BackBone.toSubclass ()
]	Definition at line 320 of file SketchComponent.java.
Men	nber Data Documentation
Arra	yList <integer> data_center.SketchComponent.BackBone.bbkChildren</integer>
]	Definition at line 301 of file SketchComponent.java.
Poir	nt data_center.SketchComponent.BackBone.center
]	Definition at line 299 of file SketchComponent.java.
int d	lata_center.SketchComponent.Component.ID[inherited]
]	Definition at line 12 of file SketchComponent.java.
int d	lata_center.SketchComponent.BackBone.length
]	Definition at line 300 of file SketchComponent.java.

String data center.SketchComponent.Component.primaryType[inheri
---

Definition at line 13 of file SketchComponent.java.

The documentation for this class was generated from the following file:

SketchComponent.java

### data\_center.BbkDetail Class Reference

Inheritance diagram for data\_center.BbkDetail:

```
data_center.BbkOutline

data_center.BbkDetail
```

### **Classes**

class <u>Category</u> class <u>DeepSubpart</u> class <u>Feature</u> class <u>Parameter</u> class <u>SpecifiedSubpart</u> class <u>SpecifiedSubscar</u>

### class <u>Twin</u>

**Public Member Functions** 

BbkDetail ()
int getScore ()

int <u>getScore</u> (double status\_weight, double quality\_weight, double feedbacks\_weight, double publication\_weight) void <u>display</u> ()

#### **Public Attributes**

ArrayList< <u>Category</u> > <u>categories</u> = new ArrayList< <u>Category</u>>()

ArrayList< DeepSubpart > deepSubparts = new ArrayList< DeepSubpart>()

ArrayList< Feature > features = new ArrayList< Feature > ()

ArrayList< <u>Parameter</u> > <u>parameters</u> = new ArrayList<<u>Parameter</u>>()

 $ArrayList < \underline{SpecifiedSubpart} > \underline{specifiedSubparts} = new \ ArrayList < \underline{SpecifiedSubpart} > ()$ 

 $ArrayList < \underline{SpecifiedSubscar} > \underline{specifiedSubscars} = new ArrayList < \underline{SpecifiedSubscar} > ()$ 

 $ArrayList < \underline{Twin} > \underline{twins} = new ArrayList < \underline{Twin} > ()$ 

String name

String type

String author

String enterDate

String shortDesc

String url

Rating rating = null

Blasting blasting = null

String ID

String shortName

String releaseStatus

String sampleStatus

String results

String <u>nickname</u>

String part rating

String <u>sequence</u>

String samples

String references

String groups

String **DNA\_status** 

String groupFavorite

### **Detailed Description**

The class used to store the data in the detail page. All of the data are fetched from EasyBbk database and stored as Strings.

Definition at line 9 of file BbkDetail.java.

### **Constructor & Destructor Documentation**

### data\_center.BbkDetail.BbkDetail ()

Definition at line 20 of file BbkDetail.java.

### **Member Function Documentation**

### void data\_center.BbkOutline.display ()[inherited]

Print main attributes in cmd for testing.

Definition at line 59 of file BbkOutline.java.

### int data\_center.BbkOutline.getScore ()[inherited]

Score at default weight.

Definition at line 45 of file BbkOutline.java.

int data\_center.BbkOutline.getScore (double status\_weight, double quality\_weight, double feedbacks\_weight, double publication\_weight)[inherited]

Score at custom weight.

Definition at line 51 of file BbkOutline.java.

# **Member Data Documentation** String data\_center.BbkOutline.author[inherited] Definition at line 14 of file BbkOutline.java. Blasting data\_center.BbkOutline.blasting = null[inherited] Definition at line 20 of file BbkOutline.java. ArrayList<<u>Category</u>> data\_center.BbkDetail.categories = new ArrayList<<u>Category</u>>() Definition at line 11 of file BbkDetail.java. ArrayList<DeepSubpart> data center.BbkDetail.deepSubparts = new ArrayList< DeepSubpart>() Definition at line 12 of file BbkDetail.java.

Definition at line 33 of file BbkOutline.java.

String data\_center.BbkOutline.enterDate[inherited]

String data\_center.BbkOutline.DNA\_status[inherited]

Definition at line 15 of file BbkOutline.java.

ArrayList< <u>Feature</u> > data_center.BbkDetail.features = new ArrayList< <u>Feature</u> >()
Definition at line 13 of file BbkDetail.java.
String data_center.BbkOutline.groupFavorite[inherited]
Definition at line 34 of file BbkOutline.java.
String data_center.BbkOutline.groups[inherited]
Definition at line 32 of file BbkOutline.java.
String data_center.BbkOutline.ID[inherited]
Definition at line 22 of file BbkOutline.java.
String data_center.BbkOutline.name[inherited]
Definition at line 12 of file BbkOutline.java.
String data_center.BbkOutline.nickname[inherited]
Definition at line 27 of file BbkOutline.java.

ArrayList< <u>Parameter</u> > data_center.BbkDetail.parameters = new ArrayList< <u>Parameter</u> >()
Definition at line 14 of file BbkDetail.java.
String data_center.BbkOutline.part_rating[inherited]
Definition at line 28 of file BbkOutline.java.
Rating data_center.BbkOutline.rating = null[inherited]
Definition at line 19 of file BbkOutline.java.
String data_center.BbkOutline.references[inherited]
Definition at line 31 of file BbkOutline.java.
String data_center.BbkOutline.releaseStatus[inherited]
Definition at line 24 of file BbkOutline.java.
String data_center.BbkOutline.results[inherited]
Definition at line 26 of file BbkOutline.java.

String data_center.BbkOutline.samples[inherited]
Definition at line 30 of file BbkOutline.java.
String data_center.BbkOutline.sampleStatus[inherited]
Definition at line 25 of file BbkOutline.java.
String data_center.BbkOutline.sequence[inherited]
Definition at line 29 of file BbkOutline.java.
String data_center.BbkOutline.shortDesc[inherited]
Definition at line 16 of file BbkOutline.java.
String data_center.BbkOutline.shortName[inherited]
Definition at line 23 of file BbkOutline.java.
ArrayList< <u>SpecifiedSubpart</u> > data_center.BbkDetail.specifiedSubparts = new ArrayList< <u>SpecifiedSubpart</u> >()
Definition at line 15 of file BbkDetail.java.

ArrayList< <u>SpecifiedSubscar</u> > data_center.BbkDetail.specifiedSubscars = new ArrayList< <u>SpecifiedSubscar</u> >()
Definition at line 16 of file BbkDetail.java.
ArrayList< <u>Twin</u> > data_center.BbkDetail.twins = new ArrayList< <u>Twin</u> >()
Definition at line 17 of file BbkDetail.java.
String data_center.BbkOutline.type[inherited]
Definition at line 13 of file BbkOutline.java.
String data_center.BbkOutline.url[inherited]
Definition at line 17 of file BbkOutline.java.
The documentation for this class was generated from the following file:  BbkDetail.java

### data\_center.BbkOutline Class Reference

Inheritance diagram for data\_center.BbkOutline:

```
data_center.BbkOutline
```

### Classes

class Blasting class Rating

### **Public Member Functions**

```
BbkOutline ()
BbkOutline (R
```

<u>BbkOutline</u> (ResultSet resultSet) throws SQLException

int getScore ()

int <a href="mailto:getScore">getScore</a> (double status\_weight, double quality\_weight, double feedbacks\_weight, double publication\_weight)

void display ()

### **Public Attributes**

String <u>name</u>

String type

String author

String enterDate

String shortDesc

String url

Rating rating = null

Blasting blasting = null

String ID

String shortName

String releaseStatus

String sampleStatus

String results

String nickname

String part rating

String <u>sequence</u>

String samples

String references

String groups

String **DNA\_status** 

String groupFavorite

### **Detailed Description**

The class used to store the data to be shown in search result. All of the data are fetched from EasyBbk database and stored as Strings. Also contains the <a href="mailto:getScore">getScore</a>() method to get the score evaluated by SJTU-software team.

Definition at line 9 of file BbkOutline.java.

### **Constructor & Destructor Documentation**

Definition at line 51 of file BbkOutline.java.

# data\_center.BbkOutline.BbkOutline () Definition at line 36 of file BbkOutline.java. data\_center.BbkOutline.BbkOutline (ResultSet resultSet) throws SQLException Definition at line 39 of file BbkOutline.java. **Member Function Documentation** void data\_center.BbkOutline.display () Print main attributes in cmd for testing. Definition at line 59 of file BbkOutline.java. int data\_center.BbkOutline.getScore () Score at default weight. Definition at line 45 of file BbkOutline.java. int data\_center.BbkOutline.getScore (double status\_weight, double quality\_weight, double feedbacks\_weight, double publication\_weight) Score at custom weight.

### **Member Data Documentation**

### String data\_center.BbkOutline.author

Definition at line 14 of file BbkOutline.java.

### **Blasting** data\_center.BbkOutline.blasting = null

Definition at line 20 of file BbkOutline.java.

### String data\_center.BbkOutline.DNA\_status

Definition at line 33 of file BbkOutline.java.

### String data\_center.BbkOutline.enterDate

Definition at line 15 of file BbkOutline.java.

### String data\_center.BbkOutline.groupFavorite

Definition at line 34 of file BbkOutline.java.

### String data\_center.BbkOutline.groups

Definition at line 32 of file BbkOutline.java.

### String data\_center.BbkOutline.ID

Definition at line 22 of file BbkOutline.java.

### String data\_center.BbkOutline.name

Definition at line 12 of file BbkOutline.java.

### String data\_center.BbkOutline.nickname

Definition at line 27 of file BbkOutline.java.

### String data\_center.BbkOutline.part\_rating

Definition at line 28 of file BbkOutline.java.

### Rating data\_center.BbkOutline.rating = null

Definition at line 19 of file BbkOutline.java.

### String data\_center.BbkOutline.references

Definition at line 31 of file BbkOutline.java.

### String data\_center.BbkOutline.releaseStatus

Definition at line 24 of file BbkOutline.java.

### String data\_center.BbkOutline.results

Definition at line 26 of file BbkOutline.java.

### String data\_center.BbkOutline.samples

Definition at line 30 of file BbkOutline.java.

### String data\_center.BbkOutline.sampleStatus

Definition at line 25 of file BbkOutline.java.

### String data\_center.BbkOutline.sequence

Definition at line 29 of file BbkOutline.java.

### String data\_center.BbkOutline.shortDesc

Definition at line 16 of file BbkOutline.java.

String data_center.BbkOutline.shortName		
Definition at line 23 of file BbkOutline.java.		
String data_center.BbkOutline.type		
Definition at line 13 of file BbkOutline.java.		
String data_center.BbkOutline.url		
Definition at line 17 of file BbkOutline.java.		
The documentation for this class was generated from the following file: <u>BbkOutline.java</u>		

### data\_center.BbkProperties Class Reference

### **Classes**

class Category

class DeepSubpart

class Feature

class Parameter

class SpecifiedSubpart

class SpecifiedSubscar

class Twin

### **Detailed Description**

The properties in the other 7 tables exclude main, used to be extended in <u>BbkDetail</u> and <u>BbkUpload</u> to store the details.

Definition at line 8 of file BbkProperties.java.

The documentation for this class was generated from the following file: BbkProperties.java

### data\_center.BbkType Class Reference

### **Classes**

class Sketch

### **Static Public Attributes**

```
static final int PROMOTER = 1
static final int RBS = 2
static final int PROTEIN DOMAIN = 3
static final int PROTEIN CODING SEQUENCE = 4
static final int TRANSLATIONAL UNIT = 5
static final int \overline{\text{TERMINATOR}} = 6
static final int DNA = 7
static final int PLASMID BACKBONE = 8
static final int PLASMID = 9
static final int PRIMER = 10
static final int COMPOSITE = 11
static final int PROTEIN_GENERATOR = 12
static final int \frac{REPORTER}{} = 13
static final int INVERTER = 14
static final int \underline{SIGNALLING} = 15
static final int MEASUREMENT = 16
static final int OTHER = 0
static final String <a href="strOf">strOf</a> <a href="PROMOTER">PROMOTER</a> = "Regulatory"
static final String strOf RBS = "RBS"
static final String strOf_PROTEIN_DOMAIN = "Tag"
static final String strOf PROTEIN CODING SEQUENCE = "Coding"
static final String strOf_TRANSLATIONAL_UNIT = "Translational_Unit"
static final String strOf_TERMINATOR = "Terminator"
static final String strOf DNA = "DNA"
static final String strOf PLASMID BACKBONE = "Plasmid_Backbone"
static final String strOf_PLASMID = "Plasmid"
static final String strOf PRIMER = "Primer"
static final String <a href="strOf_COMPOSITE">strOf_COMPOSITE</a> = "Composite"
static final String strOf_PROTEIN_GENERATOR = "Generator"
static final String strOf REPORTER = "Reporter"
static final String strOf_INVERTER = "Inverter"
static final String strOf_SIGNALLING = "Signalling"
static final String strOf MEASUREMENT = "Measurement"
```

### **Detailed Description**

The class to store the constants of the types of biobrick.

Definition at line 4 of file BbkType.java.

### **Member Data Documentation**

### final int data\_center.BbkType.COMPOSITE = 11 [static]

Definition at line 16 of file BbkType.java.

### final int data\_center.BbkType.DNA = 7[static]

Definition at line 12 of file BbkType.java.

### final int data\_center.BbkType.INVERTER = 14[static]

Definition at line 19 of file BbkType.java.

### final int data\_center.BbkType.MEASUREMENT = 16[static]

Definition at line 21 of file BbkType.java.

### final int data\_center.BbkType.OTHER = 0[static]

Definition at line 22 of file BbkType.java.

### final int data\_center.BbkType.PLASMID = 9[static]

Definition at line 14 of file BbkType.java.

final int data_center.BbkType.PLASMID_BACKBONE = 8[static]
Definition at line 13 of file BbkType.java.
final int data_center.BbkType.PRIMER = 10[static]
Definition at line 15 of file BbkType.java.
final int data_center.BbkType.PROMOTER = 1 [static]
Definition at line 6 of file BbkType.java.
final int data_center.BbkType.PROTEIN_CODING_SEQUENCE = 4[static]
Definition at line 9 of file BbkType.java.
final int data_center.BbkType.PROTEIN_DOMAIN = 3 [static]
Definition at line 8 of file BbkType.java.
final int data_center.BbkType.PROTEIN_GENERATOR = 12[static]
Definition at line 17 of file BbkType.java.

Definition at line 7 of file BbkType.java.
final int data_center.BbkType.REPORTER = 13 [static]
Definition at line 18 of file BbkType.java.
final int data_center.BbkType.SIGNALLING = 15[static]
Definition at line 20 of file BbkType.java.
final String data_center.BbkType.strOf_COMPOSITE = "Composite" [static]
Definition at line 34 of file BbkType.java.
final String data_center.BbkType.strOf_DNA = "DNA" [static]
Definition at line 30 of file BbkType.java.
final String data_center.BbkType.strOf_INVERTER = "Inverter" [static]
Definition at line 37 of file BbkType.java.

final int data\_center.BbkType.RBS = 2[static]

# final String data\_center.BbkType.strOf\_MEASUREMENT = "Measurement" [static] Definition at line 39 of file BbkType.java. final String data\_center.BbkType.strOf\_PLASMID = "Plasmid" [static] Definition at line 32 of file BbkType.java. final String data\_center.BbkType.strOf\_PLASMID\_BACKBONE = "Plasmid Backbone" [static] Definition at line 31 of file BbkType.java. final String data\_center.BbkType.strOf\_PRIMER = "Primer" [static] Definition at line 33 of file BbkType.java. final String data\_center.BbkType.strOf\_PROMOTER = "Regulatory"[static] Definition at line 24 of file BbkType.java. final String data\_center.BbkType.strOf\_PROTEIN\_CODING\_SEQUENCE = "Coding"[static] Definition at line 27 of file BbkType.java.

# final String data\_center.BbkType.strOf\_PROTEIN\_DOMAIN = "Tag" [static] Definition at line 26 of file BbkType.java. final String data\_center.BbkType.strOf\_PROTEIN\_GENERATOR = "Generator"[static] Definition at line 35 of file BbkType.java. final String data\_center.BbkType.strOf\_RBS = "RBS" [static] Definition at line 25 of file BbkType.java. final String data\_center.BbkType.strOf\_REPORTER = "Reporter" [static] Definition at line 36 of file BbkType.java. final String data\_center.BbkType.strOf\_SIGNALLING = "Signalling" [static] Definition at line 38 of file BbkType.java. final String data\_center.BbkType.strOf\_TERMINATOR = "Terminator" [static] Definition at line 29 of file BbkType.java.

final String data_center.BbkType.strOf_TRANSLATIONAL_UNIT = "Translational_Unit" [static]	
Definition at line 28 of file BbkType.java.	
final int data_center.BbkType.TERMINATOR = 6[static]	
Definition at line 11 of file BbkType.java.	
final int data_center.BbkType.TRANSLATIONAL_UNIT = 5 [static]	
Definition at line 10 of file BbkType.java.	

