

GenetikTest

Abel Hodelin Hernandez, Timur Horn

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Name	Value
Name	GenetikTest_CD
Author	her_hod
Create Date Time	01.07.2015 12:55:52
Last Modified	06.07.2015 19:58:26

Summary

Name	Description
 ImagePanel	Ein Hilfspanel für die Anzeige von Bildern @author Abel Hodelin Hernandez @author Timur Horn @version 1.0
 DnaGenerator	Ein Programm für Üben der genetischen Verfahren: Replication (DNA zu cDNA), Transcription (DNA zu mRNA), Translation(mRNA zu Protein). @author Abel Hodelin Hernandez @author Timur Horn @version 1.0
 GeneticQuiz	GUI, die nach dem starten des Programms angezeigt wird Dies ist die Hauptinteraktionsschnittstelle mit dem Anwender @author Abel Hodelin Hernandez @author Timur Horn @version 1.0
 GeneCode	Jedes Objekt der Klasse repräsentiert einen Code, der alle möglichen Codons enthält. Codons sind Wörter fester Länge über dem Alphabet @author Abel Hodelin Hernandez @author Timur Horn @version 1.0
 ConfigGeneCode	Diese GUI ist ein Dialog für die Konfiguration und Erstellung eines GeneCode-Objekts @author Abel Hodelin Hernandez @author Timur Horn @version 1.0
 NewGCDIALOG	Ein Hilfsfenster für die Erzeugung eines neuen GeneCodes Enthält nur die nötigsten felder @author Abel Hodelin Hernandez @author Timur Horn @version 1.0

Details

ImagePanel

Name	Value
Description	Ein Hilfspanel für die Anzeige von Bildern

	@author Abel Hodelin Hernandez @author Timur Horn @version 1.0	
Active	false	
Business Key Mutable	true	
Java Detail	N/A	
Business Model	false	
Visibility	package	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:30
	Last Modified	06.07.2015 19:56:24

Attributes

private img : java.awt.image.BufferedImage			
Initial Value	null		
Type	java.awt.image.BufferedImage		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:30	
	Last Modified	01.07.2015 13:08:25	

Operations

public ImagePanel ()	
Leaf	false
Upper	1
Ordered	false
Unique	true
Query	false

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:30
	Last Modified	01.07.2015 13:08:25

public ImagePanel (i : java.awt.image.BufferedImage)			
Parameters	i		
	Multiplicity	Unspecified	
	Type	java.awt.image.BufferedImage	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:30
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:30	
	Last Modified	01.07.2015 13:08:25	


public setImage (bi : java.awt.image.BufferedImage) : void			
Parameters	bi		
	Multiplicity	Unspecified	
	Type	java.awt.image.BufferedImage	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:30
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		


Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:30
	Last Modified	01.07.2015 13:08:25

protected paintComponent (g : java.awt.Graphics) : void			
Parameters	g		
	Multiplicity	Unspecified	
	Type	java.awt.Graphics	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:30
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:30	
	Last Modified	01.07.2015 13:08:25	

Relationships

Unnamed Association

From	Name	Value		
	End Model Element	 GeneticQuiz		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	Unspecified		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Non Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	06.07.2015 19:46:01	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name	Value		
	Author	her_hod		
	Create Date Time	06.07.2015 19:46:01		
	Last Modified	06.07.2015 19:56:24		
Unnamed Association				

From	Name	Value		
	End Model Element	 GeneticQuiz		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	Unspecified		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Non Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	06.07.2015 19:46:01	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name	Value		
	Author	her_hod		
	Create Date Time	06.07.2015 19:46:01		
	Last Modified	06.07.2015 19:56:24		

DnaGenerator

Name	Value
Description	Ein Programm für Üben der genetischen Verfahren: Replication (DNA zu cDNA), Transcription (DNA zu mRNA), Translation(mRNA zu Protein). @author Abel Hodelin Hernandez @author Timur Horn @version 1.0
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false

Root	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:00
	Last Modified	06.07.2015 19:56:24

Attributes

private random : java.util.Random			
Initial Value	new Random()		
Type	java.util.Random		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	


public dnaGeneral : String			
Initial Value	"TAATAGTATGAAGAGGATGACAATAACCAACAGCATCACAAAAAGTACACAAACGCGACGGC"		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	


public cdnaGeneral : String			
Description	generierte DNA-Sequenz		
Initial Value	"ATTATCATACTTCTCCTACTGTTATTGGTTGTCGTAGTGTTTTTCATGTGTTGCGCTGCCGCA		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	

public rnaGeneral : String			
Description	cDNA		
Initial Value	"AUUAUCAUACUUCUCCUACUGUUAUUGGUUGUCGUAGUGUUUUUCAUGUGUUGCGCUGO		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	


public proteinGeneral : String	
Description	mRNA
Initial Value	"IIIIIIIIIIVVVVFFMCCAAAAGGGGPPPPTTTTSSSSSSYYWQQNNHHEEDDKKRRRRRR****"
Type	String

Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	

private senseGeneral : boolean			
Description	Protein		
Initial Value	true		
Type	 boolean		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	

private seqTypGeneral : int			
Description	Richtung zum lesen		
Initial Value	1		
Type	 int		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		

Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	

private geneCodeGeneral : int			
Description	Verfahren		
Initial Value	1		
Type	 int		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	


private crSeq : String			
Description	aktueller Gencode		
Initial Value	""		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		

Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	06.07.2015 19:49:02	
	Last Modified	06.07.2015 19:56:24	

private translChain : String			
Description	erzeugte Sequenz		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	06.07.2015 19:49:02	
	Last Modified	06.07.2015 19:56:24	




private translEnd : String			
Description	Uebersetzung der erzeugten Sequenz		
Initial Value	""		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:49:02
	Last Modified	06.07.2015 19:56:24

private gCode : GeneCode			
Description	genetische Code Fuer die neue Schnittstelle		
Type	 GeneCode		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	06.07.2015 19:49:02	
	Last Modified	06.07.2015 19:56:24	


Operations

```
public generateDNA (seqLeng : int, invert : boolean, typSeqToCheck : int) : String
```



