Cryptographics

Entwurf

Inhalt

- Architektur
- Wichtige Klassen
- Klassendiagramme
- Sequenzdiagramme
- Arbeitsteilung

Architektur

Schichtmodell

Caesar

Vigenere

DiffieHellman

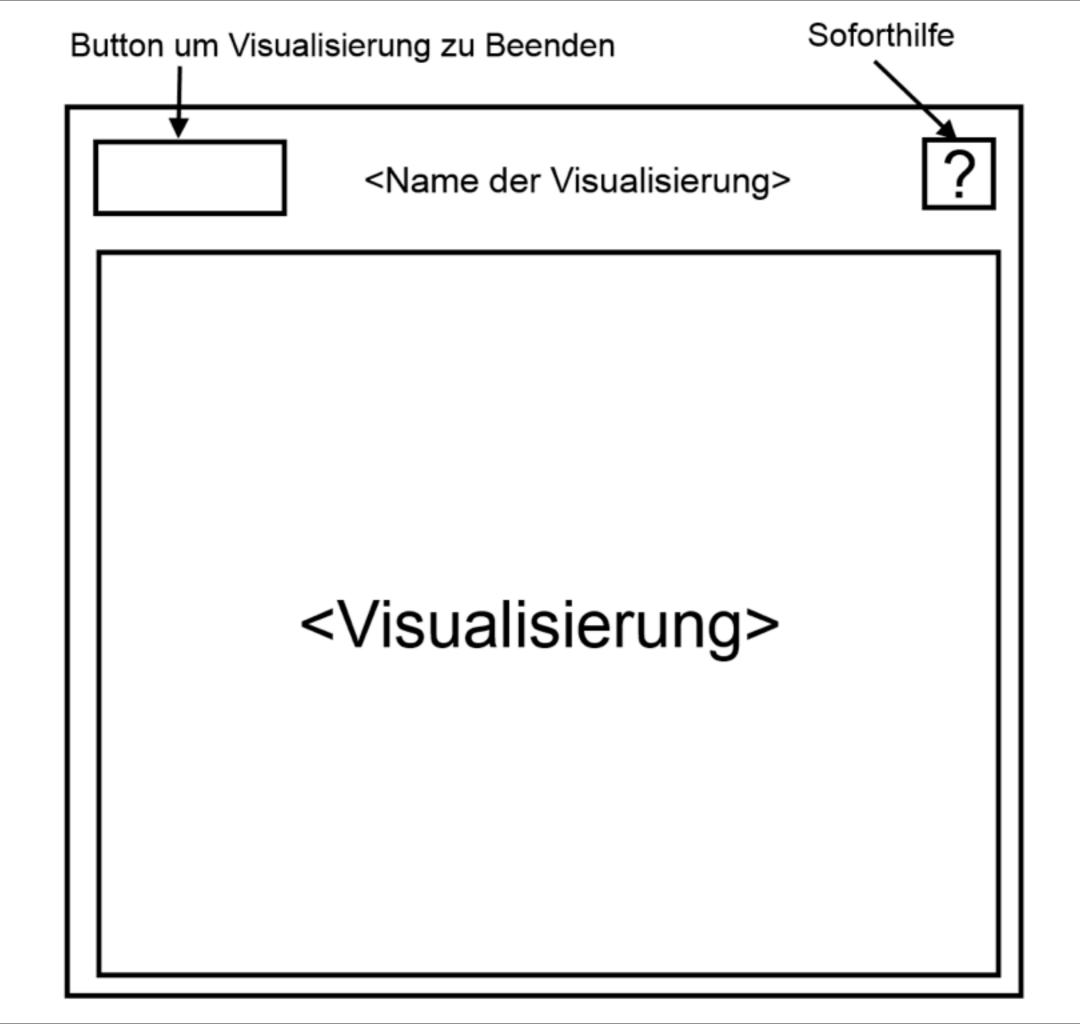
edu.kit.iks.Cryptographics

edu.kit.iks.CryptographicsLib

QRGen

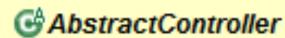
Localization Framework

Wichtige Klassen



AbstractController

<<Java Class>>



edu.kit.iks.CryptographicsLib

- view: JComponent
- parentController: AbstractController
- childControllers: List<AbstractController>
- addChildController(AbstractController):void
- removeChildController(AbstractController):void
- √ loadView():void
- unloadView():void
- getView():JComponent
- getParentController():AbstractController
- getChildControllers():List<AbstractController>
- viewlsLoaded():boolean