The documentation for this class was generated from the following file:

BbkType.java

# data\_center.BbkUpload Class Reference

# **Classes**

class <u>Category</u> class <u>DeepSubpart</u> class <u>Feature</u> class <u>Parameter</u> class <u>SpecifiedSubpart</u> class <u>SpecifiedSubscar</u> class <u>Twin</u>

#### **Public Member Functions**

BbkUpload ()
String getName ()
void setName (String rawName)
String getEnterDate ()
void setEnterDate ()
String getID ()
void setID ()
String getShortName ()
String getSequence ()
void setSequence (ArrayList< Object > sequenceTokens, boolean useDefaultScar)
void fillPrivateData (ResultSet resultSet) throws SQLException
void display ()

# **Public Attributes**

String type
String author
String shortDesc
String nickname
String groupFavorite
String delete this part
ArrayList< Category > categories = new ArrayList<Category>()
ArrayList< Feature > features = new ArrayList<Parameter>()
ArrayList< Parameter > parameters = new ArrayList<Parameter>()

# **Detailed Description**

The data stored locally in the EasyBbk before upload. A filled <u>BbkUpload</u> can be used to upload a biobrick directly into the database established by SJTU-software.

Definition at line 9 of file BbkUpload.java.

# **Constructor & Destructor Documentation**

# data center.BbkUpload.BbkUpload()

Definition at line 33 of file BbkUpload.java.
Member Function Documentation
void data_center.BbkUpload.display ()
Definition at line 246 of file BbkUpload.java.
void data_center.BbkUpload.fillPrivateData (ResultSet resultSet) throws SQLException Used when filling private from database into bbkUpload, others in DBDataFiller
Exceptions:  SQLException
Definition at line 120 of file BbkUpload.java.
String data_center.BbkUpload.getEnterDate ()
Definition at line 49 of file BbkUpload.java.
String data_center.BbkUpload.getID ()
Definition at line 58 of file BbkUpload.java.
String data_center.BbkUpload.getName ()
Definition at line 35 of file BbkUpload.java.

# String data\_center.BbkUpload.getSequence ()

Definition at line 71 of file BbkUpload.java.

# String data\_center.BbkUpload.getShortName ()

setShortName in setName()

Definition at line 68 of file BbkUpload.java.

# void data\_center.BbkUpload.setEnterDate ()

Definition at line 52 of file BbkUpload.java.

# void data center.BbkUpload.setID ()

Definition at line 61 of file BbkUpload.java.

# void data\_center.BbkUpload.setName (String rawName)

rawName is some thing without "BBa\_", like "B0012". Suffix "\_EasyBbk" will be automatically appended to distinguish them from the biobricks fetched from igem.org

Definition at line 41 of file BbkUpload.java.

# void data\_center.BbkUpload.setSequence (ArrayList< Object > sequenceTokens, boolean useDefaultScar)

Also set the subscar, subpart, deepsubpart and twins at the same time Please call uploadCenter.isSequanceValid() first. useDefaultScar means use RFC[10] to fill all unspecified scars between bio-bricks

Definition at line 78 of file BbkUpload.java.

Member Data Documentation
String data_center.BbkUpload.author
Definition at line 19 of file BbkUpload.java.
ArrayList< <u>Category</u> > data_center.BbkUpload.categories = new ArrayList< <u>Category</u> >()
Definition at line 25 of file BbkUpload.java.
String data_center.BbkUpload.delete_this_part
Definition at line 23 of file BbkUpload.java.
ArrayList< <u>Feature</u> > data_center.BbkUpload.features = new ArrayList< <u>Feature</u> >()
Definition at line 26 of file BbkUpload.java.
String data_center.BbkUpload.groupFavorite
Definition at line 22 of file BbkUpload.java.
String data_center.BbkUpload.nickname
Definition at line 21 of file BbkUpload.java.

ArrayList< <u>Parameter</u> > data_center.BbkUpload.parameters = new ArrayList< <u>Parameter</u> >()
Definition at line 27 of file BbkUpload.java.
String data_center.BbkUpload.shortDesc
Definition at line 20 of file BbkUpload.java.
String data_center.BbkUpload.type
Definition at line 18 of file BbkUpload.java.
The documentation for this class was generated from the following file: <u>BbkUpload.java</u>

# data\_center.BbkType.Sketch.BioBrick Class Reference

# **Static Public Attributes**

```
static final int \frac{PROMOTER}{RBS} = 1
static final int \frac{RBS}{RBS} = 2
static final int \frac{PROTEIN\ CODING\ SEQUENCE}{RBMINATOR} = 4
static final int \frac{PRIMER}{SEQUENCE} = 5
static final int \frac{OTHER}{SEQUENCE} = 0
```

# **Detailed Description**

Definition at line 52 of file BbkType.java.

# **Member Data Documentation**

final int data\_center.BbkType.Sketch.BioBrick.OTHER = 0[static]

Definition at line 59 of file BbkType.java.

final int data\_center.BbkType.Sketch.BioBrick.PRIMER = 5[static]

Definition at line 58 of file BbkType.java.

final int data\_center.BbkType.Sketch.BioBrick.PROMOTER = 1 [static]

Definition at line 54 of file BbkType.java.

final int data\_center.BbkType.Sketch.BioBrick.PROTEIN\_CODING\_SEQUENCE = 3[static]

final int data_center.BbkType.Sketch.BioBrick.RBS = 2[static]
Definition at line 55 of file BbkType.java.
final int data_center.BbkType.Sketch.BioBrick.TERMINATOR = 4[static]
Definition at line 57 of file BbkType.java.

The documentation for this class was generated from the following file:

BbkType.java

Definition at line 56 of file BbkType.java.

# data\_center.SketchComponent.BioBrick Class Reference

Inheritance diagram for data\_center.SketchComponent.BioBrick:

data\_center.SketchComponent.Component

data\_center.SketchComponent.BioBrick

# **Public Member Functions**

BioBrick (int theID, int secondaryType, Point center, Color color)

BioBrick (int theID, String bbkName, int secondaryType, Point center, Color color)

BioBrick toSubclass ()

Integer <a href="mailto:getSecondaryType">getSecondaryType</a> ()

void setSecondaryType (Integer type)

String getString ()

void <a href="mailto:setString">setString</a> (String bbkName)

Point getCenter ()

void setCenter (Point pos)

Color getColor ()

void setColor (Color color)

void display ()

Label toLabel ()

BioBrick toBioBrick ()

Protein toProtein ()

BackBone toBackBone ()

Relation to Relation ()

BioVector toBioVictor ()

Font getFont ()

void setFont (Font font)

Double getSize ()

void setSize (double size)

ArrayList< Point > getCurve ()

void setCurve (ArrayList< Point > curve)

ArrayList< Integer > getChildren ()

void <a href="mailto:setChildren">setChildren</a> (ArrayList< Integer > children)

# **Public Attributes**

BbkOutline bbkOutline = null

int secondaryType

Point center

Color color

int ID

String <a href="mailto:primaryType">primaryType</a>

# **Detailed Description**

Definition at line 164 of file SketchComponent.java.

# **Constructor & Destructor Documentation**

bbkChildren in backBone, the IDs

Definition at line 88 of file SketchComponent.java.

data_center.SketchComponent.BioBrick.BioBrick (int <i>theID</i> , int <i>secondaryType</i> , Point <i>center</i> , Color <i>color</i> )
Definition at line 172 of file SketchComponent.java.
data_center.SketchComponent.BioBrick.BioBrick (int theID, String bbkName, int secondaryType, Point center, Color color)
bbkOutline should be set by setString(bbkName)
Definition at line 183 of file SketchComponent.java.
Member Function Documentation
void data_center.SketchComponent.BioBrick.display ()
Definition at line 231 of file SketchComponent.java.
Point data_center.SketchComponent.BioBrick.getCenter ()
Definition at line 216 of file SketchComponent.java.
ArrayList <integer> data center.SketchComponent.Component.getChildren ()[inherited]</integer>

Color data_center.SketchComponent.BioBrick.getColor ()
Definition at line 224 of file SketchComponent.java.
ArrayList <point> data_center.SketchComponent.Component.getCurve ()[inherited]</point>
Definition at line 82 of file SketchComponent.java.
Font data_center.SketchComponent.Component.getFont ()[inherited]
Definition at line 66 of file SketchComponent.java.
Integer data_center.SketchComponent.BioBrick.getSecondaryType ()
Definition at line 198 of file SketchComponent.java.
Double data_center.SketchComponent.Component.getSize () [inherited]
length in <u>BackBone</u> , thickness in <u>Relation</u> and scale in <u>BioVector</u>
Definition at line 77 of file SketchComponent.java.
String data_center.SketchComponent.BioBrick.getString ()
Definition at line 206 of file SketchComponent.java.

void data_center.SketchComponent.BioBrick.setCenter (Point pos)
Definition at line 220 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setChildren (ArrayList&lt; Integer &gt; children)[inherited]</pre>
Definition at line 91 of file SketchComponent.java.
void data_center.SketchComponent.BioBrick.setColor (Color <i>color</i> )
Definition at line 228 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setCurve (ArrayList&lt; Point &gt; curve)[inherited]</pre>
Definition at line 85 of file SketchComponent.java.
void data_center.SketchComponent.Component.setFont (Font font)[inherited]
Definition at line 69 of file SketchComponent.java.
void data_center.SketchComponent.BioBrick.setSecondaryType (Integer <i>type</i> )
Definition at line 202 of file SketchComponent.java.

void data_center.SketchComponent.Component.setSize (double size)[inherited]
Definition at line 80 of file SketchComponent.java.
<pre>void data_center.SketchComponent.BioBrick.setString (String bbkName) Set bbkOutline by bbkName in the function, if there's no such bbkName in the database bbkOutline will be a null</pre>
Definition at line 212 of file SketchComponent.java.
BackBone data_center.SketchComponent.Component.toBackBone ()[inherited]
Definition at line 35 of file SketchComponent.java.
BioBrick data_center.SketchComponent.Component.toBioBrick ()[inherited]
Definition at line 29 of file SketchComponent.java.
BioVector data_center.SketchComponent.Component.toBioVictor () [inherited]
Definition at line 41 of file SketchComponent.java.
Label data_center.SketchComponent.Component.toLabel ()[inherited]

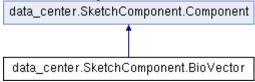
Definition at line 26 of file SketchComponent.java.

Protein data_center.SketchComponent.Component.toProtein ()[inherited]
Definition at line 32 of file SketchComponent.java.
Relation data_center.SketchComponent.Component.toRelation ()[inherited]
Definition at line 38 of file SketchComponent.java.
BioBrick data_center.SketchComponent.BioBrick.toSubclass ()
Definition at line 194 of file SketchComponent.java.
Member Data Documentation
<u>BbkOutline</u> data_center.SketchComponent.BioBrick.bbkOutline = null
Definition at line 166 of file SketchComponent.java.
Point data_center.SketchComponent.BioBrick.center
Definition at line 168 of file SketchComponent.java.
Definition at line 168 of file SketchComponent.java.  Color data_center.SketchComponent.BioBrick.color

int data_center.SketchComponent.Component.ID [inherited]
Definition at line 12 of file SketchComponent.java.
String data_center.SketchComponent.Component.primaryType[inherited]
Definition at line 13 of file SketchComponent.java.
int data_center.SketchComponent.BioBrick.secondaryType
Definition at line 167 of file SketchComponent.java.
The documentation for this class was generated from the following file: <u>SketchComponent.java</u>

# data\_center.SketchComponent.BioVector Class Reference

Inheritance diagram for data\_center.SketchComponent.BioVector:



# **Public Member Functions**

<u>BioVector</u> (int theID, int <u>secondaryType</u>, Point <u>center</u>, double <u>scale</u>)

BioVector toSubclass ()

Integer getSecondaryType ()

void <a href="mailto:setSecondaryType">setSecondaryType</a> (Integer type)

Point getCenter ()

void setCenter (Point pos)

Double getSize ()

void setSize (double scale)

void display ()

Label toLabel ()

BioBrick toBioBrick ()

Protein toProtein ()

BackBone toBackBone ()

Relation to Relation ()

BioVector toBioVictor ()

String getString ()

void setString (String str)

Font getFont ()

void setFont (Font font)

Color getColor ()

void setColor (Color color)

ArrayList< Point > getCurve ()

void setCurve (ArrayList< Point > curve)

ArrayList< Integer > getChildren ()

void <a href="mailto:setChildren">setChildren</a> (ArrayList< Integer > children)

# **Public Attributes**

int secondaryType

Point center

double scale

int ID

String <a href="mailto:primaryType">primaryType</a>

# **Detailed Description**

Definition at line 423 of file SketchComponent.java.

# **Constructor & Destructor Documentation**

lata_center.SketchComponent.BioVector.BioVector (int <i>theID</i> , int secondaryType, Prenter, double scale)	oint

Definition at line 429 of file SketchComponent.java.

#### **Member Function Documentation**

# void data\_center.SketchComponent.BioVector.display ()

Definition at line 465 of file SketchComponent.java.

# Point data\_center.SketchComponent.BioVector.getCenter ()

Definition at line 450 of file SketchComponent.java.

# ArrayList<Integer> data\_center.SketchComponent.Component.getChildren ()[inherited] bbkChildren in backBone, the IDs

Definition at line 88 of file SketchComponent.java.

# Color data\_center.SketchComponent.Component.getColor ()[inherited]

Definition at line 71 of file SketchComponent.java.

# ArrayList<Point> data\_center.SketchComponent.Component.getCurve ()[inherited]

Definition at line 82 of file SketchComponent.java.
Font data_center.SketchComponent.Component.getFont ()[inherited]
Definition at line 66 of file SketchComponent.java.
Integer data_center.SketchComponent.BioVector.getSecondaryType ()
Definition at line 442 of file SketchComponent.java.
Double data_center.SketchComponent.BioVector.getSize ()
Definition at line 458 of file SketchComponent.java.
String data_center.SketchComponent.Component.getString ()[inherited] text for <u>Label</u> , and bbkName for <u>BioBrick</u>
Definition at line 55 of file SketchComponent.java.
void data_center.SketchComponent.BioVector.setCenter (Point <i>pos</i> )
Definition at line 454 of file SketchComponent.java.

void data\_center.SketchComponent.Component.setChildren (ArrayList< Integer >
children)[inherited]

Definition at line 91 of file SketchComponent.java.
void data_center.SketchComponent.Component.setColor (Color color)[inherited]
Definition at line 74 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setCurve (ArrayList&lt; Point &gt; curve)[inherited]</pre>
Definition at line 85 of file SketchComponent.java.
void data_center.SketchComponent.Component.setFont (Font font)[inherited]
Definition at line 69 of file SketchComponent.java.
void data_center.SketchComponent.BioVector.setSecondaryType (Integer <i>type</i> )
Definition at line 446 of file SketchComponent.java.

void data\_center.SketchComponent.BioVector.setSize (double scale)

Definition at line 462 of file SketchComponent.java.

void data\_center.SketchComponent.Component.setString (String str)[inherited]
text for <u>Label</u>, and bbkName for <u>BioBrick</u>

Definition at line 59 of file SketchComponent.java.

<u>BackBone</u> data_center.SketchComponent.Component.toBackBone ()[inherited]
Definition at line 35 of file SketchComponent.java.
BioBrick data_center.SketchComponent.Component.toBioBrick ()[inherited]
Definition at line 29 of file SketchComponent.java.
<u>BioVector</u> data_center.SketchComponent.Component.toBioVictor ()[inherited]
Definition at line 41 of file SketchComponent.java.
<u>Label</u> data_center.SketchComponent.Component.toLabel ()[inherited]
Definition at line 26 of file SketchComponent.java.
Protein data_center.SketchComponent.Component.toProtein ()[inherited]
Definition at line 32 of file SketchComponent.java.
Relation data_center.SketchComponent.Component.toRelation ()[inherited]
Definition at line 38 of file SketchComponent.java.

<u>BioVector</u> data_center.SketchComponent.BioVector.toSubclass ()
Definition at line 438 of file SketchComponent.java.
Member Data Documentation
Point data_center.SketchComponent.BioVector.center
Definition at line 426 of file SketchComponent.java.
int data_center.SketchComponent.Component.ID[inherited]
Definition at line 12 of file SketchComponent.java.
String data_center.SketchComponent.Component.primaryType[inherited]
Definition at line 13 of file SketchComponent.java.
double data_center.SketchComponent.BioVector.scale
Definition at line 427 of file SketchComponent.java.
int data_center.SketchComponent.BioVector.secondaryType
Definition at line 425 of file SketchComponent.java.