Parameters	seqLeng			
	Multiplicity	Unspecified		
	Type	 int		
	Direction	inout		
	Java Detail	N/A		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	01.07.2015 12:58:00	
		Last Modified	01.07.2015 13:08:25	
	invert			
	Multiplicity	Unspecified		
	Type	 boolean		
	Direction	inout		
	Java Detail	N/A		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	01.07.2015 12:58:00	
		Last Modified	01.07.2015 13:08:25	
	typSeqToCheck			
	Multiplicity	Unspecified		
	Type	 int		
	Direction	inout		
	Java Detail	N/A		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	01.07.2015 12:58:00	
		Last Modified	01.07.2015 13:08:25	
	Description	Generiert die DNA-Sequenz		
Leaf	false			
Upper	1			
Ordered	false			
Unique	true			
Return Type Description	dnaGeneral: DNA-Sequenz			
Query	false			
Project Management	Name		Value	
	Author		her_hod	
	Create Date Time		01.07.2015 12:58:00	
	Last Modified		06.07.2015 19:56:24	

public invertSequence (dna : String) : String

Parameters	dna		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:00
		Last Modified	01.07.2015 13:08:25
Description	Invertiert die XNA-Sequenz		
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Return Type Description	dna: umgekehrte XNA-Sequenz		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	06.07.2015 19:56:24	

public setCode (geneCode : int) : void			
Parameters	geneCode		
	Multiplicity	Unspecified	
	Type	 int	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:00
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	01.07.2015 13:08:25	


public getSeqTyp (typ : int) : void

Parameters	typ		
	Multiplicity	Unspecified	
	Type	 int	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:00
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:58:00
	Last Modified		01.07.2015 13:08:25

public dnaToCDNA () : String		
Description	Replication (DNA zu cDNA)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	cdnaGeneral: cDNA-Sequenz	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:00
	Last Modified	06.07.2015 19:56:24

public dnaToMRNA () : String		
Description	Transcription (DNA zu mRNA)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	rnaGeneral: mRNA-Sequenz	
Query	false	



Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:00
	Last Modified	06.07.2015 19:56:24

public dnaToProtein (code : int) : String			
Parameters	code		
	Multiplicity	Unspecified	
	Type	 int	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:00
		Last Modified	01.07.2015 13:08:25
Description	Translation (mRNA zu Protein)		
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Return Type Description	proteinGeneral: Protein-Sequenz		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:00	
	Last Modified	06.07.2015 19:56:24	


public checkSequence (querySequence : String) : boolean			
Parameters	querySequence		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:00
		Last Modified	01.07.2015 13:08:25
Description	Analysiert das Ergebnis Vergleich die erzeugte X-Sequenz mit der Sequenz des Benutzers		
Leaf	false		
Upper	1		
Ordered	false		

Unique	true	
Return Type Description	true wenn beide Sequenze gleich sind, sonst false	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:00
	Last Modified	06.07.2015 19:56:24


public getSequence () : String		
Description	Zeigt das Ergebnis (Sequenze)	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	seq: X-Sequenze	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:00
	Last Modified	06.07.2015 19:56:24

public generateDNA_new (length : int, geneCode : GeneCode) : String		
Parameters	length	
	Multiplicity	Unspecified
	Type	 int
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		06.07.2015 19:49:02
		Last Modified
		06.07.2015 19:56:24
	geneCode	
	Multiplicity	Unspecified
	Type	 GeneCode
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		06.07.2015 19:49:02
		Last Modified
		06.07.2015 19:56:24
Description	Erzeugt eine Zufaelliche Sequenz anhand vom geneCode	

Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	zufaellige Sequenz	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:49:02
	Last Modified	06.07.2015 19:56:24



public checkSequence_new (querySequence : String, reverse : boolean) : boolean		
Parameters	querySequence	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		06.07.2015 19:49:02
		Last Modified
		06.07.2015 19:56:24
	reverse	
	Multiplicity	Unspecified
	Type	 boolean
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		06.07.2015 19:49:02
		Last Modified
		06.07.2015 19:56:24
Description	Prueft, ob die eingabe mit der Uebersetzung uebereinstimmt	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	true wenn die Übersetzung richtig ist	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:49:02
	Last Modified	06.07.2015 19:56:24


public getSequence_new () : String		
Description	Prueft, ob die eingabe mit der Uebersetzung uebereinstimmt	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	Alle entstandenen Translationen mit "\n" getrennt	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:49:02
	Last Modified	06.07.2015 19:56:24

private translateCode (seq : String, gc : GeneCode) : String			
Parameters	seq		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	06.07.2015 19:49:02
		Last Modified	06.07.2015 19:56:24
	gc		
	Multiplicity	Unspecified	
	Type	 GeneCode	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	06.07.2015 19:49:02
		Last Modified	06.07.2015 19:56:24
	Description	Eine rekursive Funktion, die eine Sequenz anhand eines Codes uebersetzt	
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Return Type Description	Alle entstandenen Translationen mit "\n" getrennt		
Query	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:49:02
	Last Modified	06.07.2015 19:56:24

Relationships

Unnamed Association		
To (gCode)	Name	Value
	End Model Element	 GeneCode
	Description	genetische Code Fuer die neue Schnittstelle
	Representative Attribute	gCode
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	Unspecified
	Visibility	private
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 GeneCode
	Project Management	Name
		Value
		Author her_hod
	Create Date Time 06.07.2015 19:49:02	
Abstract	false	
Leaf	false	
Visibility	Unspecified	
Derived	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:49:02
	Last Modified	06.07.2015 19:56:24
Unnamed Association		

From	Name	Value	
	End Model Element	 GeneticQuiz	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	Unspecified	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Non Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	

GeneticQuiz

Name	Value
Description	<p>GUI, die nach dem starten des Programms angezeigt wird</p> <p>Dies ist die Hauptinteraktionsschnittstelle mit dem Anwender</p> <p>@author Abel Hodelin Hernandez @author Timur Horn @version 1.0</p>
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	06.07.2015 19:56:24

Attributes

private codeText : javax.swing.JTextPane			
Type	javax.swing.JTextPane		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	

package status : javax.swing.JLabel			
Type	javax.swing.JLabel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

package rightTranslation : String	
Initial Value	""

Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

package I : javax.swing.JComboBox			
Template Type Bind Info	N/A		
Type	javax.swing.JComboBox		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	

package codeSelectionCB : javax.swing.JComboBox			
Template Type Bind Info	N/A		
Type	javax.swing.JComboBox		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		

Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	

package complCB : javax.swing.JCheckBox			
Type	javax.swing.JCheckBox		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

package showImageCB : javax.swing.JCheckBox			
Type	javax.swing.JCheckBox		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

package translText : javax.swing.JTextPane			
Type	javax.swing.JTextPane		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

package translTextSolve : javax.swing.JTextPane			
Type	javax.swing.JTextPane		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

package configGC : javax.swing.JButton	
Type	javax.swing.JButton
Allow Empty Name	false

Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

package lengthList : Integer			
Initial Value	new Integer [{1,2,3,4,5,10,15,20,25,30}]		
Type Modifier	[]		
Type	Integer		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	


package codonInfo : javax.swing.JTextField			
Type	javax.swing.JTextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		


Read Only	false	
Is ID	false	
Leaf	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

package imagePanel : javax.swing.JPanel			
Type	javax.swing.JPanel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	


package subCodesPanel : javax.swing.JPanel			
Description	Panel, die kleinen Bilder der nextCodes zeigt		
Type	javax.swing.JPanel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	


package imageCodeSunSubs : javax.swing.JButton			
Type Modifier	[]		
Type	javax.swing.JButton		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	

package newCodeChosen : boolean			
Type	 boolean		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	


private dnaGen : DnaGenerator			
Description	Logik		
Initial Value	new DnaGenerator()		
Type	 DnaGenerator		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		


Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	


package gencodes : GeneCode			
Type	 GeneCode		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	*		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	

package currentGC : GeneCode			
Description	aktueller Gene code		
Type	 GeneCode		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

package choosenGC : GeneCode			
Type	 GeneCode		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

package imageCodeSun : ImagePanel			
Type	 ImagePanel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	06.07.2015 19:46:01	
	Last Modified	06.07.2015 19:56:24	

package subImagesButtons : ImagePanel	
Type	 ImagePanel
Allow Empty Name	false

Getter	false	Setter	false
Derived	false		
Multiplicity	*		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	06.07.2015 19:46:01	
	Last Modified	06.07.2015 19:56:24	

Operations

public GeneticQuiz ()		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

private fillComboBox () : void		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

protected configureGeneCode () : void	
Leaf	false
Upper	1
Ordered	false
Unique	true

Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

protected createStringToTranslate () : void		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

protected evaluate () : void		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

private createStandardCodes () : void		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

private readCodeFiles (dir : java.io.File) : void		
---	--	--

Parameters	dir		
	Multiplicity	Unspecified	
	Type	java.io.File	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:59:11
	Last Modified		01.07.2015 13:08:25

public mouseClicked (e : java.awt.event.MouseEvent) : void			
Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:59:11
	Last Modified		01.07.2015 13:08:25

public mousePressed (e : java.awt.event.MouseEvent) : void

Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:59:11
	Last Modified		01.07.2015 13:08:25


public mouseReleased (e : java.awt.event.MouseEvent) : void			
Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:59:11
	Last Modified		01.07.2015 13:08:25

public mouseEntered (e : java.awt.event.MouseEvent) : void

Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:59:11
	Last Modified		01.07.2015 13:08:25

public mouseExited (e : java.awt.event.MouseEvent) : void			
Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:59:11
	Last Modified		01.07.2015 13:08:25

public addGeneCode (geneCode : GeneCode) : void

Parameters	geneCode		
	Multiplicity	Unspecified	
	Type	 GeneCode	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

public itemStateChanged (e : java.awt.event.ItemEvent) : void			
Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.ItemEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	01.07.2015 13:08:25	

private updateView () : void	
Leaf	false
Upper	1

Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25

public actionPerformed (e : java.awt.event.ActionEvent) : void		
Parameters	e	
	Multiplicity	Unspecified
	Type	java.awt.event.ActionEvent
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		01.07.2015 12:59:11
		Last Modified
		01.07.2015 13:08:25
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:11
	Last Modified	01.07.2015 13:08:25



public GeneticQuiz (string : String)		
Parameters	string	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		06.07.2015 19:46:01
		Last Modified
		06.07.2015 19:56:24
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	



Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:46:01
	Last Modified	06.07.2015 19:56:24

public main (args : String) : void		
Parameters	args	
	Multiplicity	Unspecified
	Type Modifier	[]
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		06.07.2015 19:46:01
		Last Modified
		06.07.2015 19:56:24
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:46:01
	Last Modified	06.07.2015 19:56:24



Relationships

Unnamed Association



To (chosenGC)	Name		Value	
	End Model Element		 GeneCode	
	Representative Attribute		chosenGC	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		Unspecified	
	Visibility		package	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		 GeneCode	
	Project Management		Name	Value
			Author	her_hod
			Create Date Time	01.07.2015 12:59:11
Abstract		false		
Leaf		false		
Visibility		Unspecified		
Derived		false		
Project Management		Name	Value	
		Author	her_hod	
		Create Date Time	01.07.2015 12:59:11	
		Last Modified	06.07.2015 19:56:24	
Unnamed Association				

To (imageCodeSun)	Name		Value	
	End Model Element		 ImagePanel	
	Representative Attribute		imageCodeSun	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		Unspecified	
	Visibility		package	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		 ImagePanel	
	Project Management		Name	Value
			Author	her_hod
			Create Date Time	06.07.2015 19:46:01
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name		Value	
	Author		her_hod	
	Create Date Time		06.07.2015 19:46:01	
	Last Modified		06.07.2015 19:56:24	



Unnamed Association

To (currentGC)	Name		Value	
	End Model Element		 GeneCode	
	Description		aktueller Gene code	
	Representative Attribute		currentGC	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		Unspecified	
	Visibility		package	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		 GeneCode	
	Project Management		Name	
			Value	
			Author	her_hod
			Create Date Time	01.07.2015 12:59:11
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name		Value	
	Author		her_hod	
	Create Date Time		01.07.2015 12:59:11	
	Last Modified		06.07.2015 19:56:24	



Unnamed Association

To (subImagesButtons)	Name		Value	
	End Model Element		 ImagePanel	
	Representative Attribute		subImagesButtons	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		*	
	Visibility		package	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		 ImagePanel	
	Project Management		Name	Value
			Author	her_hod
			Create Date Time	06.07.2015 19:46:01
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name		Value	
	Author		her_hod	
	Create Date Time		06.07.2015 19:46:01	
	Last Modified		06.07.2015 19:56:24	

Unnamed Association

To (gencodes)	Name		Value	
	End Model Element		 GeneCode	
	Representative Attribute		gencodes	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		*	
	Visibility		package	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		 GeneCode	
	Project Management		Name	Value
			Author	her_hod
			Create Date Time	01.07.2015 12:59:11
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name		Value	
	Author		her_hod	
	Create Date Time		01.07.2015 12:59:11	
	Last Modified		06.07.2015 19:56:24	