Controller-Hierarchie

edu.kit.iks.Cryptographics.MainController konkrete Subklasse von edu.kit.iks.CryptographicsLib.AbstractVisualizationController

AbstractVisualizationInfo

<<Java Enumeration>>

VisualizationDifficulty

edu.kit.iks.CryptographicsLib

SoF EASY: VisualizationDifficulty

Sof MEDIUM: VisualizationDifficulty

SoF HARD: VisualizationDifficulty

VisualizationDifficulty()

<<Java Class>>



edu.kit.iks.CryptographicsLib

- AbstractVisualizationInfo()

- getAdditionalInformationFileURL():URL
- getQrCode():Image

MainController

<<Java Class>>

MainController

edu.kit.iks.Cryptographics

- frame: JFrame
- startController: StartController
- visualizationContainerController: VisualizationContainerController
- loadView():void
- loadFrame():void
- presentStartAction():void
- presentVisualizationAction(AbstractVisualizationInfo):void
- loadStartController():void
- loadVisualizationContainerController():void

StartController

<<Java Class>>

StartController

edu.kit.iks.Cryptographics

- popoverView: TimelinePopoverView
- timelineView: TimelineView
- welcomeView: WelcomeView
- visualizationInfos: List<AbstractVisualizationInfo>
- StartController()
- loadView():void
- unloadView():void
- loadPopoverView(AbstractVisualizationInfo):void
- presentPopoverAction(AbstractVisualizationInfo):void
- dismissPopoverAction():void
- startVisualizationAction(AbstractVisualizationInfo):void
- loadAllVisualizationInfos():void

Visualization Controllers

<<Java Class>>

G AbstractVisualizationController

edu.kit.iks.CryptographicsLib

- visualizationInfo: AbstractVisualizationInfo
- getVisualizationInfo():AbstractVisualizationInfo
- de getHelp():String