The documentation for this class was generated from the following file:

SketchComponent.java

# data\_center.BbkOutline.Blasting Class Reference

Public Attributes
int score double eValue
Detailed Description
The evaluation criteria stored when blasting.
Definition at line 146 of file BbkOutline.java.
Member Data Documentation
double data_center.BbkOutline.Blasting.eValue
Definition at line 149 of file BbkOutline.java.
int data_center.BbkOutline.Blasting.score

The documentation for this class was generated from the following file:

Definition at line 148 of file BbkOutline.java.

BbkOutline.java

# data\_center.BlastingSearcher Class Reference

# **Detailed Description**

The class to connect to the remote server set up by SJTU-software to execute a blast compare between the sequence provided and the sequence in the current biobrick database. The class depends on the class <u>DatabaseConnector</u> to get the <u>BbkOutline</u> instances.

Definition at line 21 of file BlastingSearcher.java.

The documentation for this class was generated from the following file: BlastingSearcher.java



Inheritance diagram for data\_center.BbkDetail.Category: data\_center.BbkProperties.Category data\_center.BbkDetail.Category **Public Member Functions** Category (ResultSet resultSet) throws SQLException **Public Attributes** String <u>category</u> **Detailed Description** Definition at line 27 of file BbkDetail.java. **Constructor & Destructor Documentation** data\_center.BbkDetail.Category.Category (ResultSet resultSet) throws SQLException Definition at line 29 of file BbkDetail.java. **Member Data Documentation** String data\_center.BbkProperties.Category.category[inherited] Definition at line 12 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkDetail.java

# data\_center.DBConsts.Header.Category Class Reference

Static Public Attributes
static final String <u>CATEGORY</u> = "category"
Detailed Description
Definition at line 93 of file DBConsts.java.
Member Data Documentation
final String data_center.DBConsts.Header.Category.CATEGORY = "category" [static]
Definition at line 95 of file DBConsts.java.

The documentation for this class was generated from the following file:

DBConsts.java

# data\_center.BbkProperties.Category Class Reference

Inheritance diagram for data\_center.BbkProperties.Category:

data\_center.BbkProperties.Category

t

data\_center.BbkDetail.Category

data\_center.BbkUpload.Category

# **Public Member Functions**

Category ()

<u>Category</u> (ResultSet resultSet) throws SQLException

# **Public Attributes**

String category

# **Detailed Description**

Definition at line 10 of file BbkProperties.java.

#### **Constructor & Destructor Documentation**

data\_center.BbkProperties.Category.Category ()

Definition at line 14 of file BbkProperties.java.

data\_center.BbkProperties.Category.Category (ResultSet resultSet) throws SQLException

Definition at line 16 of file BbkProperties.java.

#### **Member Data Documentation**

# String data\_center.BbkProperties.Category.category

Definition at line 12 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkProperties.java

# data\_center.BbkUpload.Category Class Reference

Inheritance diagram for data\_center.BbkUpload.Category:

data\_center.BbkProperties.Category

data\_center.BbkUpload.Category

# **Public Member Functions**

<u>Category</u> (String <u>category</u>)

<u>Category</u> (ResultSet resultSet) throws SQLException

# **Public Attributes**

String category

# **Detailed Description**

Definition at line 132 of file BbkUpload.java.

#### **Constructor & Destructor Documentation**

# data\_center.BbkUpload.Category.Category (String category)

Definition at line 134 of file BbkUpload.java.

# data\_center.BbkUpload.Category.Category (ResultSet resultSet) throws SQLException

Used to fill data from database when modify uploaded bbk

Definition at line 140 of file BbkUpload.java.

# **Member Data Documentation**

# String data\_center.BbkProperties.Category.category[inherited]

Definition at line 12 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkUpload.java

# data\_center.CompareCenter Class Reference

# **Public Member Functions**

CompareCenter ()

BbkDetail assignDetail (String bbkName, int pos)

BbkDetail getDetail (int pos)

# **Public Attributes**

BbkDetail[] compareList = {null, null, null}

# **Detailed Description**

Provide a comparison between up to 3 bbkDetails, pos == 0, 1, 2

Definition at line 4 of file CompareCenter.java.

#### **Constructor & Destructor Documentation**

# data\_center.CompareCenter.CompareCenter ()

Definition at line 8 of file CompareCenter.java.

# **Member Function Documentation**

# **BbkDetail** data\_center.CompareCenter.assignDetail (String bbkName, int pos)

Specify a bbkName to inquire in the database, set it in the list and return.

#### Returns:

The <u>BbkDetail</u> instance just assigned, null if the bbkName is not in database or the pos is not 0, 1 or 2.

Definition at line 13 of file CompareCenter.java.

# **BbkDetail** data\_center.CompareCenter.getDetail (int pos)

Check the detail stored in the 3 slots in the compareCenter.

Definition at line 26 of file CompareCenter.java.

# **Member Data Documentation**

**BbkDetail** [] data\_center.CompareCenter.compareList = {null, null, null}

Definition at line 6 of file CompareCenter.java.

The documentation for this class was generated from the following file:

CompareCenter.java

# data\_center.SketchComponent.Component Class Reference

 $Inheritance\ diagram\ for\ data\_center. Sketch Co\underline{mponent. Component}:$ 

data\_center\_SketchComponent\_BackBone | data\_center\_SketchComponent\_BioBrick | data\_center\_SketchComponent\_BioBrick | data\_center\_SketchComponent\_BioProtein | da **Public Member Functions** Component (int theID, String theType) abstract Component toSubclass () Label toLabel () BioBrick toBioBrick () Protein toProtein () BackBone toBackBone () Relation to Relation () BioVector toBioVictor () Integer getSecondaryType () void <a href="mailto:setSecondaryType">setSecondaryType</a> (Integer type) String getString () void setString (String str) Point getCenter () void setCenter (Point center) Font getFont () void setFont (Font font) Color getColor () void setColor (Color color) Double getSize () void setSize (double size) ArrayList< Point > getCurve () void setCurve (ArrayList< Point > curve) ArrayList< Integer > getChildren () void <a href="mailto:setChildren">setChildren</a> (ArrayList< Integer > children) void display () **Public Attributes** int ID String <a href="mailto:primaryType">primaryType</a> **Detailed Description** 

Definition at line 10 of file SketchComponent.java.

# **Constructor & Destructor Documentation**

data\_center.SketchComponent.Component.Component (int theID, String theType)

Definition at line 15 of file SketchComponent.java.

Member Function Documentation
void data_center.SketchComponent.Component.display ()
Definition at line 93 of file SketchComponent.java.
Point data_center.SketchComponent.Component.getCenter ()
Definition at line 61 of file SketchComponent.java.
ArrayList <integer> data_center.SketchComponent.Component.getChildren () bbkChildren in backBone, the IDs</integer>
Definition at line 88 of file SketchComponent.java.
Color data_center.SketchComponent.Component.getColor ()
Definition at line 71 of file SketchComponent.java.
ArrayList <point> data_center.SketchComponent.Component.getCurve ()</point>
Definition at line 82 of file SketchComponent.java.
Font data_center.SketchComponent.Component.getFont ()

Definition at line 66 of file SketchComponent.java.

#### Integer data\_center.SketchComponent.Component.getSecondaryType ()

Definition at line 48 of file SketchComponent.ja	va.
--	-----

#### Double data\_center.SketchComponent.Component.getSize ()

length in **BackBone**, thickness in **Relation** and scale in **BioVector** 

Definition at line 77 of file SketchComponent.java.

#### String data\_center.SketchComponent.Component.getString ()

text for Label, and bbkName for BioBrick

Definition at line 55 of file SketchComponent.java.

#### void data\_center.SketchComponent.Component.setCenter (Point center)

Definition at line 64 of file SketchComponent.java.

# void data\_center.SketchComponent.Component.setChildren (ArrayList< Integer > children)

Definition at line 91 of file SketchComponent.java.

#### void data\_center.SketchComponent.Component.setColor (Color color)

Definition at line 74 of file SketchComponent.java.

void data_center.SketchComponent.Component.setCurve (ArrayList< Point > curve)
Definition at line 85 of file SketchComponent.java.
void data_center.SketchComponent.Component.setFont (Font font)
Definition at line 69 of file SketchComponent.java.
void data_center.SketchComponent.Component.setSecondaryType (Integer type)
Secondary type is defined in <a href="mailto:BbkType.Sketch">BbkType.Sketch</a>
Definition at line 52 of file SketchComponent.java.
void data_center.SketchComponent.Component.setSize (double size)
Definition at line 80 of file SketchComponent.java.
void data_center.SketchComponent.Component.setString (String <i>str</i> ) text for <u>Label</u> , and bbkName for <u>BioBrick</u>
Definition at line 59 of file SketchComponent.java.
BackBone data_center.SketchComponent.Component.toBackBone ()
Definition at line 35 of file SketchComponent.java.

Member Data Documentation
int data_center.SketchComponent.Component.ID
Definition at line 12 of file SketchComponent.java.
String data_center.SketchComponent.Component.primaryType
Definition at line 13 of file SketchComponent.java.

SketchComponent.java

## data\_center.DatabaseConnector Class Reference

#### **Detailed Description**

The class to connect the EasyBbk and the database by SJTU-software.

Definition at line 9 of file DatabaseConnector.java.

The documentation for this class was generated from the following file:

<u>DatabaseConnector.java</u>

## data\_center.DataCenter Class Reference

#### **Public Member Functions**

DataCenter ()

#### **Public Attributes**

SearchCenter searchCenter
SketchCenter sketchCenter
CompareCenter compareCenter
UploadCenter uploadCenter

## **Detailed Description**

The overall function of the package <u>data center</u>. Keep the Datacenter instance to get access to the searchCenter, sketchCenter, compareCenter, uploadCenter, which provide all of the main function in EasyBbk.

Definition at line 6 of file DataCenter.java.

#### Constructor & Destructor Documentation

data\_center.DataCenter.DataCenter ()

Definition at line 13 of file DataCenter.java.

#### **Member Data Documentation**

#### **CompareCenter** data\_center.DataCenter.compareCenter

Definition at line 10 of file DataCenter.java.

#### <u>SearchCenter</u> data\_center.DataCenter.searchCenter

Definition at line 8 of file DataCenter.java.

DataCenter.java

## data\_center.DBConsts Class Reference

#### Classes

class <u>Header</u> class <u>Rating</u> class <u>Table</u>

## **Detailed Description**

Store all the constant in the Database, including headers and default score weights

Definition at line 5 of file DBConsts.java.

The documentation for this class was generated from the following file: <u>DBConsts.java</u>

## data\_center.DBConsts.Header.DeepSub Class Reference

#### **Static Public Attributes**

```
static final String ID = "subpart_id" static final String NAME = "subpart_name" static final String SHORT DESC = "subpart_short_desc" static final String TYPE = "subpart_type" static final String NICKNAME = "subpart_nickname"
```

#### **Detailed Description**

DeepSubpart.ID != ID

Definition at line 99 of file DBConsts.java.

#### **Member Data Documentation**

final String data\_center.DBConsts.Header.DeepSub.ID = "subpart\_id" [static]

Definition at line 101 of file DBConsts.java.

final String data\_center.DBConsts.Header.DeepSub.NAME = "subpart\_name" [static]

Definition at line 102 of file DBConsts.java.

final String data\_center.DBConsts.Header.DeepSub.NICKNAME = "subpart\_nickname" [static]

Definition at line 105 of file DBConsts.java.

final String data\_center.DBConsts.Header.DeepSub.SHORT\_DESC =
"subpart\_short\_desc"[static]

Definition at line 103 of file DBConsts.java.

final String data\_center.DBConsts.Header.DeepSub.TYPE = "subpart\_type" [static]

Definition at line 104 of file DBConsts.java.

The documentation for this class was generated from the following file:

DBConsts.java

## data\_center.BbkDetail.DeepSubpart Class Reference

Inheritance diagram for data\_center.BbkDetail.DeepSubpart:

data\_center.BbkProperties.DeepSubpart

data\_center.BbkDetail.DeepSubpart

#### **Public Member Functions**

DeepSubpart (ResultSet resultSet) throws SQLException

#### **Public Attributes**

String <u>ID</u> String <u>name</u>

String shortDesc

String type

String nickname

#### **Detailed Description**

Definition at line 33 of file BbkDetail.java.

#### **Constructor & Destructor Documentation**

data\_center.BbkDetail.DeepSubpart.DeepSubpart (ResultSet resultSet) throws SQLException

Definition at line 35 of file BbkDetail.java.

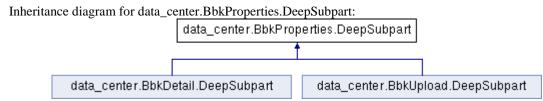
#### **Member Data Documentation**

String data\_center.BbkProperties.DeepSubpart.ID [inherited]

Definition at line 24 of file BbkProperties.java.

String data_center.BbkProperties.DeepSubpart.name[inherited]
Definition at line 25 of file BbkProperties.java.
String data_center.BbkProperties.DeepSubpart.nickname[inherited]
Definition at line 28 of file BbkProperties.java.
String data_center.BbkProperties.DeepSubpart.shortDesc[inherited]
Definition at line 26 of file BbkProperties.java.
String data_center.BbkProperties.DeepSubpart.type[inherited]
Definition at line 27 of file BbkProperties.java.
The documentation for this class was generated from the following file: <u>BbkDetail.java</u>

## data\_center.BbkProperties.DeepSubpart Class Reference



#### **Public Member Functions**

DeepSubpart ()

DeepSubpart (ResultSet resultSet) throws SQLException

#### **Public Attributes**

String ID

String name

String shortDesc

String type

String <u>nickname</u>

#### **Detailed Description**

Definition at line 22 of file BbkProperties.java.

#### **Constructor & Destructor Documentation**

#### data\_center.BbkProperties.DeepSubpart.DeepSubpart ()

Definition at line 30 of file BbkProperties.java.

# data\_center.BbkProperties.DeepSubpart.DeepSubpart (ResultSet resultSet) throws SQLException

Definition at line 32 of file BbkProperties.java.

Member Data Documentation
String data_center.BbkProperties.DeepSubpart.ID
Definition at line 24 of file BbkProperties.java.
String data_center.BbkProperties.DeepSubpart.name
Definition at line 25 of file BbkProperties.java.
String data_center.BbkProperties.DeepSubpart.nickname
Definition at line 28 of file BbkProperties.java.
String data_center.BbkProperties.DeepSubpart.shortDesc
Definition at line 26 of file BbkProperties.java.
String data_center.BbkProperties.DeepSubpart.type
Definition at line 27 of file BbkProperties.java.

BbkProperties.java

## data\_center.BbkUpload.DeepSubpart Class Reference

Inheritance diagram for data\_center.BbkUpload.DeepSubpart:

data\_center.BbkProperties.DeepSubpart

data\_center.BbkUpload.DeepSubpart

#### **Public Member Functions**

<u>DeepSubpart</u> (BbkDetail.DeepSubpart subpart)<u>DeepSubpart</u> (ResultSet resultSet) throws SQLException

#### **Public Attributes**

String ID
String name
String shortDesc
String type
String nickname

#### **Detailed Description**

Definition at line 183 of file BbkUpload.java.

#### **Constructor & Destructor Documentation**

data\_center.BbkUpload.DeepSubpart.DeepSubpart (BbkDetail.DeepSubpart subpart)

Definition at line 185 of file BbkUpload.java.

# data\_center.BbkUpload.DeepSubpart.DeepSubpart (ResultSet resultSet) throws SQLException

Used to fill data from database when modify uploaded bbk

Definition at line 195 of file BbkUpload.java.

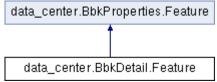
# **Member Data Documentation** String data\_center.BbkProperties.DeepSubpart.ID[inherited] Definition at line 24 of file BbkProperties.java. String data\_center.BbkProperties.DeepSubpart.name[inherited] Definition at line 25 of file BbkProperties.java. String data\_center.BbkProperties.DeepSubpart.nickname[inherited] Definition at line 28 of file BbkProperties.java. String data\_center.BbkProperties.DeepSubpart.shortDesc[inherited] Definition at line 26 of file BbkProperties.java. String data\_center.BbkProperties.DeepSubpart.type[inherited]

The documentation for this class was generated from the following file: BbkUpload.java

Definition at line 27 of file BbkProperties.java.

## data\_center.BbkDetail.Feature Class Reference

Inheritance diagram for data\_center.BbkDetail.Feature:



#### **Public Member Functions**

Feature (ResultSet resultSet) throws SQLException

#### **Public Attributes**

String ID

String title

String type

String <u>direction</u>

 $String \ \underline{startPos}$ 

String endPos

#### **Detailed Description**

Definition at line 39 of file BbkDetail.java.