Unnamed Association

To (dnaGen)	Name	Value	
	End Model Element	 DnaGenerator	
	Description	Logik	
	Representative Attribute	dnaGen	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	Unspecified	
	Visibility	private	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Default Value	new DnaGenerator()	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 DnaGenerator	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:11
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:11	
	Last Modified	06.07.2015 19:56:24	

GeneCode

Name	Value
Description	<p>Jedes Objekt der Klasse repräsentiert einen Code, der alle möglichen Codons enthält. Codons sind Wörter fester Länge über dem Alphabet</p> <p>@author Abel Hodelin Hernandez @author Timur Horn @version 1.0</p>
Active	false
Business Key Mutable	true
Java Detail	N/A


Business Model	false		
Visibility	public		
Leaf	false		
Root	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	06.07.2015 19:56:24	


Attributes

public FILEEXTENTION : String			
Initial Value	".genecode"		
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	01.07.2015 13:08:25	

private name : String			
Stereotypes	Property		
Type	String		
Allow Empty Name	false		
Getter	true	Setter	true
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		


Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	01.07.2015 13:08:25

private alphabet : char			
Stereotypes	Property		
Type Modifier	[]		
Type	 char		
Allow Empty Name	false		
Getter	true	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	06.07.2015 19:56:24	

private wordLength : int			
Type	 int		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	01.07.2015 13:08:25	

private img : java.awt.image.BufferedImage			
--	--	--	--

Description	referenz für das erzeugte Bild		
Type	java.awt.image.BufferedImage		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	06.07.2015 19:56:24	

private smallestCell : int			
Description	Bestimmt indirekt die Auflösung des Bildes Breite der kleinsten Zelle im Bild, als des Buchstaben am Ende des Wortes		
Type	 int		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	06.07.2015 19:56:24	


private codons : java.util.Hashtable			
Description	enthält alle Codons		
Template Type Bind Info	N/A		
Type	java.util.Hashtable		
Allow Empty Name	false		
Getter	false	Setter	false

Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	06.07.2015 19:56:24	

private complements : java.util.Hashtable			
Description	Jeder Buchstabe des Alphabets kann komplementären Buchstaben haben Analog zu DNS: complement strand		
Template Type Bind Info	N/A		
Type	java.util.Hashtable		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
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private colors : java.awt.Color			
Description	colors for created image		
Type Modifier	[]		
Type	java.awt.Color		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		


Aggregation	None	
Derived Union	false	
Read Only	false	
Is ID	false	
Leaf	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24


private nextGeneCode : GeneCode			
Description	for code chaining		
Type	 GeneCode		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:38	
	Last Modified	06.07.2015 19:56:24	

Operations

public GeneCode ()		
Description	Erzeugt den Standard-Code von RNA nach Protein Alphabet {A,C,G,U}	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24

public GeneCode (name : String, alph : String, l : int)		
Parameters	name	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Create Date Time	01.07.2015 12:58:37
		01.07.2015 13:08:25
	alph	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Create Date Time	01.07.2015 12:58:37
		01.07.2015 13:08:25
	l	
	Multiplicity	Unspecified
	Type	 int
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Create Date Time	01.07.2015 12:58:37
		01.07.2015 13:08:25
Description	Erzeugt einen neuen code der Länge l über dem alphabet alph Alle Codons werden erzeugt und mit Defaultvalue belegt	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24

public GeneCode (g : GeneCode)		
Parameters	g	
	Multiplicity	Unspecified
	Type	 GeneCode
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
Description	Erzeugt einen neuen code	
	Leaf	
	false	
	Upper	
Ordered	1	
	false	
	Unique	
	true	
Query	false	
	Name	
	Value	
	Author	
Project Management	her_hod	
	Create Date Time	
	01.07.2015 12:58:37	
	Last Modified	
	01.07.2015 13:08:25	

private init (prefix : String, position : int) : void		
Parameters	prefix	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:58:37
		Last Modified
		01.07.2015 13:08:25
	position	
	Multiplicity	Unspecified
	Type	 int
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
Description	fill Hashtable rekursive	

Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	01.07.2015 13:08:25

public setCodon (name : String, value : String) : boolean		
Parameters	name	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		01.07.2015 12:58:37
		Last Modified
		01.07.2015 13:08:25
	value	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		01.07.2015 12:58:37
		Last Modified
		01.07.2015 13:08:25
Description	Setzt einen Wert für ein Codon Nur, wenn das Codon existiert	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	true wenn der Wert gesetzt werden konnte	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24

public setComplement (name : String, value : String) : boolean		
Parameters	name	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Create Date Time	01.07.2015 12:58:37
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	value	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Create Date Time	01.07.2015 12:58:37
		01.07.2015 13:08:25
Description	Setzt einen Wert für ein Komplement eines Buchstaben zB 1 -> 0 oder G -> C	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	true wenn der Wert gesetzt werden konnte	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24
public getComplement (letter : String) : String		

Parameters	letter		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:37
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:58:37
	Last Modified		01.07.2015 13:08:25

public SaveAs (FileName : String) : boolean			
Parameters	FileName		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:37
		Last Modified	01.07.2015 13:08:25
Description	Das Objekt wird in eine Datei geschrieben		
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Return Type Description	true wenn der die Datei geschrieben werden konnte		
Query	false		
Project Management	Name		Value
	Author		her_hod
	Create Date Time		01.07.2015 12:58:37
	Last Modified		06.07.2015 19:56:24

package ReadCode (fileName : String) : GeneCode

Parameters	fileName		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:37
		Last Modified	01.07.2015 13:08:25
Description	Eine Code-Objekt wird aus einer Dateil ausgelesen		
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Return Type Description	aus der Datei ausgelesenes Objekt		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:58:37	
	Last Modified	06.07.2015 19:56:24	

public getValue (codon : String) : String			
Parameters	codon		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:58:37
		Last Modified	01.07.2015 13:08:25
Description	Gibt den Wert eines Codons aus Ist ein Codon nicht vorhanden wird ein leerer String ausgegeben		
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Return Type Description	Der Wert des Codons		
Query	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24


public getSize () : int		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	Anzahl aller möglichen Codons	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24

public toString () : String		
Description	Für die Ausgabe aufbereitete Informationen	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	formatierter String	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24

public clone () : GeneCode		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	Kopie des Objekts	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24


public getCodonLength () : int		
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Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	die Codonlänge	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24


public getCodonKeyFromGraph (angle : double) : String				
Parameters	angle			
	Description	winkel in rad. im Uhrzeigersinn 0 grad -> 3 Uhr		
	Multiplicity	Unspecified		
	Type	 double		
	Direction	inout		
	Java Detail	N/A		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	01.07.2015 12:58:37	
		Last Modified	06.07.2015 19:56:24	
Description	Bei der Codesonne ist jedem Winkel ein Codon zugeordnet die Methode liefert das entsprechende Codon zurück			
Leaf	false			
Upper	1			
Ordered	false			
Unique	true			
Return Type Description	Codonsequenz			
Query	false			
Project Management	Name		Value	
	Author		her_hod	
	Create Date Time		01.07.2015 12:58:37	
	Last Modified		06.07.2015 19:56:24	

public getCodeSun () : java.awt.image.BufferedImage	
Description	Erzeugt für den Code entsprechende Codesonne Ein bild welches alle Codons mit den zugehörigen Werten darstellt Bei zu großen Abmessungen wird nur ein Infobild erzeugt
Leaf	false
Upper	1
Ordered	false