-visualizationControllers

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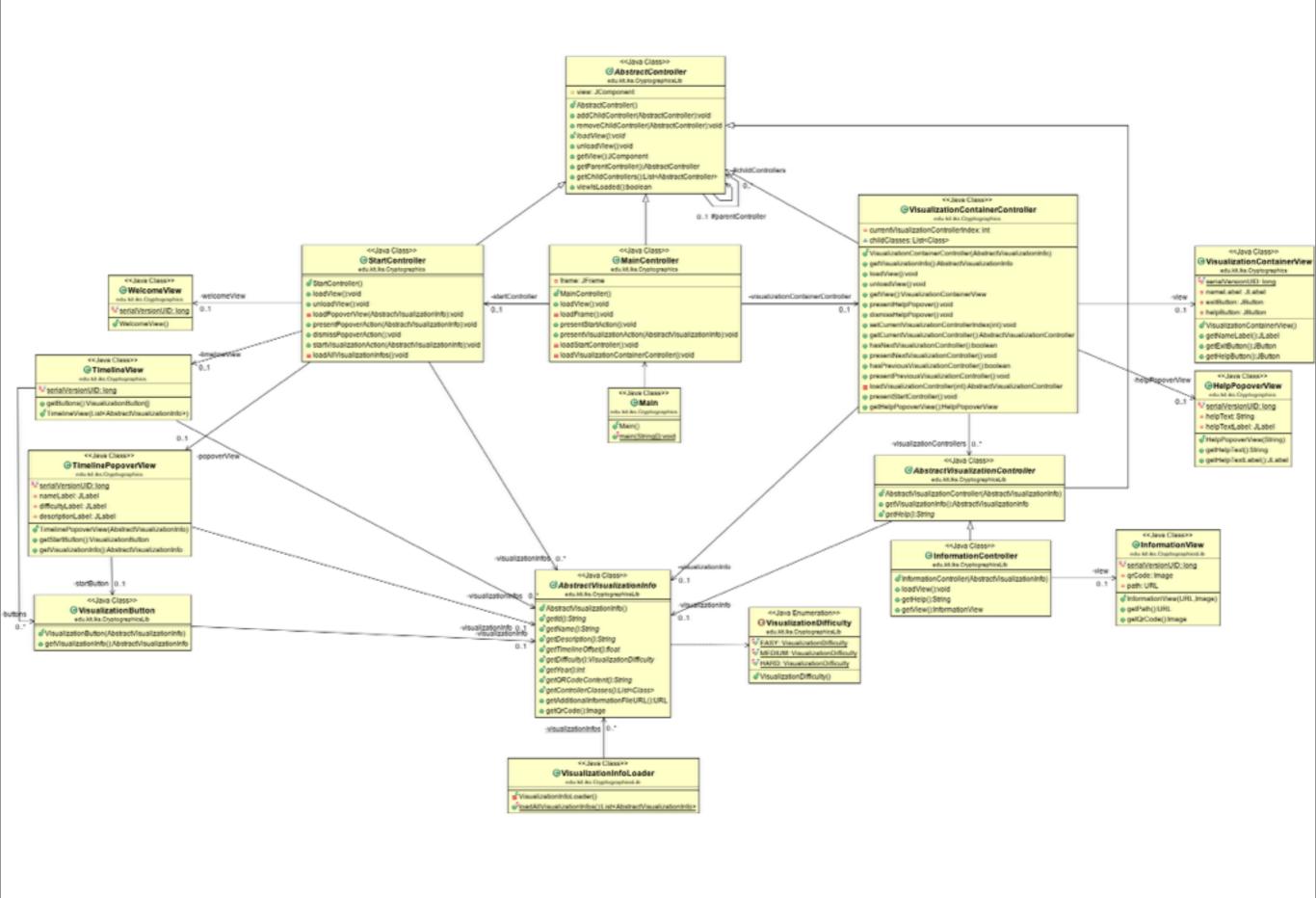
• VisualizationContainerController

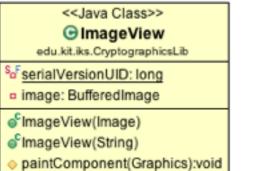
<<Java Class>>

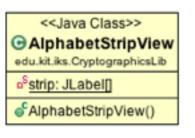
edu.kit.iks.Cryptographics

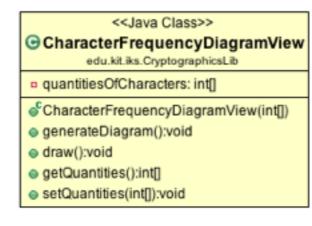
- currentVisualizationControllerIndex: int
- visualizationInfo: AbstractVisualizationInfo
- view: VisualizationContainerView
- △ childClasses: List<Class>
- helpPopoverView: HelpPopoverView
- √VisualizationContainerController(AbstractVisualizationInfo)
- getVisualizationInfo():AbstractVisualizationInfo
- loadView():void
- unloadView():void
- getView():VisualizationContainerView
- presentHelpPopover():void
- dismissHelpPopover():void
- setCurrentVisualizationControllerIndex(int):void
- getCurrentVisualizationController():AbstractVisualizationController
- hasNextVisualizationController():boolean
- presentNextVisualizationController():void
- hasPreviousVisualizationController():boolean
- presentPreviousVisualizationController():void
- loadVisualizationController(int):AbstractVisualizationController
- presentStartController():void
- getHelpPopoverView():HelpPopoverView