#### **Constructor & Destructor Documentation**

data\_center.BbkDetail.Feature.Feature (ResultSet resultSet) throws SQLException

Definition at line 41 of file BbkDetail.java.

#### **Member Data Documentation**

String data\_center.BbkProperties.Feature.direction[inherited]

Definition at line 47 of file BbkProperties.java.

String data_center.BbkProperties.Feature.endPos[inherited]
Definition at line 49 of file BbkProperties.java.
String data_center.BbkProperties.Feature.ID[inherited]
Definition at line 44 of file BbkProperties.java.
String data_center.BbkProperties.Feature.startPos[inherited]
Definition at line 48 of file BbkProperties.java.
String data_center.BbkProperties.Feature.title[inherited]
Definition at line 45 of file BbkProperties.java.
String data_center.BbkProperties.Feature.type[inherited]
Definition at line 46 of file BbkProperties.java.
The documentation for this class was generated from the following file: <u>BbkDetail.java</u>

## data\_center.DBConsts.Header.Feature Class Reference

#### **Static Public Attributes**

```
static final String ID = "id" static final String TITLE = "title" static final String TYPE = "type" static final String DIRECTION = "direction" static final String START POS = "startpos" static final String END POS = "endpos"
```

#### **Detailed Description**

Definition at line 108 of file DBConsts.java.

#### **Member Data Documentation**

final String data\_center.DBConsts.Header.Feature.DIRECTION = "direction" [static]

Definition at line 113 of file DBConsts.java.

final String data\_center.DBConsts.Header.Feature.END\_POS = "endpos" [static]

Definition at line 115 of file DBConsts.java.

final String data\_center.DBConsts.Header.Feature.ID = "id" [static]

Definition at line 110 of file DBConsts.java.

final String data\_center.DBConsts.Header.Feature.START\_POS = "startpos" [static]

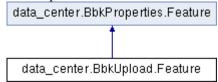
Definition at line 114 of file DBConsts.java.

final String data_center.DBConsts.Header.Feature.TITLE = "title" [static]	
Definition at line 111 of file DBConsts.java.	
final String data_center.DBConsts.Header.Feature.TYPE = "type" [static]	
Definition at line 112 of file DBConsts.java.	

DBConsts.java

## data\_center.BbkUpload.Feature Class Reference

Inheritance diagram for data\_center.BbkUpload.Feature:



#### **Public Member Functions**

<u>Feature</u> (String <u>ID</u>, String <u>title</u>, String <u>type</u>, String <u>direction</u>, String <u>startPos</u>, String <u>endPos</u>)
<u>Feature</u> (ResultSet resultSet) throws SQLException

#### **Public Attributes**

String ID

String title

String type

String <u>direction</u>

String startPos

String endPos

#### **Detailed Description**

Definition at line 144 of file BbkUpload.java.

#### **Constructor & Destructor Documentation**

data\_center.BbkUpload.Feature.Feature (String *ID*, String *title*, String *type*, String *direction*, String *startPos*, String *endPos*)

Definition at line 146 of file BbkUpload.java.

#### data\_center.BbkUpload.Feature.Feature (ResultSet resultSet) throws SQLException

Used to fill data from database when modify uploaded bbk

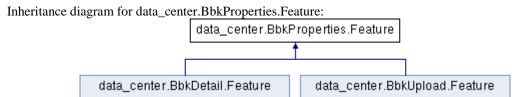
Definition at line 158 of file BbkUpload.java.

#### **Member Data Documentation**

String data_center.BbkProperties.Feature.direction[inherited]
Definition at line 47 of file BbkProperties.java.
String data_center.BbkProperties.Feature.endPos[inherited]
Definition at line 49 of file BbkProperties.java.
String data_center.BbkProperties.Feature.ID [inherited]
Definition at line 44 of file BbkProperties.java.
String data_center.BbkProperties.Feature.startPos[inherited]
Definition at line 48 of file BbkProperties.java.
String data_center.BbkProperties.Feature.title[inherited]
Definition at line 45 of file BbkProperties.java.
String data_center.BbkProperties.Feature.type[inherited]
Definition at line 46 of file BbkProperties.java.

BbkUpload.java

## data\_center.BbkProperties.Feature Class Reference



#### **Public Member Functions**

Feature ()

Feature (ResultSet resultSet) throws SQLException

#### **Public Attributes**

String ID

String title

String type

String direction

String startPos

String endPos

#### **Detailed Description**

Definition at line 42 of file BbkProperties.java.

#### **Constructor & Destructor Documentation**

#### data\_center.BbkProperties.Feature.Feature ()

Definition at line 51 of file BbkProperties.java.

#### data\_center.BbkProperties.Feature.Feature (ResultSet resultSet) throws SQLException

Definition at line 53 of file BbkProperties.java.

#### **Member Data Documentation**

String data_center.BbkProperties.Feature.direction
Definition at line 47 of file BbkProperties.java.
String data_center.BbkProperties.Feature.endPos
Definition at line 49 of file BbkProperties.java.
String data_center.BbkProperties.Feature.ID
Definition at line 44 of file BbkProperties.java.
String data_center.BbkProperties.Feature.startPos
Definition at line 48 of file BbkProperties.java.
String data_center.BbkProperties.Feature.title
Definition at line 45 of file BbkProperties.java.
String data_center.BbkProperties.Feature.type

Definition at line 46 of file BbkProperties.java.

BbkProperties.java

## data\_center.DBConsts.Header Class Reference

#### Classes

class Category

class DeepSub

class Feature

class Main

class Parameter

class SpecScar

class SpecSub

class Twin

#### **Detailed Description**

Definition at line 50 of file DBConsts.java.

The documentation for this class was generated from the following file:

DBConsts.java

## data\_center.HistoryList< T > Class Reference

#### **Public Member Functions**

void <u>putInItem</u> (T item) int <u>getCurrentItemNo</u> () T <u>getCurrentItem</u> () boolean <u>canRollBack</u> () boolean <u>canGoForward</u> () T <u>rollBack</u> () T <u>goForward</u> () void <u>clear</u> ()

#### **Detailed Description**

The class implements a history list contains roll back and go forward function.

Definition at line 6 of file HistoryList.java.

#### **Member Function Documentation**

#### boolean data\_center.HistoryList< T >.canGoForward ()

Definition at line 41 of file HistoryList.java.

#### boolean data\_center.HistoryList< T >.canRollBack ()

Definition at line 36 of file HistoryList.java.

#### void data\_center.HistoryList< T >.clear ()

Definition at line 76 of file HistoryList.java.

T data_center.HistoryList< T >.getCurrentItem ()
Definition at line 28 of file HistoryList.java.
int data_center.HistoryList< T >.getCurrentItemNo ()
Definition at line 23 of file HistoryList.java.
T data_center.HistoryList< T >.goForward ()
Definition at line 61 of file HistoryList.java.
<pre>void data_center.HistoryList&lt; T &gt;.putInItem (T item) Keeps the previous items and flush the following items.</pre>
Definition at line 12 of file HistoryList.java.
T data_center.HistoryList< T >.rollBack ()
Definition at line 46 of file HistoryList.java.
The documentation for this class was generated from the following file: <u>HistoryList.java</u>

## data\_center.SketchComponent.Label Class Reference

Inheritance diagram for data\_center.SketchComponent.Label:

data\_center.SketchComponent.Component

data\_center.SketchComponent.Label

#### **Public Member Functions**

<u>Label</u> (int theID, String <u>text</u>, Point pos, Font <u>font</u>, Color <u>color</u>)

Label toSubclass ()

String getString ()

void setString (String text)

Point getCenter ()

void setCenter (Point pos)

Font getFont ()

void setFont (Font font)

Color getColor ()

void setColor (Color color)

void display ()

Label toLabel ()

BioBrick toBioBrick ()

Protein toProtein ()

BackBone toBackBone ()

Relation to Relation ()

BioVector toBioVictor ()

Integer getSecondaryType ()

void <u>setSecondaryType</u> (Integer type)

Double <a href="mailto:getSize">getSize</a> ()

void setSize (double size)

ArrayList< Point > getCurve ()

void setCurve (ArrayList< Point > curve)

ArrayList< Integer > getChildren ()

void setChildren (ArrayList< Integer > children)

#### **Public Attributes**

String text

Point center

Font font

Color color

int ID

String <a href="mailto:primaryType">primaryType</a>

#### **Detailed Description**

Definition at line 102 of file SketchComponent.java.

#### **Constructor & Destructor Documentation**

data_	center.SketchComponent.Label.Label (int thel	D, String t	<i>text</i> , Point <i>pos</i>	s, Font <i>font</i>
Colo	color)			

Definition at line 110 of file SketchComponent.java.

#### **Member Function Documentation**

#### void data\_center.SketchComponent.Label.display ()

Definition at line 156 of file SketchComponent.java.

#### Point data\_center.SketchComponent.Label.getCenter ()

Definition at line 133 of file SketchComponent.java.

# ArrayList<Integer> data\_center.SketchComponent.Component.getChildren ()[inherited] bbkChildren in backBone, the IDs

Definition at line 88 of file SketchComponent.java.

## Color data\_center.SketchComponent.Label.getColor ()

Definition at line 149 of file SketchComponent.java.

#### ArrayList<Point> data\_center.SketchComponent.Component.getCurve ()[inherited]

Font data_center.SketchComponent.Label.getFont ()
Definition at line 141 of file SketchComponent.java.
Integer data_center.SketchComponent.Component.getSecondaryType () [inherited]
Definition at line 48 of file SketchComponent.java.
Double data_center.SketchComponent.Component.getSize () [inherited] length in <a href="BackBone">BackBone</a> , thickness in <a href="Relation">Relation</a> and scale in <a href="BioVector">BioVector</a>
Definition at line 77 of file SketchComponent.java.
String data_center.SketchComponent.Label.getString ()
Definition at line 125 of file SketchComponent.java.
void data_center.SketchComponent.Label.setCenter (Point pos)
Definition at line 137 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setChildren (ArrayList&lt; Integer &gt; children)[inherited]</pre>

Definition at line 82 of file SketchComponent.java.

Definition at line 91 of file SketchComponent.java.
void data_center.SketchComponent.Label.setColor (Color color)
Definition at line 153 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setCurve (ArrayList&lt; Point &gt; curve)[inherited]</pre>
Definition at line 85 of file SketchComponent.java.
void data_center.SketchComponent.Label.setFont (Font font)
Definition at line 145 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setSecondaryType (Integer type)[inherited]</pre>
Secondary type is defined in <a href="mailto:BbkType.Sketch">BbkType.Sketch</a>
Definition at line 52 of file SketchComponent.java.
void data_center.SketchComponent.Component.setSize (double size)[inherited]
Definition at line 80 of file SketchComponent.java.
void data_center.SketchComponent.Label.setString (String text)

\_

Definition at line 129 of file SketchComponent.java.

BackBone data_center.SketchComponent.Component.toBackBone ()[inherited]
Definition at line 35 of file SketchComponent.java.
BioBrick data_center.SketchComponent.Component.toBioBrick ()[inherited]
Definition at line 29 of file SketchComponent.java.
BioVector data_center.SketchComponent.Component.toBioVictor () [inherited]
Definition at line 41 of file SketchComponent.java.
<u>Label</u> data_center.SketchComponent.Component.toLabel ()[inherited]
Definition at line 26 of file SketchComponent.java.
Protein data_center.SketchComponent.Component.toProtein ()[inherited]
Definition at line 32 of file SketchComponent.java.
Relation data_center.SketchComponent.Component.toRelation ()[inherited]
Definition at line 38 of file SketchComponent.java.

<u>Label</u> data_center.SketchComponent.Label.toSubclass ()
Definition at line 121 of file SketchComponent.java.
Member Data Documentation
Point data_center.SketchComponent.Label.center
Definition at line 105 of file SketchComponent.java.
Color data_center.SketchComponent.Label.color
Definition at line 107 of file SketchComponent.java.
Font data_center.SketchComponent.Label.font
Definition at line 106 of file SketchComponent.java.
int data_center.SketchComponent.Component.ID[inherited]
Definition at line 12 of file SketchComponent.java.
String data_center.SketchComponent.Component.primaryType[inherited]
Definition at line 13 of file SketchComponent.java.

### String data\_center.SketchComponent.Label.text

Definition at line 104 of file SketchComponent.java.

The documentation for this class was generated from the following file:

SketchComponent.java

### data center.DBConsts.Header.Main Class Reference

### **Static Public Attributes**

```
static final String NAME = "part_name"
static final String TYPE = "part_type"
static final String <u>AUTHOR</u> = "part_author"
static final String <a href="ENTER_DATE">ENTER_DATE</a> = "part_entered"
static final String SHORT_DESC = "part_short_desc"
static final String <u>URL</u> = "part_url"
static final String ID = "part_id"
static final String SHORT NAME = "part short name"
static final String <u>RELEASE STATUS</u> = "release_status"
static final String <a href="mailto:SAMPLE_STATUS">SAMPLE_STATUS</a> = "sample_status"
static final String RESULTS = "part results"
static final String <u>NICKNAME</u> = "part_nickname"
static final String <a href="PART_RATING">PART_RATING</a> = "part_rating"
static final String SEQUENCE = "sequence"
static final String <a href="SAMPLES">SAMPLES</a> = "samples"
static final String REFERENCES = "references"
static final String GROUPS = "groups"
static final String DNA STATUS = "DNA_status"
static final String GROUP_FAVOURITE = "Group_favorite"
static final String <u>DELETE THIS PART</u> = "delete_this_part"
static final String TOT CONFIRMED = "tot_confirmed"
static final String DETAIL_NOT_CONFIRMED = "detail_not_confirmed"
static final String AVERAGE STARS = "average stars"
static final String TOT_COMMENTS = "tot_comments"
static final String GOOGLE_ITEMS = "google_items"
static final String FIRST URL = "first_url"
static final String STATUS = "status"
static final String QUALITY = "quality"
static final String FEEDBACKS = "feedbacks"
static final String PUBLICATION = "publication"
static final String RATING = "rating"
```

### **Detailed Description**

Definition at line 52 of file DBConsts.java.

### **Member Data Documentation**

final String data\_center.DBConsts.Header.Main.AUTHOR = "part\_author" [static]

Definition at line 56 of file DBConsts.java.

final String data_center.DBConsts.Header.Main.AVERAGE_STARS = "average_stars" [static]
Definition at line 79 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.DELETE_THIS_PART = "delete_this_part" [static]
Definition at line 76 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.DETAIL_NOT_CONFIRMED = "detail_not_confirmed"[static]
Definition at line 78 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.DNA_STATUS = "DNA_status" [static]
Definition at line 72 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.ENTER_DATE = "part_entered" [static]
Definition at line 57 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.FEEDBACKS = "feedbacks" [static]
Definition at line 86 of file DBConsts.java.

final String data_center.DBConsts.Header.Main.FIRST_URL = "first_url" [static]
Definition at line 82 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.GOOGLE_ITEMS = "google_items" [static]
Definition at line 81 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.GROUP_FAVOURITE = "Group_favorite" [static]
Definition at line 73 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.GROUPS = "groups" [static]
Definition at line 71 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.ID = "part_id" [static]
Definition at line 61 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.NAME = "part_name" [static]
Definition at line 54 of file DBConsts.java.

```
final String data_center.DBConsts.Header.Main.NICKNAME = "part_nickname" [static]
    Definition at line 66 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.PART_RATING = "part_rating" [static]
    Definition at line 67 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.PUBLICATION = "publication" [static]
    Definition at line 87 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.QUALITY = "quality" [static]
    Definition at line 85 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.RATING = "rating" [static]
   Definition at line 88 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.REFERENCES = "references" [static]
    Definition at line 70 of file DBConsts.java.
```

# final String data\_center.DBConsts.Header.Main.RELEASE\_STATUS = "release\_status"[static] Definition at line 63 of file DBConsts.java. final String data\_center.DBConsts.Header.Main.RESULTS = "part\_results" [static] Definition at line 65 of file DBConsts.java. final String data\_center.DBConsts.Header.Main.SAMPLE\_STATUS = "sample\_status" [static] Definition at line 64 of file DBConsts.java. final String data\_center.DBConsts.Header.Main.SAMPLES = "samples" [static] Definition at line 69 of file DBConsts.java. final String data\_center.DBConsts.Header.Main.SEQUENCE = "sequence" [static] Definition at line 68 of file DBConsts.java. final String data\_center.DBConsts.Header.Main.SHORT\_DESC = "part\_short\_desc" [static] Definition at line 58 of file DBConsts.java.

final String data_center.DBConsts.Header.Main.SHORT_NAME = "part_short_name" [static]
Definition at line 62 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.STATUS = "status" [static]
Definition at line 84 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.TOT_COMMENTS = "tot_comments" [static]
Definition at line 80 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.TOT_CONFIRMED = "tot_confirmed" [static]
Definition at line 77 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.TYPE = "part_type" [static]
Definition at line 55 of file DBConsts.java.
final String data_center.DBConsts.Header.Main.URL = "part_url" [static]
Definition at line 59 of file DBConsts.java.