Unique	true	
Return Type Description	Codonsequenz	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24

public getColor (index : int) : java.awt.Color		
Parameters	index	
	Description	der Farbe. Die Anzahl der Farben entspricht der Länge des Alphabets
	Multiplicity	Unspecified
	Type	 int
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:58:37
		Last Modified
		06.07.2015 19:56:24
Description	gibt eine der Farbena aus, die beim Erstellen des Bildes verwendet werden	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	Farbe	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24


public setColor (index : int, color : java.awt.Color) : void

Parameters	index	
	Description	der Farbe. Die Anzahl der Farben entspricht der Länge des Alphabets
	Multiplicity	Unspecified
	Type	 int
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:58:37
		Last Modified
		06.07.2015 19:56:24
	color	
	Description	new Farbe
	Multiplicity	Unspecified
	Type	java.awt.Color
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:58:37
		Last Modified
		06.07.2015 19:56:24
Description	neue Farbe zuweisen	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24

public getColorsCount () : int	
Description	Gibt die anzahl der Farben zurück
Leaf	false
Upper	1
Ordered	false
Unique	true
Return Type Description	Anzahl der Farben. Entspricht i.d.R. der Länge des Alphabets
Query	false

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24



public getNextCode () : GeneCode		
Description	gibt den nächsten verketteten Code zurück	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	nächster verketteter Code	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24


public setNextCode (genc : GeneCode) : boolean		
Parameters	genc	
	Multiplicity	Unspecified
	Type	 GeneCode
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:58:37
		Last Modified
		01.07.2015 13:08:25
Description	die Codes lassen sich verketten, um zB das Aufeinanderfolgen mehrerer übersetzungen zu repräsentieren zB DNA->tRNA->Protein	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Return Type Description	bei zyklischer verkettung false	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:58:37
	Last Modified	06.07.2015 19:56:24


public getCodons () : java.util.Enumeration

Leaf	false	
Upper	1	
Template Type Bind Info	N/A	
Ordered	false	
Unique	true	
Return Type Description	Alle Codons	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:49:02
	Last Modified	06.07.2015 19:56:24


Relationships

Unnamed Association		
To (nextGeneCode)	Name	Value
	End Model Element	 GeneCode
	Description	for code chaining
	Representative Attribute	nextGeneCode
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	Unspecified
	Visibility	private
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 GeneCode
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:58:38
Abstract	false	
Leaf	false	
Visibility	Unspecified	
Derived	false	


Project Management	Name		Value			
	Author		her_hod			
	Create Date Time		01.07.2015 12:58:38			
	Last Modified		06.07.2015 19:56:24			
Unnamed Association						
From	Name		Value			
	End Model Element		 GeneticQuiz			
	Provide Property Getter Method		false			
	Provide Property Setter Method		false			
	Multiplicity		Unspecified			
	Visibility		Unspecified			
	Aggregation Kind		None			
	Navigable		Non Navigable			
	Derived		false			
	Derived Union		false			
	Read Only		false			
	Static		false			
	Leaf		false			
	Project Management		Name		Value	
			Author		her_hod	
			Create Date Time		01.07.2015 12:59:11	
	Abstract	false				
Leaf	false					
Visibility	Unspecified					
Derived	false					
Project Management	Name		Value			
	Author		her_hod			
	Create Date Time		01.07.2015 12:59:11			
	Last Modified		06.07.2015 19:56:24			
Unnamed Association						

From	Name	Value		
	End Model Element	 ConfigGeneCode		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	Unspecified		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Non Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	06.07.2015 19:44:56	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name	Value		
	Author	her_hod		
	Create Date Time	06.07.2015 19:44:56		
	Last Modified	06.07.2015 19:56:24		


Unnamed Association

From	Name	Value		
	End Model Element	 DnaGenerator		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	Unspecified		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Non Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	06.07.2015 19:49:02	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name	Value		
	Author	her_hod		
	Create Date Time	06.07.2015 19:49:02		
	Last Modified	06.07.2015 19:56:24		


Unnamed Association

From	Name	Value		
	End Model Element	 GeneticQuiz		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	Unspecified		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Non Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	01.07.2015 12:59:11	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name	Value		
	Author	her_hod		
	Create Date Time	01.07.2015 12:59:11		
	Last Modified	06.07.2015 19:56:24		

Unnamed Association

From	Name	Value	
	End Model Element	 NewGCDialog	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	Unspecified	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Non Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:59:40
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:40	
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Unnamed Association


From	Name	Value		
	End Model Element	 GeneticQuiz		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	Unspecified		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Non Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Project Management	Name	Value	
		Author	her_hod	
		Create Date Time	01.07.2015 12:59:11	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name	Value		
	Author	her_hod		
	Create Date Time	01.07.2015 12:59:11		
	Last Modified	06.07.2015 19:56:24		

ConfigGeneCode

Name	Value
Description	<p>Diese GUI ist ein Dialog für die Konfiguration und Erstellung eines GeneCode-Objekts</p> <p>@author Abel Hodelin Hernandez @author Timur Horn @version 1.0</p>
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:50
	Last Modified	06.07.2015 19:56:24

Attributes

private serialVersionUID : long			
Initial Value	1L		
Type	 long		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

private contentPanel : javax.swing.JScrollPane			
Type	javax.swing.JScrollPane		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

private table : javax.swing.JTable			
------------------------------------	--	--	--

Type	javax.swing.JTable		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

package okButton : javax.swing.JButton			
Type	javax.swing.JButton		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

package gcname_in : javax.swing.JTextField			
Type	javax.swing.JTextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		