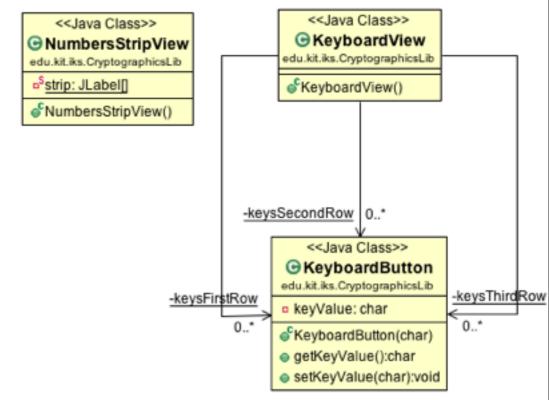
Klassendiagramme

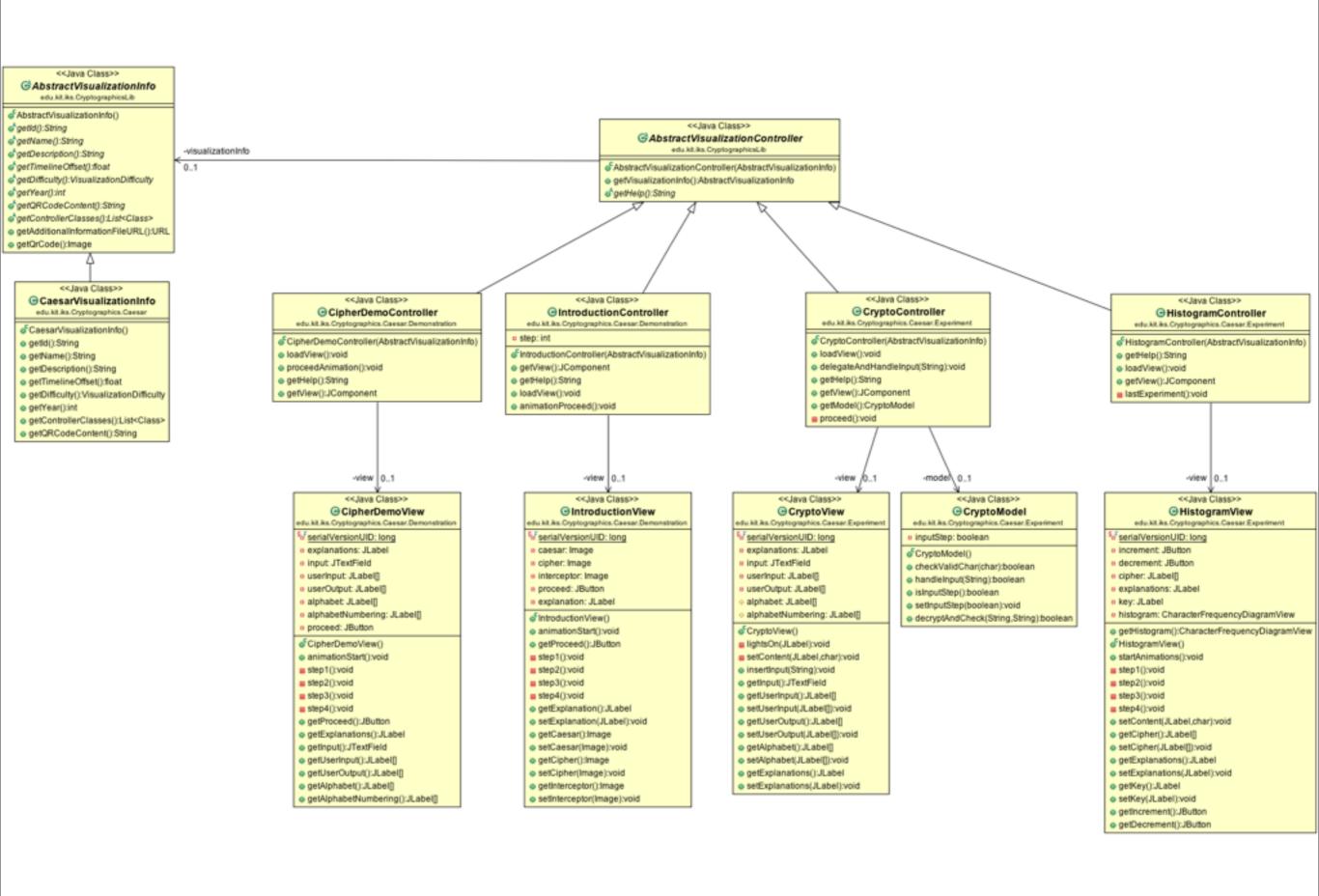