The documentation for this class was generated from the following file:

DBConsts.java

### data\_center.SketchProject.Operation Class Reference

### **Public Member Functions**

Operation (int ID, int opeType, int attType, Object pre, Object fol)
Operation generateReversedOp ()

### **Public Attributes**

int <u>ID</u>
int <u>operationType</u>
int <u>attributeType</u>
Object <u>previous</u> = null
Object <u>following</u> = null

### **Static Public Attributes**

```
static final int <u>ADD</u> = 1

static final int <u>REMOVE</u> = 2

static final int <u>MODIFY</u> = 3

static final int <u>TYPE COMPONENT</u> = 0

static final int <u>TYPE STRING</u> = 1

static final int <u>TYPE CENTER</u> = 2

static final int <u>TYPE FONT</u> = 3

static final int <u>TYPE COLOR</u> = 4

static final int <u>TYPE SIZE</u> = 5

static final int <u>TYPE NULL</u> = -1
```

### **Detailed Description**

Definition at line 38 of file SketchProject.java.

### **Constructor & Destructor Documentation**

data\_center.SketchProject.Operation.Operation (int *ID*, int *opeType*, int *attType*, Object *pre*, Object *fol*)

Definition at line 62 of file SketchProject.java.

### **Member Function Documentation**

Operation data\_center.SketchProject.Operation.generateReversedOp ()

D	efir	nition	at	line	71	οf	file	Sketc	hPro	iect is	ava

### **Member Data Documentation**

### final int data\_center.SketchProject.Operation.ADD = 1 [static]

Add component, not bbkName or sth like that

Definition at line 41 of file SketchProject.java.

### int data\_center.SketchProject.Operation.attributeType

Definition at line 58 of file SketchProject.java.

### Object data\_center.SketchProject.Operation.following = null

Definition at line 60 of file SketchProject.java.

### int data\_center.SketchProject.Operation.ID

Definition at line 56 of file SketchProject.java.

### final int data\_center.SketchProject.Operation.MODIFY = 3[static]

Definition at line 44 of file SketchProject.java.

### int data\_center.SketchProject.Operation.operationType

Definition at line 57 of file SketchProject.java.

### Object data\_center.SketchProject.Operation.previous = null

Definition at line 59 of file SketchProject.java.

### final int data\_center.SketchProject.Operation.REMOVE = 2[static]

Remove component, not bbkName or sth like that

Definition at line 43 of file SketchProject.java.

### final int data\_center.SketchProject.Operation.TYPE\_CENTER = 2[static]

Definition at line 49 of file SketchProject.java.

### final int data\_center.SketchProject.Operation.TYPE\_COLOR = 4[static]

Definition at line 51 of file SketchProject.java.

### final int data\_center.SketchProject.Operation.TYPE\_COMPONENT = 0 [static]

Definition at line 47 of file SketchProject.java.

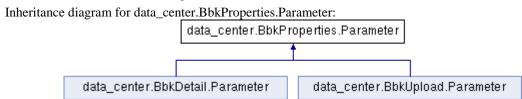
### final int data\_center.SketchProject.Operation.TYPE\_FONT = 3[static]

Definition at line 50 of file SketchProject.java.

final int data_center.SketchProject.Operation.TYPE_NULL = -1 [static]
Definition at line 53 of file SketchProject.java.
final int data_center.SketchProject.Operation.TYPE_SIZE = 5 [static]
Definition at line 52 of file SketchProject.java.
final int data_center.SketchProject.Operation.TYPE_STRING = 1 [static]
Definition at line 48 of file SketchProject.java.

The documentation for this class was generated from the following file: <u>SketchProject.java</u>

### data\_center.BbkProperties.Parameter Class Reference



### **Public Member Functions**

Parameter ()

<u>Parameter</u> (ResultSet resultSet) throws SQLException

### **Public Attributes**

String <u>name</u>

String value

String units

String <u>url</u>

String ID

String m date

String userID

String <u>userName</u>

### **Detailed Description**

Definition at line 64 of file BbkProperties.java.

### **Constructor & Destructor Documentation**

### data\_center.BbkProperties.Parameter.Parameter ()

Definition at line 75 of file BbkProperties.java.

# data\_center.BbkProperties.Parameter.Parameter (ResultSet resultSet) throws SQLException

Definition at line 77 of file BbkProperties.java.

### **Member Data Documentation**

### String data\_center.BbkProperties.Parameter.ID

Definition at line 70 of file BbkProperties.java.

### String data\_center.BbkProperties.Parameter.m\_date

Definition at line 71 of file BbkProperties.java.

### String data\_center.BbkProperties.Parameter.name

Definition at line 66 of file BbkProperties.java.

### String data\_center.BbkProperties.Parameter.units

Definition at line 68 of file BbkProperties.java.

### String data\_center.BbkProperties.Parameter.url

Definition at line 69 of file BbkProperties.java.

### String data\_center.BbkProperties.Parameter.userID

Definition at line 72 of file BbkProperties.java.

String data_center.BbkProperties.Parameter.userName
Definition at line 73 of file BbkProperties.java.
String data_center.BbkProperties.Parameter.value
Definition at line 67 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkProperties.java

### data\_center.DBConsts.Header.Parameter Class Reference

### **Static Public Attributes**

```
static final String NAME = "name"
static final String VALUE = "value"
static final String UNITS = "units"
static final String URL = "url"
static final String ID = "id"
static final String M DATE = "m_date"
static final String USER_ID = "user_id"
static final String USER_NAME = "user_name"
```

### **Detailed Description**

Definition at line 118 of file DBConsts.java.

### **Member Data Documentation**

final String data\_center.DBConsts.Header.Parameter.ID = "id" [static]

Definition at line 124 of file DBConsts.java.

final String data\_center.DBConsts.Header.Parameter.M\_DATE = "m\_date" [static]

Definition at line 125 of file DBConsts.java.

final String data\_center.DBConsts.Header.Parameter.NAME = "name" [static]

Definition at line 120 of file DBConsts.java.

final String data\_center.DBConsts.Header.Parameter.UNITS = "units" [static]

final String data_center.DBConsts.Header.Parameter.URL = "url" [static]
Definition at line 123 of file DBConsts.java.
final String data_center.DBConsts.Header.Parameter.USER_ID = "user_id" [static]
Definition at line 126 of file DBConsts.java.
final String data_center.DBConsts.Header.Parameter.USER_NAME = "user_name" [static]
Definition at line 127 of file DBConsts.java.

Definition at line 122 of file DBConsts.java.

The documentation for this class was generated from the following file:

Definition at line 121 of file DBConsts.java.

final String data\_center.DBConsts.Header.Parameter.VALUE = "value" [static]

DBConsts.java

### data\_center.BbkDetail.Parameter Class Reference

Inheritance diagram for data\_center.BbkDetail.Parameter:

data\_center.BbkProperties.Parameter

data\_center.BbkDetail.Parameter

### **Public Member Functions**

Parameter (ResultSet resultSet) throws SQLException

### **Public Attributes**

String name

String value

String <u>units</u>

String url

String ID

String m date

String <u>userID</u>

String <u>userName</u>

### **Detailed Description**

Definition at line 45 of file BbkDetail.java.

### **Constructor & Destructor Documentation**

data\_center.BbkDetail.Parameter.Parameter (ResultSet resultSet) throws SQLException

Definition at line 47 of file BbkDetail.java.

### **Member Data Documentation**

String data\_center.BbkProperties.Parameter.ID[inherited]

Definition at line 70 of file BbkProperties.java.

String data_center.BbkProperties.Parameter.m_date[inherited]
Definition at line 71 of file BbkProperties.java.
String data_center.BbkProperties.Parameter.name[inherited]
Definition at line 66 of file BbkProperties.java.
String data_center.BbkProperties.Parameter.units[inherited]
Definition at line 68 of file BbkProperties.java.
String data_center.BbkProperties.Parameter.url[inherited]
Definition at line 69 of file BbkProperties.java.
String data_center.BbkProperties.Parameter.userID [inherited]
Definition at line 72 of file BbkProperties.java.
String data_center.BbkProperties.Parameter.userName[inherited]
Definition at line 73 of file BbkProperties.java.

String data_center.BbkProperties.Parameter.value[inherited
--

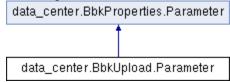
Definition at line 67 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkDetail.java

### data\_center.BbkUpload.Parameter Class Reference

 $Inheritance\ diagram\ for\ data\_cen\underline{ter.BbkUpload.Parameter:}$ 



### **Public Member Functions**

<u>Parameter</u> (String <u>name</u>, String <u>value</u>, String <u>units</u>, String <u>url</u>, String <u>ID</u>, String <u>userName</u>) <u>Parameter</u> (ResultSet resultSet) throws SQLException

### **Public Attributes**

String <u>name</u>

String value

String units

String <u>url</u>

String ID

String m date

String userID

String <u>userName</u>

### **Detailed Description**

Definition at line 162 of file BbkUpload.java.

### **Constructor & Destructor Documentation**

data\_center.BbkUpload.Parameter.Parameter (String *name*, String *value*, String *units*, String *url*, String *ID*, String *userName*)

Definition at line 164 of file BbkUpload.java.

### data\_center.BbkUpload.Parameter.Parameter (ResultSet resultSet) throws SQLException

Used to fill data from database when modify uploaded bbk

Definition at line 179 of file BbkUpload.java.

### **Member Data Documentation**

# String data\_center.BbkProperties.Parameter.ID[inherited] Definition at line 70 of file BbkProperties.java. String data\_center.BbkProperties.Parameter.m\_date[inherited] Definition at line 71 of file BbkProperties.java. String data\_center.BbkProperties.Parameter.name[inherited] Definition at line 66 of file BbkProperties.java. String data\_center.BbkProperties.Parameter.units[inherited] Definition at line 68 of file BbkProperties.java. String data\_center.BbkProperties.Parameter.url[inherited] Definition at line 69 of file BbkProperties.java.

Definition at line 72 of file BbkProperties.java.

String data\_center.BbkProperties.Parameter.userID[inherited]

String data_center.BbkProperties.Parameter.userName[inherited]
Definition at line 73 of file BbkProperties.java.
String data_center.BbkProperties.Parameter.value[inherited]
Definition at line 67 of file BbkProperties.java.
The documentation for this class was generated from the following file: <u>BbkUpload.java</u>

### data\_center.BbkType.Sketch.Protein Class Reference

# Static Public Attributes static final int FACTOR = 0 static final int RECEPTER = 1 Detailed Description Definition at line 62 of file BbkType.java. Member Data Documentation final int data\_center.BbkType.Sketch.Protein.FACTOR = 0 [static] Definition at line 64 of file BbkType.java.

The documentation for this class was generated from the following file:

BbkType.java

Definition at line 65 of file BbkType.java.

### data\_center.SketchComponent.Protein Class Reference

Inheritance diagram for data\_center.SketchComponent.Protein:

data\_center.SketchComponent.Component

data\_center.SketchComponent.Protein

### **Public Member Functions**

Protein (int theID, int secondaryType, Point center, Color color)

Protein toSubclass ()

Integer getSecondaryType ()

void <a href="mailto:setSecondaryType">setSecondaryType</a> (Integer type)

Point getCenter ()

void setCenter (Point pos)

Color getColor ()

void setColor (Color color)

void display ()

Label toLabel ()

BioBrick toBioBrick ()

Protein toProtein ()

BackBone toBackBone ()

Relation to Relation ()

BioVector toBioVictor ()

String getString ()

void setString (String str)

Font getFont ()

void setFont (Font font)

Double <a href="mailto:getSize">getSize</a> ()

void setSize (double size)

ArrayList< Point > getCurve ()

void setCurve (ArrayList< Point > curve)

ArrayList< Integer > getChildren ()

void <a href="mailto:setChildren">setChildren</a> (ArrayList< Integer > children)

### **Public Attributes**

int secondaryType

Point center

Color color

int ID

String <a href="mailto:primaryType">primaryType</a>

### **Detailed Description**

Definition at line 243 of file SketchComponent.java.

### **Constructor & Destructor Documentation**

data_center.SketchComponent.Protein.Protein (int theID, int secondaryType, Point center, Color color)
Definition at line 250 of file SketchComponent.java.
Member Function Documentation
void data_center.SketchComponent.Protein.display ()
Definition at line 287 of file SketchComponent.java.
Point data_center.SketchComponent.Protein.getCenter ()
Definition at line 272 of file SketchComponent.java.
ArrayList <integer> data_center.SketchComponent.Component.getChildren () [inherited] bbkChildren in backBone, the IDs</integer>
Definition at line 88 of file SketchComponent.java.

 ${\bf Color\ data\_center.SketchComponent.Protein.getColor\ ()}$ 

Definition at line 280 of file SketchComponent.java.

ArrayList<Point> data\_center.SketchComponent.Component.getCurve ()[inherited]

- ~		~ -		~		
Definition	at line	82 of	file	Sketch(	Component.iava.	

### Font data\_center.SketchComponent.Component.getFont ()[inherited]

Definition at line 66 of file SketchComponent.java.

### Integer data\_center.SketchComponent.Protein.getSecondaryType ()

Definition at line 264 of file SketchComponent.java.

### Double data\_center.SketchComponent.Component.getSize () [inherited]

length in <u>BackBone</u>, thickness in <u>Relation</u> and scale in <u>BioVector</u>

Definition at line 77 of file SketchComponent.java.

### String data\_center.SketchComponent.Component.getString ()[inherited]

text for **Label**, and bbkName for **BioBrick** 

Definition at line 55 of file SketchComponent.java.

### void data\_center.SketchComponent.Protein.setCenter (Point pos)

Definition at line 276 of file SketchComponent.java.

# void data\_center.SketchComponent.Component.setChildren (ArrayList< Integer > children)[inherited]

Definition at line 91 of file SketchComponent.java.
void data_center.SketchComponent.Protein.setColor (Color color)
Definition at line 284 of file SketchComponent.java.
<pre>void data_center.SketchComponent.Component.setCurve (ArrayList&lt; Point &gt; curve)[inherited]</pre>
Definition at line 85 of file SketchComponent.java.
void data_center.SketchComponent.Component.setFont (Font font)[inherited]
Definition at line 69 of file SketchComponent.java.
void data_center.SketchComponent.Protein.setSecondaryType (Integer <i>type</i> )
Definition at line 268 of file SketchComponent.java.
void data_center.SketchComponent.Component.setSize (double size)[inherited]

void data\_center.SketchComponent.Component.setString (String str)[inherited]
text for <u>Label</u>, and bbkName for <u>BioBrick</u>

Definition at line 59 of file SketchComponent.java.

Definition at line 80 of file SketchComponent.java.

<u>BackBone</u> data_center.SketchComponent.Component.toBackBone ()[inherited]
Definition at line 35 of file SketchComponent.java.
BioBrick data_center.SketchComponent.Component.toBioBrick ()[inherited]
Definition at line 29 of file SketchComponent.java.
BioVector data_center.SketchComponent.Component.toBioVictor () [inherited]
Definition at line 41 of file SketchComponent.java.
<u>Label</u> data_center.SketchComponent.Component.toLabel ()[inherited]
Definition at line 26 of file SketchComponent.java.
Protein data_center.SketchComponent.Component.toProtein ()[inherited]
Definition at line 32 of file SketchComponent.java.
Relation data_center.SketchComponent.Component.toRelation ()[inherited]
Definition at line 38 of file SketchComponent.java.

Protein data_center.SketchComponent.Protein.toSubclass ()
Definition at line 260 of file SketchComponent.java.
Member Data Documentation
Point data_center.SketchComponent.Protein.center
Definition at line 246 of file SketchComponent.java.
Color data_center.SketchComponent.Protein.color
Definition at line 247 of file SketchComponent.java.
int data_center.SketchComponent.Component.ID[inherited]
Definition at line 12 of file SketchComponent.java.
String data_center.SketchComponent.Component.primaryType[inherited]
Definition at line 13 of file SketchComponent.java.
int data_center.SketchComponent.Protein.secondaryType
Definition at line 245 of file SketchComponent.java.

The documentation for this class was generated from the following file:

SketchComponent.java

### data\_center.BbkOutline.Rating Class Reference

### **Public Member Functions**

Rating (ResultSet resultSet) throws SQLException
int getScore ()
int getScore (double status\_weight, double quality\_weight, double feedbacks\_weight, double publication\_weight)
void display ()

### **Public Attributes**

String rating
String status
String quality
String feedbacks
String publication
String delete this part
String tot\_confirmed
String detail\_not\_confirmed
String average stars
String tot\_commets
String google\_items

### **Detailed Description**

String first url

The rating by EasyBbk, evaluation criteria from both official web page and criteria by SJTU-software.