Read Only	false	
Is ID	false	
Leaf	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

package cancelButton : javax.swing.JButton			
Type	javax.swing.JButton		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

package colorChooser : javax.swing.JColorChooser			
Type	javax.swing.JColorChooser		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	


package colorFields : javax.swing.JLabel			
Type Modifier	[]		
Type	javax.swing.JLabel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	06.07.2015 19:56:24	

package complementsFields : javax.swing.JTextField			
Type Modifier	[]		
Type	javax.swing.JTextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	06.07.2015 19:56:24	

package letterAddInfoFields : javax.swing.JPanel			
Type Modifier	[]		
Type	javax.swing.JPanel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		

Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	06.07.2015 19:56:24	

package alphabetAddInfoArea : javax.swing.JPanel			
Type	javax.swing.JPanel		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

package gc : GeneCode			
Type	 GeneCode		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:44:56
	Last Modified	06.07.2015 19:56:24

Operations

public ConfigGeneCode ()		
Description	Create the dialog.	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

package setGeneCode (gc : GeneCode) : boolean			
Parameters	gc		
	Multiplicity	Unspecified	
	Type	GeneCode	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:57:51
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

private createMenuBar () : void	
Leaf	false
Upper	1
Ordered	false

Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

private saveCodeFile (f : String) : boolean		
Parameters	f	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		01.07.2015 12:57:51
		Last Modified
		01.07.2015 13:08:25
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

private loadGeneCode (file : String) : GeneCode		
Parameters	file	
	Multiplicity	Unspecified
	Type	String
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
	Project Management	Create Date Time
		01.07.2015 12:57:51
		Last Modified
		01.07.2015 13:08:25
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

private createNewGeneCode () : void		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25


private chooseFile () : String		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

public actionPerformed (ae : java.awt.event.ActionEvent) : void			
Parameters	ae		
	Multiplicity	Unspecified	
	Type	java.awt.event.ActionEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:57:51
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

private readTable () : void		
Description	read table in the GeneCode Hashtable	
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

public getGeneCode () : GeneCode		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

private chooseColor (index : int) : void			
Parameters	index		
	Multiplicity	Unspecified	
	Type	 int	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:57:51
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		

Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

public mouseClicked (e : java.awt.event.MouseEvent) : void		
Parameters	e	
	Multiplicity	Unspecified
	Type	java.awt.event.MouseEvent
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:57:51
		Last Modified
		01.07.2015 13:08:25
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

public mousePressed (e : java.awt.event.MouseEvent) : void		
Parameters	e	
	Multiplicity	Unspecified
	Type	java.awt.event.MouseEvent
	Direction	inout
	Java Detail	N/A
	Project Management	Name
		Value
		Author
		her_hod
		Create Date Time
		01.07.2015 12:57:51
		Last Modified
		01.07.2015 13:08:25
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

public mouseReleased (e : java.awt.event.MouseEvent) : void			
Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:57:51
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	



public mouseEntered (e : java.awt.event.MouseEvent) : void			
Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:57:51
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:57:51
	Last Modified	01.07.2015 13:08:25

public mouseExited (e : java.awt.event.MouseEvent) : void			
Parameters	e		
	Multiplicity	Unspecified	
	Type	java.awt.event.MouseEvent	
	Direction	inout	
	Java Detail	N/A	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	01.07.2015 12:57:51
		Last Modified	01.07.2015 13:08:25
Leaf	false		
Upper	1		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:57:51	
	Last Modified	01.07.2015 13:08:25	

Relationships

Unnamed Association

To (gc)	Name	Value	
	End Model Element	 GeneCode	
	Representative Attribute	gc	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	Unspecified	
	Visibility	package	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 GeneCode	
	Project Management	Name	Value
		Author	her_hod
		Create Date Time	06.07.2015 19:44:56
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	06.07.2015 19:44:56	
	Last Modified	06.07.2015 19:56:24	

NewGCDialog

Name	Value
Description	Ein Hilfsfenster für die Erzeugung eines neuen GeneCodes Enthält nur die nötigsten felder @author Abel Hodelin Hernandez @author Timur Horn @version 1.0
Active	false
Business Key Mutable	true
Java Detail	N/A
Business Model	false
Visibility	public
Leaf	false
Root	false

Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:40
	Last Modified	06.07.2015 19:56:24

Attributes

package at : javax.swing.JTextField			
Type	javax.swing.JTextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:40	
	Last Modified	01.07.2015 13:08:25	

package It : javax.swing.JTextField			
Type	javax.swing.JTextField		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:40	
	Last Modified	01.07.2015 13:08:25	

package gc : GeneCode	
Type	 GeneCode

Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Java Detail	N/A		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	her_hod	
	Create Date Time	01.07.2015 12:59:40	
	Last Modified	01.07.2015 13:08:25	

Operations

public NewGCDialog ()		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:40
	Last Modified	01.07.2015 13:08:25



private createLabel () : void		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:40
	Last Modified	01.07.2015 13:08:25

private createGC () : void	
Leaf	false
Upper	1
Ordered	false

Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:40
	Last Modified	01.07.2015 13:08:25

public getResult () : GeneCode		
Leaf	false	
Upper	1	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:40
	Last Modified	01.07.2015 13:08:25