Definition at line 77 of file BbkOutline.java.

### **Constructor & Destructor Documentation**

data\_center.BbkOutline.Rating.Rating (ResultSet resultSet) throws SQLException

Definition at line 93 of file BbkOutline.java.

### **Member Function Documentation**

### void data\_center.BbkOutline.Rating.display ()

Print main attributes in cmd for testing.

int data_center.BbkOutline.Rating.getScore ()
Definition at line 110 of file BbkOutline.java.
int data_center.BbkOutline.Rating.getScore (double <i>status_weight</i> , double <i>quality_weight</i> , double <i>feedbacks_weight</i> , double <i>publication_weight</i> )
Definition at line 118 of file BbkOutline.java.
Member Data Documentation
String data_center.BbkOutline.Rating.average_stars
Definition at line 88 of file BbkOutline.java.
String data_center.BbkOutline.Rating.delete_this_part
Definition at line 85 of file BbkOutline.java.
String data_center.BbkOutline.Rating.detail_not_confirmed
Definition at line 87 of file BbkOutline.java.
String data_center.BbkOutline.Rating.feedbacks

Definition at line 134 of file BbkOutline.java.

Definition at line 82 of file BbkOutline.java	a.
String data_center.BbkOutline.Rating.fir	st_url

# String data\_center.BbkOutline.Rating.google\_items

Definition at line 90 of file BbkOutline.java.

Definition at line 91 of file BbkOutline.java.

### String data\_center.BbkOutline.Rating.publication

Definition at line 83 of file BbkOutline.java.

### String data\_center.BbkOutline.Rating.quality

Definition at line 81 of file BbkOutline.java.

### String data\_center.BbkOutline.Rating.rating

Definition at line 79 of file BbkOutline.java.

### String data\_center.BbkOutline.Rating.status

Definition at line 80 of file BbkOutline.java.

String data_center.BbkOutline.Rating.tot_commets
Definition at line 89 of file BbkOutline.java.
String data_center.BbkOutline.Rating.tot_confirmed
Definition at line 86 of file BbkOutline.java.

The documentation for this class was generated from the following file:

BbkOutline.java

### data\_center.DBConsts.Rating Class Reference

### **Static Public Attributes**

```
static final double <u>STATUS DEFAULT WEIGHT</u> = 0.2 static final double <u>QUALITY DEFAULT WEIGHT</u> = 0.12 static final double <u>FEEDBACKS DEFAULT WEIGHT</u> = 0.48 static final double <u>PUBLICATION DEFAULT WEIGHT</u> = 0.2 static final double <u>STATUS_TOTAL_POINTS</u> = 1 static final double <u>QUALITY TOTAL_POINTS</u> = 0.6 static final double <u>FEEDBACKS_TOTAL_POINTS</u> = 2.4 static final double <u>PUBLICATION_TOTAL_POINTS</u> = 1 static final double <u>TOTAL_POINTS</u> = 5
```

### **Detailed Description**

Store the total score and default weight set in database

Definition at line 32 of file DBConsts.java.

### **Member Data Documentation**

final double data\_center.DBConsts.Rating.FEEDBACKS\_DEFAULT\_WEIGHT = 0.48[static]

Definition at line 37 of file DBConsts.java.

final double data\_center.DBConsts.Rating.FEEDBACKS\_TOTAL\_POINTS = 2.4 [static]

Definition at line 43 of file DBConsts.java.

final double data\_center.DBConsts.Rating.PUBLICATION\_DEFAULT\_WEIGHT = 0.2[static]

Definition at line 38 of file DBConsts.java.

final double data_center.DBConsts.Rating.PUBLICATION_TOTAL_POINTS = 1 [static]
Definition at line 44 of file DBConsts.java.
final double data_center.DBConsts.Rating.QUALITY_DEFAULT_WEIGHT = 0.12 [static]
Definition at line 36 of file DBConsts.java.
final double data_center.DBConsts.Rating.QUALITY_TOTAL_POINTS = 0.6 [static]
Definition at line 42 of file DBConsts.java.
final double data_center.DBConsts.Rating.STATUS_DEFAULT_WEIGHT = 0.2 [static]
Definition at line 35 of file DBConsts.java.
final double data_center.DBConsts.Rating.STATUS_TOTAL_POINTS = 1 [static]
Definition at line 41 of file DBConsts.java.
final double data_center.DBConsts.Rating.TOTAL_POINTS = 5 [static]
Definition at line 46 of file DBConsts.java.

The documentation for this class was generated from the following file:

DBConsts.java

# data\_center.BbkType.Sketch.Relation Class Reference

# **Static Public Attributes**

static final int <u>PROMOTE</u> = 1 static final int <u>SUPPRESS</u> = 2 static final int <u>OTHER</u> = 0

# **Detailed Description**

Definition at line 74 of file BbkType.java.

### **Member Data Documentation**

final int data\_center.BbkType.Sketch.Relation.OTHER = 0[static]

Definition at line 78 of file BbkType.java.

final int data\_center.BbkType.Sketch.Relation.PROMOTE = 1[static]

Definition at line 76 of file BbkType.java.

final int data\_center.BbkType.Sketch.Relation.SUPPRESS = 2[static]

Definition at line 77 of file BbkType.java.

The documentation for this class was generated from the following file:

BbkType.java

# data\_center.SketchComponent.Relation Class Reference

Inheritance diagram for data\_center.SketchComponent.Relation:

data\_center.SketchComponent.Component

data\_center.SketchComponent.Relation

#### **Public Member Functions**

Relation (int theID, int secondaryType, ArrayList< Point > list, Color color, int thickness)

Relation toSubclass ()

Integer getSecondaryType ()

void <a href="mailto:setSecondaryType">setSecondaryType</a> (Integer type)

ArrayList< Point > getCurve ()

void setCurve (ArrayList< Point > curve)

Color getColor ()

void setColor (Color color)

Double getSize ()

void setSize (double thickness)

void display ()

Label toLabel ()

BioBrick toBioBrick ()

Protein toProtein ()

BackBone toBackBone ()

Relation to Relation ()

BioVector toBioVictor ()

String getString ()

void setString (String str)

Point getCenter ()

void setCenter (Point center)

Font getFont ()

void setFont (Font font)

ArrayList< Integer > getChildren ()

void <a href="mailto:setChildren">setChildren</a> (ArrayList< Integer > children)

# **Public Attributes**

int secondaryType

ArrayList< Point > posList

Color color

int thickness

int ID

String primaryType

# **Detailed Description**

Definition at line 358 of file SketchComponent.java.

# **Constructor & Destructor Documentation**

data_center.SketchComponent.Relation.Relation (int <i>theID</i> , int <i>secondaryType</i> , ArrayList< Point > <i>list</i> , Color <i>color</i> , int <i>thickness</i> )		
Definition at line 365 of file SketchComponent.java.		
Member Function Documentation		
void data_center.SketchComponent.Relation.display ()		
Definition at line 411 of file SketchComponent.java.		
Point data_center.SketchComponent.Component.getCenter ()[inherited]		
Definition at line 61 of file SketchComponent.java.		
ArrayList <integer> data_center.SketchComponent.Component.getChildren () [inherited] bbkChildren in backBone, the IDs</integer>		
Definition at line 88 of file SketchComponent.java.		
Color data_center.SketchComponent.Relation.getColor ()		
Definition at line 396 of file SketchComponent.java.		

ArrayList<Point> data\_center.SketchComponent.Relation.getCurve ()

Definition at line 388 of file SketchComponent.java.
Font data_center.SketchComponent.Component.getFont ()[inherited]
Definition at line 66 of file SketchComponent.java.
Integer data_center.SketchComponent.Relation.getSecondaryType ()
Definition at line 380 of file SketchComponent.java.
Double data_center.SketchComponent.Relation.getSize ()
Definition at line 404 of file SketchComponent.java.
String data_center.SketchComponent.Component.getString ()[inherited] text for <u>Label</u> , and bbkName for <u>BioBrick</u>
Definition at line 55 of file SketchComponent.java.
void data_center.SketchComponent.Component.setCenter (Point center)[inherited]

void data\_center.SketchComponent.Component.setChildren (ArrayList< Integer >

Definition at line 64 of file SketchComponent.java.

children)[inherited]

Definition at line 91 of file SketchComponent.java.
void data_center.SketchComponent.Relation.setColor (Color color)
Definition at line 400 of file SketchComponent.java.
void data_center.SketchComponent.Relation.setCurve (ArrayList< Point > curve)
Definition at line 392 of file SketchComponent.java.
void data_center.SketchComponent.Component.setFont (Font font)[inherited]
Definition at line 69 of file SketchComponent.java.
void data_center.SketchComponent.Relation.setSecondaryType (Integer <i>type</i> )
Definition at line 384 of file SketchComponent.java.

void data\_center.SketchComponent.Relation.setSize (double thickness)

Definition at line 408 of file SketchComponent.java.

void data\_center.SketchComponent.Component.setString (String str)[inherited]
text for <u>Label</u>, and bbkName for <u>BioBrick</u>

Definition at line 59 of file SketchComponent.java.

<u>BackBone</u> data_center.SketchComponent.Component.toBackBone ()[inherited]
Definition at line 35 of file SketchComponent.java.
BioBrick data_center.SketchComponent.Component.toBioBrick ()[inherited]
Definition at line 29 of file SketchComponent.java.
BioVector data_center.SketchComponent.Component.toBioVictor () [inherited]
Definition at line 41 of file SketchComponent.java.
<u>Label</u> data_center.SketchComponent.Component.toLabel () [inherited]
Definition at line 26 of file SketchComponent.java.
Protein data_center.SketchComponent.Component.toProtein ()[inherited]
Definition at line 32 of file SketchComponent.java.
Relation data_center.SketchComponent.Component.toRelation ()[inherited]
Definition at line 38 of file SketchComponent.java.

Relation data_center.SketchComponent.Relation.toSubclass ()		
Definition at line 376 of file SketchComponent.java.		
Member Data Documentation		
Color data_center.SketchComponent.Relation.color		
Definition at line 362 of file SketchComponent.java.		
int data_center.SketchComponent.Component.ID[inherited]		
Definition at line 12 of file SketchComponent.java.		
ArrayList <point> data_center.SketchComponent.Relation.posList</point>		
Definition at line 361 of file SketchComponent.java.		
String data_center.SketchComponent.Component.primaryType[inherited]		
Definition at line 13 of file SketchComponent.java.		
int data_center.SketchComponent.Relation.secondaryType		
Definition at line 360 of file SketchComponent.java.		

# int data\_center.SketchComponent.Relation.thickness

Definition at line 363 of file SketchComponent.java.

The documentation for this class was generated from the following file:

SketchComponent.java

# data\_center.SearchCenter Class Reference

# **Public Member Functions**

SearchCenter ()

boolean <a href="mailto:canRollBack">canRollBack</a> ()

boolean <a href="mailto:canGoForward">canGoForward</a> ()

 $SearchResultList\ \underline{getCurrentRawSearchResultList}\ ()$ 

SearchResultList search (String keyword)

SearchResultList <u>blast</u> (String input, int mode)

BbkDetail getDetail (String bbkName)

SearchResultList rollBack ()

SearchResultList goForward ()

#### **Public Attributes**

HistoryList < SearchResultList > historyList

# **Detailed Description**

Provide functions about searching database by SJTU-software. Can search by keyword, blast by sequence, get detail by name.

Definition at line 5 of file SearchCenter.java.

# **Constructor & Destructor Documentation**

data\_center.SearchCenter.SearchCenter ()

Definition at line 9 of file SearchCenter.java.

# **Member Function Documentation**

SearchResultList data\_center.SearchCenter.blast (String input, int mode)

Definition at line 38 of file SearchCenter.java.

boolean data_center.SearchCenter.canGoForward ()		
Definition at line 20 of file SearchCenter.java.		
boolean data_center.SearchCenter.canRollBack ()		
Definition at line 15 of file SearchCenter.java.		
SearchResultList data_center.SearchCenter.getCurrentRawSearchResultList ()		
Definition at line 26 of file SearchCenter.java.		
BbkDetail data_center.SearchCenter.getDetail (String bbkName)		
Definition at line 45 of file SearchCenter.java.		
SearchResultList data_center.SearchCenter.goForward ()		
Definition at line 55 of file SearchCenter.java.		
SearchResultList data_center.SearchCenter.rollBack ()		
Definition at line 50 of file SearchCenter.java.		

SearchResultList data_center.SearchCenter.search (String keyword)	
Definition at line 31 of file SearchCenter.java.	
Member Data Documentation	
HistoryList <searchresultlist> data_center.SearchCenter.historyList</searchresultlist>	
Definition at line 7 of file SearchCenter.java.	

The documentation for this class was generated from the following file:

SearchCenter.java

# data\_center.BbkType.Sketch Class Reference

# **Classes**

```
class BackBone
class BioBrick
class Protein
class Relation
class Vector
```

# **Static Public Attributes**

```
static final int <u>LABEL</u> = 1
static final int <u>BIO_BRICK</u> = 2
static final int <u>PROTEIN</u> = 3
static final int <u>BACKBONE</u> = 4
static final int <u>RELATION</u> = 5
static final int <u>VECTOR</u> = 6
```

# **Detailed Description**

The types defined in the sketch function in EasyBbk.

Definition at line 43 of file BbkType.java.

#### **Member Data Documentation**

final int data\_center.BbkType.Sketch.BACKBONE = 4[static]

Definition at line 48 of file BbkType.java.

final int data\_center.BbkType.Sketch.BIO\_BRICK = 2[static]

Definition at line 46 of file BbkType.java.

final int data\_center.BbkType.Sketch.LABEL = 1[static]

Definition at line 45 of file BbkType.java.

final int data_center.BbkType.Sketch.PROTEIN = 3 [static]	
Definition at line 47 of file BbkType.java.	
final int data_center.BbkType.Sketch.RELATION = 5[static]	
Definition at line 49 of file BbkType.java.	
final int data_center.BbkType.Sketch.VECTOR = 6[static]	
Definition at line 50 of file BbkType.java.	
The documentation for this class was generated from the following file: <u>BbkType.java</u>	

# data\_center.SketchCenter Class Reference

### **Public Member Functions**

<u>SketchProject switchCurrentProjectTo</u> (String projectName)

SketchProject newProject ()

void closeProject (String projectName)

void <a href="mailto:saveProject"><u>saveProject</u></a> (String filePath)

SketchProject loadProject (String filePath)

String[] getAllProjectNames ()

BbkOutline assignBbkOutlineToBioBrick (String bbkName, BioBrick biobrick)

BbkUpload generateBbkUploadFromBackBone (BackBone backbone)

### **Public Attributes**

SketchProject currentProject = null

ArrayList< SketchProject > projectList = new ArrayList<SketchProject>()

# **Detailed Description**

This class contains all of the operations of the sketch project. Further operation inside a project can be accessed by the reference of a <u>SketchProject</u> instance. Please note that the new, save, load all aim at the current project, which need no specification of the project name of its reference. To operate on another project? you may use the <u>switchCurrentProjectTo()</u> function.

Definition at line 13 of file SketchCenter.java.

### **Member Function Documentation**

# <u>BbkOutline</u> data\_center.SketchCenter.assignBbkOutlineToBioBrick (String *bbkName*, <u>BioBrick</u> *biobrick*)

Assign a <u>BbkOutline</u> to a <u>SketchComponent.BioBrick</u>, specified by part\_name. If the database doesn't have such name, a null will be returned.

Definition at line 80 of file SketchCenter.java.

# void data center.SketchCenter.closeProject (String projectName)

Close a project which can be either current project or not. Pass a null to represent current project.

Definition at line 40 of file SketchCenter.java.

# <u>BbkUpload</u> data\_center.SketchCenter.generateBbkUploadFromBackBone (<u>BackBone</u> backbone)

Upload the newly designed biobrick to the database by SJTU-software! This function generates a <u>BbkUpload</u> instance to start this process.

Definition at line 88 of file SketchCenter.java.

# String [] data\_center.SketchCenter.getAllProjectNames ()

Definition at line 70 of file SketchCenter.java.

# SketchProject data\_center.SketchCenter.loadProject (String filePath)

Load a project that will OVERWRITE CURRENT project

Definition at line 64 of file SketchCenter.java.

# <u>SketchProject</u> data\_center.SketchCenter.newProject ()

Definition at line 31 of file SketchCenter.java.

# void data\_center.SketchCenter.saveProject (String filePath)

Save the CURRENT project

Definition at line 56 of file SketchCenter.java.

# **<u>SketchProject</u>** data\_center.SketchCenter.switchCurrentProjectTo (String *projectName*)

Switch current project to a new one to execute new, save, load operation on it.

Definition at line 20 of file SketchCenter.java.

# **Member Data Documentation**

<u>SketchProject</u> data\_center.SketchCenter.currentProject = null

Definition at line 15 of file SketchCenter.java.

ArrayList<<u>SketchProject</u>> data\_center.SketchCenter.projectList = new ArrayList<<u>SketchProject</u>>()

Definition at line 16 of file SketchCenter.java.

The documentation for this class was generated from the following file:

SketchCenter.java

# data\_center.SketchComponent Class Reference

# Classes

class BackBone

class BioBrick

class BioVector

class Component

class Label

class Protein

class Relation

# **Detailed Description**

Definition at line 8 of file SketchComponent.java.

The documentation for this class was generated from the following file: SketchComponent.java

# data\_center.SketchProject Class Reference

### Classes

class Operation

#### **Public Member Functions**

SketchProject (String name)

Component findComponentByID (int ID)

BackBone findBackBoneInBackBoneListByID (int ID)

void addComponent (Component component)

void delComponent (Component component)

void modifyComponent (int theID, int attributeType, Object folAttribute)

void <a href="mailto:onAbsorb">onAbsorb</a> (int backBoneID, int bbkID, int index)

void onDesorb (int backBoneID, int bbkID)

Operation ctrlZ ()

Operation ctrlY ()

void displayComponents ()

void <a href="mailto:saveIntoFile"><u>saveIntoFile</u></a> (String filePath)

void loadFromFile (String filePath)

void <a>SaveIntoFile</a> (String filePath, ArrayList</a> Component > List3)

ArrayList< Component > LoadFromFile (String filePath) throws Exception

# **Static Public Member Functions**

static void callWriteXmlFile (Document doc, Writer w, String encoding)

### **Public Attributes**

String <u>name</u>

ArrayList< Component > componentList = new ArrayList<Component>()

ArrayList< BackBone > backBoneList = new ArrayList<BackBone>()

HistoryList< Operation > operationHistory = new HistoryList< Operation > ()

boolean modified = false

### **Detailed Description**

This class provides project operations include add, remove, modify components, ctrlZ, ctrlY function and save & load.

Definition at line 36 of file SketchProject.java.

# **Constructor & Destructor Documentation**

data\_center.SketchProject.SketchProject (String name)

Definition at line 125 of file SketchProject.java.

### **Member Function Documentation**

# void data\_center.SketchProject.addComponent (Component component)

Registration function, receive the user operation and remember it in the backstage.

Definition at line 151 of file SketchProject.java.

# static void data\_center.SketchProject.callWriteXmlFile (Document doc, Writer w, String encoding)[static]

Definition at line 585 of file SketchProject.java.

# Operation data\_center.SketchProject.ctrlY ()

Guidance function, guide the GUI the operation from the history list. No registration is needed since the operation is not read from the user.

Definition at line 246 of file SketchProject.java.

# Operation data\_center.SketchProject.ctrlZ ()

Guidance function, guide the GUI the operation from the history list. No registration is needed since the operation is not read from the user.

Definition at line 232 of file SketchProject.java.

# void data\_center.SketchProject.delComponent (Component component)

Registration function, receive the user operation and remember it in the backstage.

Definition at line 164 of file SketchProject.java.

### void data\_center.SketchProject.displayComponents ()

Definition at line 257 of file SketchProject.java.

# BackBone data\_center.SketchProject.findBackBoneInBackBoneListByID (int ID)

Definition at line 140 of file SketchProject.java.

# Component data\_center.SketchProject.findComponentByID (int ID)

Definition at line 131 of file SketchProject.java.

# void data\_center.SketchProject.loadFromFile (String filePath)

Load the project graph from XML file, note that the project.name will be specified after the file name.

Definition at line 364 of file SketchProject.java.

# ArrayList<Component> data\_center.SketchProject.LoadFromFile (String *filePath*) throws Exception

Definition at line 813 of file SketchProject.java.

# void data\_center.SketchProject.modifyComponent (int thelD, int attributeType, Object folAttribute)

Registration function, receive the user operation and remember it in the backstage. The attributeType should be picked from Operation.TYPE\_XXX. The folAttribute is the attribute changed into, such as Point, Color

Definition at line 178 of file SketchProject.java.

# void data\_center.SketchProject.onAbsorb (int backBoneID, int bbkID, int index)

Registration function, receive the user operation and remember it in the backstage.

Definition at line 207 of file SketchProject.java.

# void data\_center.SketchProject.onDesorb (int backBoneID, int bbkID)

Registration function, receive the user operation and remember it in the backstage.

Definition at line 218 of file SketchProject.java.

# void data\_center.SketchProject.saveIntoFile (String filePath)

Save the project graph into XML file, note that the project.name will be specified after the file name.

Definition at line 329 of file SketchProject.java.

# void data\_center.SketchProject.SaveIntoFile (String filePath, ArrayList< Component > List3)

Definition at line 600 of file SketchProject.java.

# **Member Data Documentation**

ArrayList<<u>BackBone</u>> data\_center.SketchProject.backBoneList = new ArrayList<<u>BackBone</u>>()

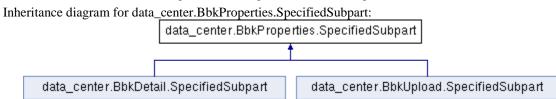
Definition at line 119 of file SketchProject.java.

ArrayList <component> data_center.SketchProject.componentList = new ArrayList<component>()</component></component>
Definition at line 118 of file SketchProject.java.
boolean data_center.SketchProject.modified = false
Definition at line 122 of file SketchProject.java.
String data_center.SketchProject.name
Definition at line 116 of file SketchProject.java.
HistoryList< <u>Operation</u> > data_center.SketchProject.operationHistory = new HistoryList< <u>Operation</u> >()
Definition at line 120 of file SketchProject.java.

The documentation for this class was generated from the following file:

SketchProject.java

# data\_center.BbkProperties.SpecifiedSubpart Class Reference



### **Public Member Functions**

SpecifiedSubpart ()

<u>SpecifiedSubpart</u> (ResultSet resultSet) throws SQLException

# **Public Attributes**

String **ID** 

String name

String shortDesc

String type

String <u>nickname</u>

# **Detailed Description**

Definition at line 90 of file BbkProperties.java.

#### **Constructor & Destructor Documentation**

data\_center.BbkProperties.SpecifiedSubpart.SpecifiedSubpart ()

Definition at line 98 of file BbkProperties.java.

data\_center.BbkProperties.SpecifiedSubpart.SpecifiedSubpart (ResultSet resultSet) throws SQLException

Definition at line 100 of file BbkProperties.java.

Member Data Documentation
String data_center.BbkProperties.SpecifiedSubpart.ID
Definition at line 92 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubpart.name
Definition at line 93 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubpart.nickname
Definition at line 96 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubpart.shortDesc
Definition at line 94 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubpart.type
Definition at line 95 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkProperties.java

# data\_center.BbkDetail.SpecifiedSubpart Class Reference

 $Inheritance\ diagram\ for\ data\_center. BbkDetail. Specified Subpart:$ 

data\_center.BbkProperties.SpecifiedSubpart

data\_center.BbkDetail.SpecifiedSubpart

# **Public Member Functions**

SpecifiedSubpart (ResultSet resultSet) throws SQLException

### **Public Attributes**

String ID

String <u>name</u>

 $String \ \underline{shortDesc}$ 

String type

String nickname

# **Detailed Description**

Definition at line 51 of file BbkDetail.java.

# **Constructor & Destructor Documentation**

data\_center.BbkDetail.SpecifiedSubpart.SpecifiedSubpart (ResultSet resultSet) throws SQLException

Definition at line 53 of file BbkDetail.java.

#### **Member Data Documentation**

String data\_center.BbkProperties.SpecifiedSubpart.ID[inherited]

Definition at line 92 of file BbkProperties.java.

String data_center.BbkProperties.SpecifiedSubpart.name[inherited]	
Definition at line 93 of file BbkProperties.java.	
String data_center.BbkProperties.SpecifiedSubpart.nickname[inherited]	
Definition at line 96 of file BbkProperties.java.	
String data_center.BbkProperties.SpecifiedSubpart.shortDesc[inherited]	
Definition at line 94 of file BbkProperties.java.	
String data_center.BbkProperties.SpecifiedSubpart.type[inherited]	
Definition at line 95 of file BbkProperties.java.	
The documentation for this class was generated from the following file: <u>BbkDetail.java</u>	

# data\_center.BbkUpload.SpecifiedSubpart Class Reference



data\_center.BbkProperties.SpecifiedSubpart

data\_center.BbkUpload.SpecifiedSubpart

### **Public Member Functions**

<u>SpecifiedSubpart</u> (<u>BbkDetail</u> bbkDetail) <u>SpecifiedSubpart</u> (ResultSet resultSet) throws SQLException

# **Public Attributes**

String ID
String name
String shortDesc
String type
String nickname

# **Detailed Description**

Definition at line 199 of file BbkUpload.java.

#### **Constructor & Destructor Documentation**

# data\_center.BbkUpload.SpecifiedSubpart.SpecifiedSubpart (BbkDetail bbkDetail)

Data collected from main

Definition at line 202 of file BbkUpload.java.

# data\_center.BbkUpload.SpecifiedSubpart.SpecifiedSubpart (ResultSet resultSet) throws SQLException

Definition at line 211 of file BbkUpload.java.

# **Member Data Documentation** String data\_center.BbkProperties.SpecifiedSubpart.ID [inherited] Definition at line 92 of file BbkProperties.java. String data\_center.BbkProperties.SpecifiedSubpart.name[inherited] Definition at line 93 of file BbkProperties.java. String data\_center.BbkProperties.SpecifiedSubpart.nickname[inherited] Definition at line 96 of file BbkProperties.java. String data\_center.BbkProperties.SpecifiedSubpart.shortDesc[inherited] Definition at line 94 of file BbkProperties.java. String data\_center.BbkProperties.SpecifiedSubpart.type[inherited]

The documentation for this class was generated from the following file: BbkUpload.java

Definition at line 95 of file BbkProperties.java.

# data\_center.BbkUpload.SpecifiedSubscar Class Reference

Inheritance diagram for data\_center.BbkUpload.SpecifiedSubscar:



### **Public Member Functions**

SpecifiedSubscar ()

SpecifiedSubscar (ResultSet resultSet) throws SQLException

# **Public Attributes**

String ID

String standard

String type

String name

String <u>nickname</u>

String comments

String sequence

# **Detailed Description**

Definition at line 215 of file BbkUpload.java.

# **Constructor & Destructor Documentation**

# data\_center.BbkUpload.SpecifiedSubscar.SpecifiedSubscar ()

Default subscar

Definition at line 218 of file BbkUpload.java.

# data\_center.BbkUpload.SpecifiedSubscar.SpecifiedSubscar (ResultSet resultSet) throws SQLException

Used to create a specified subscar instance. Can also fill data from database when modify uploaded bbk.

Definition at line 231 of file BbkUpload.java.

# **Member Data Documentation**

String data_center.BbkProperties.SpecifiedSubscar.comments[inherited]
Definition at line 117 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.ID[inherited]
Definition at line 112 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.name[inherited]
Definition at line 115 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.nickname[inherited]
Definition at line 116 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.sequence[inherited]
Definition at line 118 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.standard[inherited]

\_

Definition at line 113 of file BbkProperties.java.

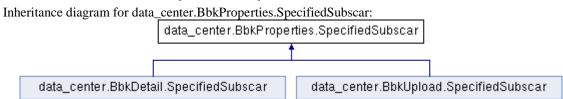
String data	center.BbkPro	perties.S	pecifiedSubscar.t	vpe	[inherited]

Definition at line 114 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkUpload.java

# data\_center.BbkProperties.SpecifiedSubscar Class Reference



### **Public Member Functions**

SpecifiedSubscar ()

SpecifiedSubscar (ResultSet resultSet) throws SQLException

# **Public Attributes**

String ID

String standard

String type

String name

String <u>nickname</u>

String comments

String sequence

# **Detailed Description**

Definition at line 110 of file BbkProperties.java.

# **Constructor & Destructor Documentation**

data\_center.BbkProperties.SpecifiedSubscar.SpecifiedSubscar()

Definition at line 120 of file BbkProperties.java.

data\_center.BbkProperties.SpecifiedSubscar.SpecifiedSubscar (ResultSet resultSet) throws SQLException

Definition at line 122 of file BbkProperties.java.

# **Member Data Documentation**

String data center.bokProperties.SpecifiedSubscar.comme	String data	bkProperties.SpecifiedSubscar.comments
---	-------------	--

Definition at line 117 of file BbkProperties.java.

# String data\_center.BbkProperties.SpecifiedSubscar.ID

Definition at line 112 of file BbkProperties.java.

# String data\_center.BbkProperties.SpecifiedSubscar.name

Definition at line 115 of file BbkProperties.java.

# $String\ data\_center. Bbk Properties. Specified Subscar. nick name$

Definition at line 116 of file BbkProperties.java.

# String data\_center.BbkProperties.SpecifiedSubscar.sequence

Definition at line 118 of file BbkProperties.java.

# String data\_center.BbkProperties.SpecifiedSubscar.standard

Definition at line 113 of file BbkProperties.java.

# String data\_center.BbkProperties.SpecifiedSubscar.type

Definition at line 114 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkProperties.java

## data\_center.BbkDetail.SpecifiedSubscar Class Reference

 $Inheritance\ diagram\ for\ data\_center. BbkDetail. Specified Subscar:$ 

data\_center.BbkProperties.SpecifiedSubscar

data\_center.BbkDetail.SpecifiedSubscar

### **Public Member Functions**

SpecifiedSubscar (ResultSet resultSet) throws SQLException

#### **Public Attributes**

String **ID** 

String standard

String type

String name

String <u>nickname</u>

String comments

String sequence

#### **Detailed Description**

Definition at line 57 of file BbkDetail.java.

### **Constructor & Destructor Documentation**

data\_center.BbkDetail.SpecifiedSubscar.SpecifiedSubscar (ResultSet resultSet) throws SQLException

Definition at line 59 of file BbkDetail.java.

#### **Member Data Documentation**

String data\_center.BbkProperties.SpecifiedSubscar.comments[inherited]

Definition at line 117 of file BbkProperties.java.

String data_center.BbkProperties.SpecifiedSubscar.ID[inherited]
Definition at line 112 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.name[inherited]
Definition at line 115 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.nickname[inherited]
Definition at line 116 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.sequence[inherited]
Definition at line 118 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.standard[inherited]
Definition at line 113 of file BbkProperties.java.
String data_center.BbkProperties.SpecifiedSubscar.type[inherited]
Definition at line 114 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkDetail.java

## data\_center.DBConsts.Header.SpecScar Class Reference

### **Static Public Attributes**

```
static final String ID = "scar_id" static final String STANDARD = "scar_standard" static final String TYPE = "scar_type" static final String NAME = "scar_name" static final String NICK_NAME = "scar_nickname" static final String COMMENTS = "scar_comments" static final String SEQUENCE = "scar_sequence"
```

#### **Detailed Description**

Definition at line 130 of file DBConsts.java.

#### **Member Data Documentation**

```
final String data_center.DBConsts.Header.SpecScar.COMMENTS =
"scar_comments" [static]
```

Definition at line 137 of file DBConsts.java.

final String data\_center.DBConsts.Header.SpecScar.ID = "scar\_id" [static]

Definition at line 132 of file DBConsts.java.

final String data\_center.DBConsts.Header.SpecScar.NAME = "scar\_name" [static]

Definition at line 135 of file DBConsts.java.

final String data\_center.DBConsts.Header.SpecScar.NICK\_NAME = "scar\_nickname" [static]

final String data_center.DBConsts.Header.SpecScar.SEQUENCE = "scar_sequence"[static]
Definition at line 138 of file DBConsts.java.
final String data_center.DBConsts.Header.SpecScar.STANDARD = "scar_standard"[static]
Definition at line 133 of file DBConsts.java.
final String data_center.DBConsts.Header.SpecScar.TYPE = "scar_type" [static]

The documentation for this class was generated from the following file:

Definition at line 136 of file DBConsts.java.

Definition at line 134 of file DBConsts.java.

DBConsts.java

## data\_center.DBConsts.Header.SpecSub Class Reference

### **Static Public Attributes**

```
static final String ID = "subpart_id" static final String NAME = "subpart_name" static final String SHORT DESC = "subpart_short_desc" static final String TYPE = "subpart_type" static final String NICKNAME = "subpart_nickname"
```

### **Detailed Description**

Definition at line 141 of file DBConsts.java.