Relationships

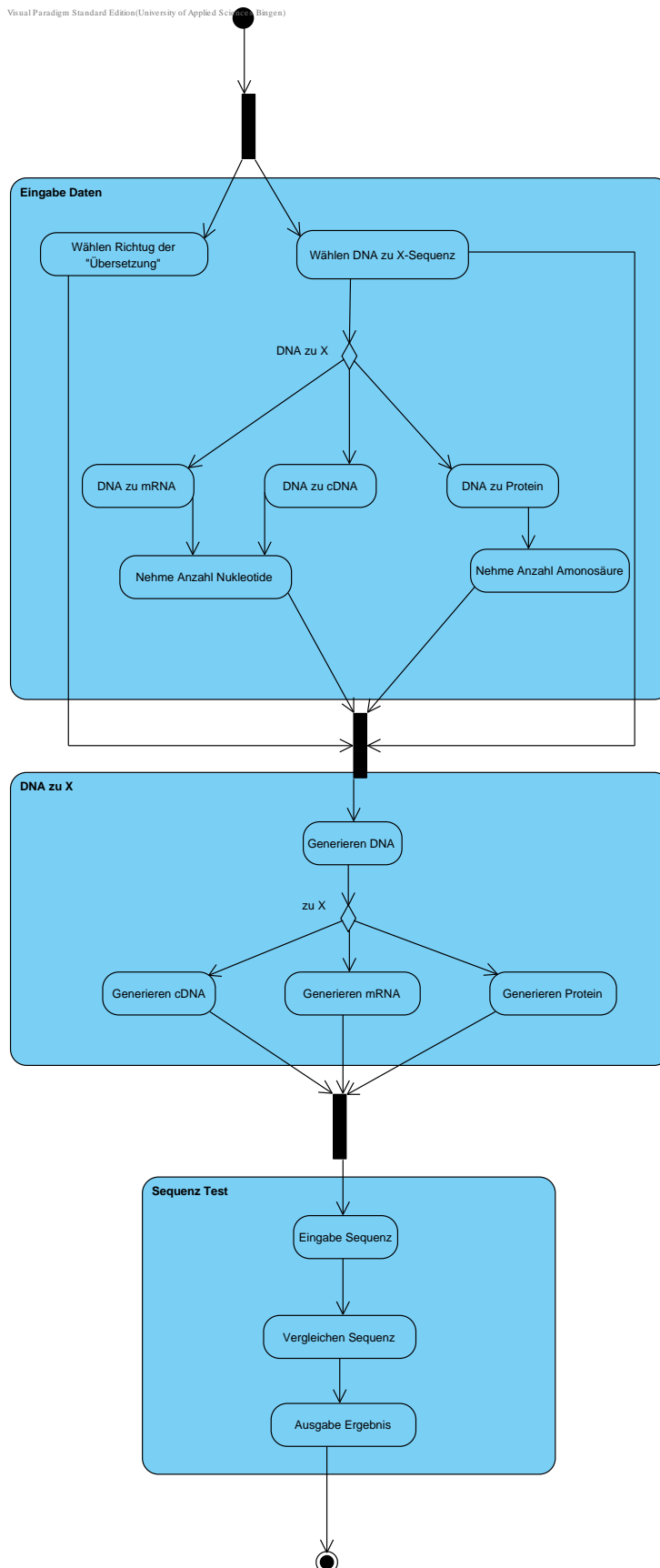
Unnamed Association		
To (gc)	Name	Value
	End Model Element	 GeneCode
	Representative Attribute	gc
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	Unspecified
	Visibility	package
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 GeneCode
	Project Management	Name
		Value
		Author her_hod
		Create Date Time 01.07.2015 12:59:40
Abstract	false	
Leaf	false	

Visibility	Unspecified	
Derived	false	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	01.07.2015 12:59:40
	Last Modified	06.07.2015 19:56:24

Activity Diagram




















GenetikTest_AD

Visual Paradigm Standard Edition (University of Applied Sciences Bingen)



Name	Value
Name	GenetikTest_AD
Author	her_hod
Create Date Time	05.07.2015 20:38:36
Last Modified	06.07.2015 19:58:54
Show Activity Edge Weight	true

Summary

Name	Description
 Wählen Richtug der "Übersetzung"	
 Eingabe Daten	
 Wählen DNA zu X-Sequenz	
 DNA zu X	
 DNA zu mRNA	
 DNA zu cDNA	
 Nehme Anzahl Nukleotide	
 DNA zu Protein	
 Nehme Anzahl Amonosäure	
 Generieren DNA	
 DNA zu X	
 zu X	
 Generieren cDNA	
 Generieren mRNA	
 Generieren Protein	
 Eingabe Sequenz	
 Sequenz Test	
 Vergleichen Sequenz	
 Ausgabe Ergebnis	

Details


● N/A


Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 20:46:49
	Last Modified	05.07.2015 21:13:16

 N/A

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:07:41
	Last Modified	05.07.2015 21:13:16

Relationships

Unnamed Control Flow		
To	 Wählen Richtug der "Übersetzung"	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:07:55
	Last Modified	05.07.2015 21:24:08

Unnamed Control Flow		
To	 Wählen DNA zu X-Sequenz	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:07:58
	Last Modified	05.07.2015 21:24:08

Wählen Richtug der "Übersetzung"

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 20:49:00
	Last Modified	05.07.2015 21:43:15

Relationships

Unnamed Control Flow		
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To	N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:34:58
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:07:55
	Last Modified	05.07.2015 21:24:08

Eingabe Daten

Name	Value	
Reentrant	false	
Single Execution	false	
Read Only	false	
Body Font Size	0	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:17:09
	Last Modified	05.07.2015 21:34:08

Children


Name	Description
Nehme Anzahl Nukleotide	
DNA zu X	
DNA zu cDNA	
DNA zu Protein	
Nehme Anzahl Amonosäure	
Wählen DNA zu X-Sequenz	
Wählen Richtug der "Übersetzung"	
DNA zu mRNA	


Wählen DNA zu X-Sequenz


Name	Value
-------------	--------------

Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 20:47:13
	Last Modified	05.07.2015 21:43:15

Relationships

Unnamed Control Flow		
To	 DNA zu X	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:03:33
	Last Modified	05.07.2015 21:24:08

Unnamed Control Flow		
To	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:36:20
	Last Modified	05.07.2015 21:43:15


Unnamed Control Flow		
From	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:07:58
	Last Modified	05.07.2015 21:24:08


DNA zu X


Name	Value
Must Isolate	false
Leaf	false
Visibility	Unspecified


Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 20:55:29
	Last Modified	05.07.2015 21:34:08

Relationships

Unnamed Control Flow		
To	 DNA zu mRNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:05:15
	Last Modified	05.07.2015 21:34:08

Unnamed Control Flow		
To	 DNA zu Protein	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:05:18
	Last Modified	05.07.2015 21:24:08


Unnamed Control Flow		
To	 DNA zu cDNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:11:50
	Last Modified	05.07.2015 21:24:08


Unnamed Control Flow		
From	 Wählen DNA zu X-Sequenz	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:03:33
	Last Modified	05.07.2015 21:24:08

 DNA zu mRNA

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:04:17
	Last Modified	05.07.2015 21:34:08

Relationships


Unnamed Control Flow		
To	 Nehme Anzahl Nukleotide	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:14:30
	Last Modified	05.07.2015 21:34:08


Unnamed Control Flow		
From	 DNA zu X	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:05:15
	Last Modified	05.07.2015 21:34:08

DNA zu cDNA

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 20:58:08
	Last Modified	05.07.2015 21:24:08

Relationships



Unnamed Control Flow	
To	 Nehme Anzahl Nukleotide
Leaf	false


Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:14:46
	Last Modified	05.07.2015 21:24:08
Unnamed Control Flow		
From	 DNA zu X	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:11:50
	Last Modified	05.07.2015 21:24:08