#### **Member Data Documentation**

final String data\_center.DBConsts.Header.SpecSub.ID = "subpart\_id" [static]

Definition at line 143 of file DBConsts.java.

final String data\_center.DBConsts.Header.SpecSub.NAME = "subpart\_name" [static]

Definition at line 144 of file DBConsts.java.

final String data\_center.DBConsts.Header.SpecSub.NICKNAME =
"subpart\_nickname" [static]

Definition at line 147 of file DBConsts.java.

final String data\_center.DBConsts.Header.SpecSub.SHORT\_DESC =
"subpart\_short\_desc" [static]

Definition at line 145 of file DBConsts.java.

final String data\_center.DBConsts.Header.SpecSub.TYPE = "subpart\_type" [static]

Definition at line 146 of file DBConsts.java.

The documentation for this class was generated from the following file:

DBConsts.java

## data\_center.DBConsts.Table Class Reference

#### **Static Public Attributes**

```
static final String MAIN = "main"
static final String <a href="CATEGORIES">CATEGORIES</a> = "categories"
static final String <a href="DEEP SUBPARTS">DEEP SUBPARTS</a> = "deep_subparts"
static final String FEATURES = "features"
static final String PARAMETERS = "parameters"
static final String <a href="SPECIFIED SUBPARTS">SPECIFIED SUBPARTS</a> = "specified_subparts"
static final String SPECIFIED_SUBSCARS = "specified_subscars"
static final String TWINS = "twins"
static final String MAIN UPLOAD = "main_upload"
static final String <u>CATEGORIES_UPLOAD</u> = "categories_upload"
static final String DEEP SUBPARTS UPLOAD = "deep subparts upload"
static final String FEATURES UPLOAD = "features upload"
static final String <a href="PARAMETERS_UPLOAD">PARAMETERS_UPLOAD</a> = "parameters_upload"
static final String <a href="SPECIFIED_SUBPARTS_UPLOAD">SPECIFIED_SUBPARTS_UPLOAD</a> = "specified_subparts_upload"
static final String SPECIFIED SUBSCARS UPLOAD = "specified_subscars_upload"
static final String TWINS_UPLOAD = "twins_upload"
```

#### **Detailed Description**

The table names in the database. Those with "\_upload" is used to contain new biobricks uploaded by EasyBbk.

Definition at line 9 of file DBConsts.java.

#### **Member Data Documentation**

final String data\_center.DBConsts.Table.CATEGORIES = "categories" [static]

Definition at line 12 of file DBConsts.java.

final String data\_center.DBConsts.Table.CATEGORIES\_UPLOAD = "categories\_upload"[static]

Definition at line 21 of file DBConsts.java.

final String data_center.DBConsts.Table.DEEP_SUBPARTS = "deep_subparts" [static]
Definition at line 13 of file DBConsts.java.
final String data_center.DBConsts.Table.DEEP_SUBPARTS_UPLOAD = "deep_subparts_upload" [static]
Definition at line 22 of file DBConsts.java.
final String data_center.DBConsts.Table.FEATURES = "features" [static]
Definition at line 14 of file DBConsts.java.
final String data_center.DBConsts.Table.FEATURES_UPLOAD = "features_upload" [static]
Definition at line 23 of file DBConsts.java.
final String data_center.DBConsts.Table.MAIN = "main" [static]
Definition at line 11 of file DBConsts.java.
final String data_center.DBConsts.Table.MAIN_UPLOAD = "main_upload" [static]
Definition at line 20 of file DBConsts.java.

final String data_center.DBConsts.Table.PARAMETERS = "parameters" [static]
Definition at line 15 of file DBConsts.java.
final String data_center.DBConsts.Table.PARAMETERS_UPLOAD = "parameters_upload" [static]
Definition at line 24 of file DBConsts.java.
final String data_center.DBConsts.Table.SPECIFIED_SUBPARTS = "specified_subparts" [static]
Definition at line 16 of file DBConsts.java.
final String data_center.DBConsts.Table.SPECIFIED_SUBPARTS_UPLOAD = "specified_subparts_upload" [static]
Definition at line 25 of file DBConsts.java.
final String data_center.DBConsts.Table.SPECIFIED_SUBSCARS = "specified_subscars" [static]
Definition at line 17 of file DBConsts.java.
final String data_center.DBConsts.Table.SPECIFIED_SUBSCARS_UPLOAD = "specified_subscars_upload" [static]

final String data_center.DBConsts.Table.TWINS = "twins" [static]
Definition at line 18 of file DBConsts.java.
final String data_center.DBConsts.Table.TWINS_UPLOAD = "twins_upload" [static]

The documentation for this class was generated from the following file:

DBConsts.java

Definition at line 26 of file DBConsts.java.

Definition at line 27 of file DBConsts.java.

## data\_center.TimeTagGenerator Class Reference

### **Static Public Member Functions**

static String <u>generateYearMonthDateStr</u> () static String <u>generateHourMinStr</u> () static String <u>generateTimeTag</u> ()

### **Detailed Description**

Used to generate time tag for <u>BlastingSearcher</u>(used to distinguish a blast request from another) and <u>BbkUpload</u>(used to record the enter date of the part into the database by SJTU-software)

Definition at line 8 of file TimeTagGenerator.java.

#### **Member Function Documentation**

### static String data\_center.TimeTagGenerator.generateHourMinStr()[static]

#### Returns:

Hour:Min

Definition at line 21 of file TimeTagGenerator.java.

#### static String data\_center.TimeTagGenerator.generateTimeTag ()[static]

#### Returns:

Time tag accurate to ms, no separators

Definition at line 30 of file TimeTagGenerator.java.

### static String data\_center.TimeTagGenerator.generateYearMonthDateStr () [static]

### Returns:

Year/Month/Date

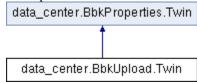
Definition at line 11 of file TimeTagGenerator.java.

The documentation for this class was generated from the following file:

<u>TimeTagGenerator.java</u>

## data\_center.BbkUpload.Twin Class Reference

Inheritance diagram for data\_center.BbkUpload.Twin:



### **Public Member Functions**

Twin ()

Twin (ResultSet resultSet) throws SQLException

### **Public Attributes**

String twin

### **Detailed Description**

Definition at line 235 of file BbkUpload.java.

#### **Constructor & Destructor Documentation**

### data\_center.BbkUpload.Twin.Twin ()

Used when new a twin to fill in BbkDatabaseConnector.findTwinsBySequence. Avoiding conflict from the filling when modify uploaded bbk

Definition at line 239 of file BbkUpload.java.

### data\_center.BbkUpload.Twin.Twin (ResultSet resultSet) throws SQLException

Used to fill data from database when modify uploaded bbk

Definition at line 242 of file BbkUpload.java.

### **Member Data Documentation**

## String data\_center.BbkProperties.Twin.twin[inherited]

The documentation for this class was generated from the following file:

BbkUpload.java

## data\_center.BbkProperties.Twin Class Reference

Inheritance diagram for data\_center.BbkProperties.Twin: data\_center.BbkProperties.Twin data\_center.BbkDetail.Twin data\_center.BbkUpload.Twin **Public Member Functions** Twin () <u>Twin</u> (ResultSet resultSet) throws SQLException **Public Attributes** String twin **Detailed Description** Definition at line 134 of file BbkProperties.java. **Constructor & Destructor Documentation** data\_center.BbkProperties.Twin.Twin () Definition at line 138 of file BbkProperties.java. data\_center.BbkProperties.Twin.Twin (ResultSet resultSet) throws SQLException Definition at line 140 of file BbkProperties.java.

#### **Member Data Documentation**

String data\_center.BbkProperties.Twin.twin

Definition at line 136 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkProperties.java



Inheritance diagram for data\_center.BbkDetail.Twin:

data\_center.BbkProperties.Twin

data\_center.BbkDetail.Twin

Public Member Functions

Twin (ResultSet resultSet) throws SQLException

## **Public Attributes**

String twin

### **Detailed Description**

Definition at line 63 of file BbkDetail.java.

#### **Constructor & Destructor Documentation**

data\_center.BbkDetail.Twin.Twin (ResultSet resultSet) throws SQLException

Definition at line 65 of file BbkDetail.java.

### **Member Data Documentation**

String data\_center.BbkProperties.Twin.twin[inherited]

Definition at line 136 of file BbkProperties.java.

The documentation for this class was generated from the following file:

BbkDetail.java

## data\_center.DBConsts.Header.Twin Class Reference

Static Public Attributes
static final String TWIN = "twin"
Detailed Description
Definition at line 150 of file DBConsts.java.
Member Data Documentation
final String data_center.DBConsts.Header.Twin.TWIN = "twin" [static]
Definition at line 152 of file DBConsts.java.

The documentation for this class was generated from the following file:

DBConsts.java

## data\_center.UploadCenter Class Reference

### **Public Member Functions**

<u>UploadCenter</u>()

boolean <u>isBbkNameNotOccupied</u> (String rawName)

String uploadAndGetOddNum (BbkUpload bbkUpload)

BbkUpload getBbkUploadByNameAndOddNum (String name, String oddNum)

boolean isSequanceValid (String sequenceToken)

BbkDetail getSubpartForSequenceToken (String bbkName)

BbkUpload.SpecifiedSubscar getSubscarForSequenceToken (String scarName)

#### **Detailed Description**

Provide function used when uploading a biobrick into database by SJTU-software. Also include validation check of the part\_name, sequence the subparts and the subscars to be filled into <a href="mailto:BbkUpload">BbkUpload</a> instance to be uploaded.

Definition at line 6 of file UploadCenter.java.

#### **Constructor & Destructor Documentation**

#### data\_center.UploadCenter.UploadCenter ()

Definition at line 8 of file UploadCenter.java.

#### **Member Function Documentation**

# <u>BbkUpload</u> data\_center.UploadCenter.getBbkUploadByNameAndOddNum (String *name*, String *oddNum*)

Use the part\_name and the oddNum to find a previously uploaded biobrick. The oddNum is stored as the part\_id of an bbk

Definition at line 30 of file UploadCenter.java.

### **BbkDetail** data\_center.UploadCenter.getSubpartForSequenceToken (String bbkName)

Used for subpart validation check.

#### Returns:

null if no such part\_name is found, thus it can't be a subpart.

Definition at line 49 of file UploadCenter.java.

# BbkUpload.SpecifiedSubscar data\_center.UploadCenter.getSubscarForSequenceToken (String scarName)

Used for subscar validation check.

#### Returns:

null if no such scar name is found, thus it can't be a subscar.

Definition at line 56 of file UploadCenter.java.

### boolean data\_center.UploadCenter.isBbkNameNotOccupied (String rawName)

rawName is also known as the shortName

#### Returns:

true for the name is not occupied, so that it can be used as the part\_name to be uploaded.

Definition at line 13 of file UploadCenter.java.

### boolean data\_center.UploadCenter.isSequanceValid (String sequenceToken)

Check if the sequence string is only consist if base group, not other chars.

Definition at line 36 of file UploadCenter.java.

### String data\_center.UploadCenter.uploadAndGetOddNum (BbkUpload)

Upload a new biobrick and get the odd number used to modify it later. The oddNum is stored in the part\_id of an biobrick.

Definition at line 23 of file UploadCenter.java.

#### The documentation for this class was generated from the following file:

UploadCenter.java

## data\_center.BbkType.Sketch.Vector Class Reference

### **Static Public Attributes**

```
static final int <u>PLASMID</u> = 0
static final int <u>VIRUS</u> = 1
static final int <u>BACTERIA</u> = 2
static final int <u>PLANT_CELL</u> = 3
static final int <u>ANIMAL_CELL</u> = 4
```

### **Detailed Description**

Definition at line 81 of file BbkType.java.

#### **Member Data Documentation**

final int data\_center.BbkType.Sketch.Vector.ANIMAL\_CELL = 4[static]

Definition at line 87 of file BbkType.java.

final int data\_center.BbkType.Sketch.Vector.BACTERIA = 2[static]

Definition at line 85 of file BbkType.java.

final int data\_center.BbkType.Sketch.Vector.PLANT\_CELL = 3[static]

Definition at line 86 of file BbkType.java.

final int data\_center.BbkType.Sketch.Vector.PLASMID = 0[static]

Definition at line 83 of file BbkType.java.

## final int data\_center.BbkType.Sketch.Vector.VIRUS = 1[static]

Definition at line 84 of file BbkType.java.

The documentation for this class was generated from the following file:

BbkType.java

## **File Documentation**

## BbkDetail.java File Reference

#### **Classes**

class data center.BbkDetail
class data center.BbkDetail.Category
class data center.BbkDetail.DeepSubpart
class data center.BbkDetail.Feature
class data center.BbkDetail.Parameter
class data center.BbkDetail.SpecifiedSubpart
class data center.BbkDetail.SpecifiedSubscar
class data center.BbkDetail.Twin

## **Packages**

package data center

## **BbkOutline.java File Reference**

## Classes

class data center.BbkOutline
class data center.BbkOutline.Rating
class data center.BbkOutline.Blasting

## **Packages**

package <u>data\_center</u>

## **BbkProperties.java File Reference**

### **Classes**

class data center.BbkProperties
class data center.BbkProperties.Category
class data center.BbkProperties.DeepSubpart
class data center.BbkProperties.Feature
class data center.BbkProperties.Parameter
class data center.BbkProperties.SpecifiedSubpart
class data center.BbkProperties.SpecifiedSubscar
class data center.BbkProperties.Twin

## **Packages**

package data center

## BbkType.java File Reference

### Classes

class data center.BbkType
class data center.BbkType.Sketch
class data center.BbkType.Sketch.BioBrick
class data center.BbkType.Sketch.Protein
class data center.BbkType.Sketch.BackBone
class data center.BbkType.Sketch.Relation
class data center.BbkType.Sketch.Vector

## **Packages**

package data center

## BbkUpload.java File Reference

### **Classes**

class data center.BbkUpload
class data center.BbkUpload.Category
class data center.BbkUpload.Feature
class data center.BbkUpload.Parameter
class data center.BbkUpload.DeepSubpart
class data center.BbkUpload.SpecifiedSubpart
class data center.BbkUpload.SpecifiedSubscar
class data\_center.BbkUpload.Twin

## **Packages**

package data center

# BlastingSearcher.java File Reference

## Classes

class data center.BlastingSearcher

## **Packages**

package <u>data\_center</u>

# CompareCenter.java File Reference

## Classes

class data center.CompareCenter

## **Packages**

package <u>data\_center</u>

# DatabaseConnector.java File Reference

## Classes

class data center.DatabaseConnector

## **Packages**

package <u>data\_center</u>

# DataCenter.java File Reference

## Classes

class data center.DataCenter

## **Packages**

package <u>data\_center</u>

## **DBConsts.java File Reference**

### **Classes**

class data\_center.DBConsts.Table
class data\_center.DBConsts.Rating
class data\_center.DBConsts.Header
class data\_center.DBConsts.Header.Main
class data\_center.DBConsts.Header.Category
class data\_center.DBConsts.Header.DeepSub
class data\_center.DBConsts.Header.Feature
class data\_center.DBConsts.Header.Parameter
class data\_center.DBConsts.Header.SpecScar
class data\_center.DBConsts.Header.SpecScar
class data\_center.DBConsts.Header.SpecSub
class data\_center.DBConsts.Header.SpecSub

### **Packages**

package data\_center

# DBDataFiller.java File Reference

## Classes

 $class \ \boldsymbol{data\_center.DBDataFiller}$ 

## **Packages**

package <u>data\_center</u>

# DetailPageCenter.java File Reference

## Classes

 $class \ \boldsymbol{data\_center.DetailPage} Center$ 

## **Packages**

package <u>data\_center</u>

# HistoryList.java File Reference

## Classes

class data center. History List < T >

## **Packages**

package <u>data\_center</u>

# SearchCenter.java File Reference

## Classes

class data center.SearchCenter

## **Packages**

package data\_center

# SearchResultList.java File Reference

## **Packages**

package data center

# SketchCenter.java File Reference

## Classes

class data center.SketchCenter

## **Packages**

package <u>data\_center</u>

## SketchComponent.java File Reference

### **Classes**

class data center.SketchComponent
class data center.SketchComponent.Component
class data center.SketchComponent.Label
class data center.SketchComponent.BioBrick
class data center.SketchComponent.Protein
class data center.SketchComponent.BackBone
class data center.SketchComponent.Relation
class data center.SketchComponent.BioVector

### **Packages**

package data center

## SketchProject.java File Reference

## Classes

class <u>data\_center.SketchProject</u> class <u>data\_center.SketchProject.Operation</u>

## **Packages**

package <u>data\_center</u>

# Testing.java File Reference

## **Packages**

package data center

# TimeTagGenerator.java File Reference

## Classes

class data center.TimeTagGenerator

## **Packages**

package <u>data\_center</u>

# UploadCenter.java File Reference

## Classes

class data center.UploadCenter

## **Packages**

package <u>data\_center</u>

# Index

INDEX