Nehme Anzahl Nukleotide

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 20:48:57
	Last Modified	05.07.2015 21:34:08

Relationships


Unnamed Control Flow		
To	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:25:49
	Last Modified	05.07.2015 21:34:08
Unnamed Control Flow		
From	 DNA zu mRNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:14:30
	Last Modified	05.07.2015 21:34:08


Unnamed Control Flow		
From	 DNA zu cDNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:14:46
	Last Modified	05.07.2015 21:24:08

DNA zu Protein

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 20:58:11
	Last Modified	05.07.2015 21:24:08

Relationships

Unnamed Control Flow		
To	 Nehme Anzahl Amonosäure	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:13:07
	Last Modified	05.07.2015 21:24:08



Unnamed Control Flow		
From	 DNA zu X	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:05:18
	Last Modified	05.07.2015 21:24:08

Nehme Anzahl Amonosäure

Name	Value
Must Isolate	false

Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:06:38
	Last Modified	05.07.2015 21:34:08


Relationships

Unnamed Control Flow		
To	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:25:54
	Last Modified	05.07.2015 21:34:08
Unnamed Control Flow		
From	 DNA zu Protein	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:13:07
	Last Modified	05.07.2015 21:24:08

 N/A


Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Combine Duplicate	true	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:25:37
	Last Modified	05.07.2015 21:43:15

Relationships

Unnamed Control Flow	
To	 Generieren DNA
Leaf	false
Visibility	Unspecified


Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:26:37
	Last Modified	05.07.2015 21:34:08

Unnamed Control Flow

From	 Nehme Anzahl Nukleotide	
Leaf	false	
Visibility	Unspecified	


Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:25:49
	Last Modified	05.07.2015 21:34:08

Unnamed Control Flow

From	 Nehme Anzahl Amonosäure	
Leaf	false	
Visibility	Unspecified	


Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:25:54
	Last Modified	05.07.2015 21:34:08

Unnamed Control Flow

From	 Wählen Richtug der "Übersetzung"	
Leaf	false	
Visibility	Unspecified	

Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:34:58
	Last Modified	05.07.2015 21:43:15

Unnamed Control Flow

From	 Wählen DNA zu X-Sequenz	
Leaf	false	
Visibility	Unspecified	



Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:36:20
	Last Modified	05.07.2015 21:43:15

Generieren DNA

Name	Value
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Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:23:12
	Last Modified	05.07.2015 21:43:15






Relationships

Unnamed Control Flow		
To	 zu X	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:28:21
	Last Modified	05.07.2015 21:34:08
Unnamed Control Flow		
From	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:26:37
	Last Modified	05.07.2015 21:34:08

DNA zu X

Name	Value	
Reentrant	false	
Single Execution	false	
Read Only	false	
Body Font Size	0	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:20:26
	Last Modified	05.07.2015 21:43:15


Children


Name	Description
 Generieren DNA	
 zu X	
 Generieren cDNA	
 Generieren mRNA	
 Generieren Protein	


zu X

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:27:05
	Last Modified	05.07.2015 21:34:08


Relationships

Unnamed Control Flow		
To	 Generieren cDNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:29:43
	Last Modified	05.07.2015 21:34:08

Unnamed Control Flow		
To	 Generieren mRNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:29:47
	Last Modified	05.07.2015 21:34:08

Unnamed Control Flow		
To	 Generieren Protein	
Leaf	false	
Visibility	Unspecified	



Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:29:50
	Last Modified	05.07.2015 21:34:08

Unnamed Control Flow		
From	 Generieren DNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:28:21
	Last Modified	05.07.2015 21:34:08

Generieren cDNA

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:28:29
	Last Modified	05.07.2015 21:43:15

Relationships


Unnamed Control Flow		
To	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:39:41
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	 zu X	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:29:43
	Last Modified	05.07.2015 21:34:08

Generieren mRNA

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:28:32
	Last Modified	05.07.2015 21:43:15

Relationships



Unnamed Control Flow		
To	 N/A	

Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:39:45
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	 zu X	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:29:47
	Last Modified	05.07.2015 21:34:08

Generieren Protein

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:28:35
	Last Modified	05.07.2015 21:43:15

Relationships




Unnamed Control Flow		
To	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:39:49
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	 zu X	
Leaf	false	
Visibility	Unspecified	


Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:29:50
	Last Modified	05.07.2015 21:34:08

 **N/A**

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Combine Duplicate	true	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:39:34
	Last Modified	05.07.2015 21:43:15

Relationships



Unnamed Control Flow		
To	 Eingabe Sequenz	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:40:06
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	 Generieren cDNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:39:41
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	 Generieren mRNA	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:39:45
	Last Modified	05.07.2015 21:43:15

Unnamed Control Flow		
From	 Generieren Protein	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:39:49
	Last Modified	05.07.2015 21:43:15

Eingabe Sequenz

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:33:27
	Last Modified	05.07.2015 21:43:15

Relationships




Unnamed Control Flow		
To	 Vergleichen Sequenz	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:41:34
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:40:06
	Last Modified	05.07.2015 21:43:15

Sequenz Test

Name	Value
Reentrant	false

Single Execution	false	
Read Only	false	
Body Font Size	0	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:31:24
	Last Modified	05.07.2015 21:43:15



Children

Name	Description
 Eingabe Sequenz	
 Vergleichen Sequenz	
 Ausgabe Ergebnis	

Vergleichen Sequenz

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:40:47
	Last Modified	05.07.2015 21:43:15



Relationships

Unnamed Control Flow		
To	 Ausgabe Ergebnis	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:42:53
	Last Modified	05.07.2015 21:43:15
Unnamed Control Flow		
From	 Eingabe Sequenz	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:41:34
	Last Modified	05.07.2015 21:43:15

Ausgabe Ergebnis

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:42:10
	Last Modified	06.07.2015 19:58:26

Relationships

Unnamed Control Flow		
To	 N/A	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:58:22
	Last Modified	06.07.2015 19:58:26
Unnamed Control Flow		
From	 Vergleichen Sequenz	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	05.07.2015 21:42:53
	Last Modified	05.07.2015 21:43:15

N/A

Name	Value	
Must Isolate	false	
Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:58:06
	Last Modified	06.07.2015 19:58:26

Relationships

Unnamed Control Flow	
From	 Ausgabe Ergebnis

Leaf	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	her_hod
	Create Date Time	06.07.2015 19:58:22
	Last Modified	06.07.2015 19:58:26