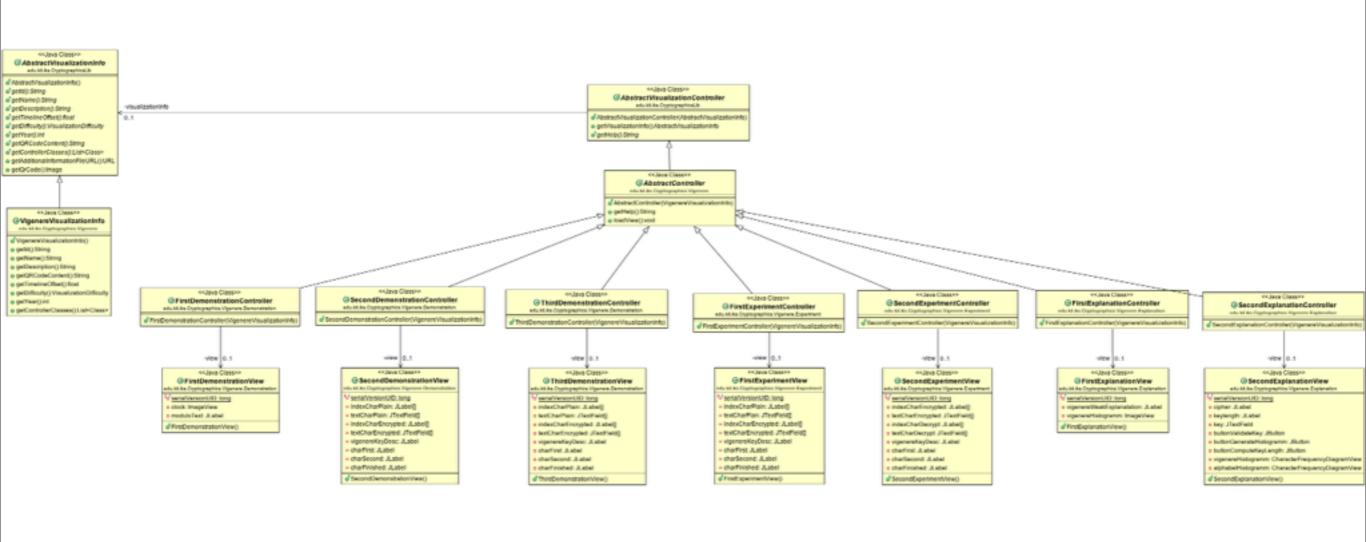


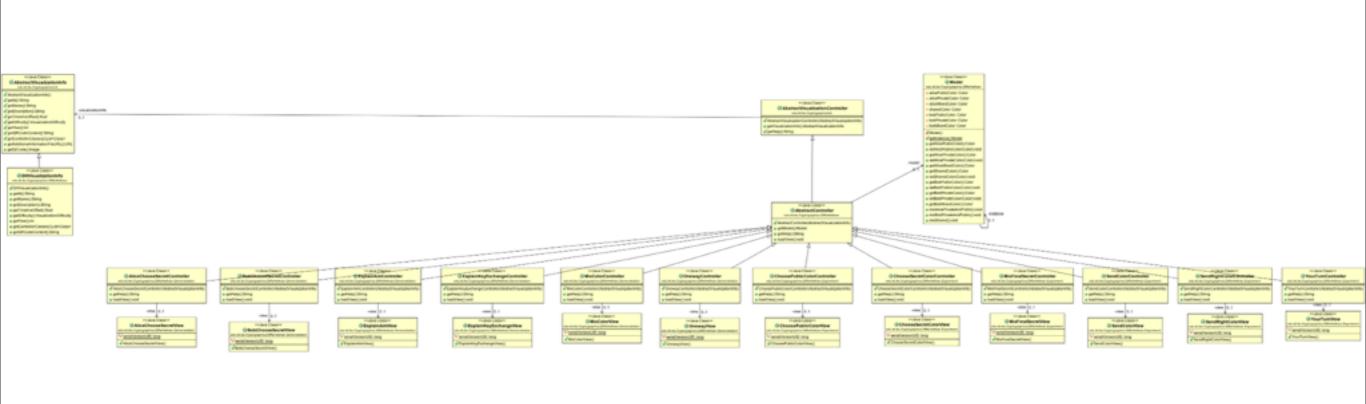




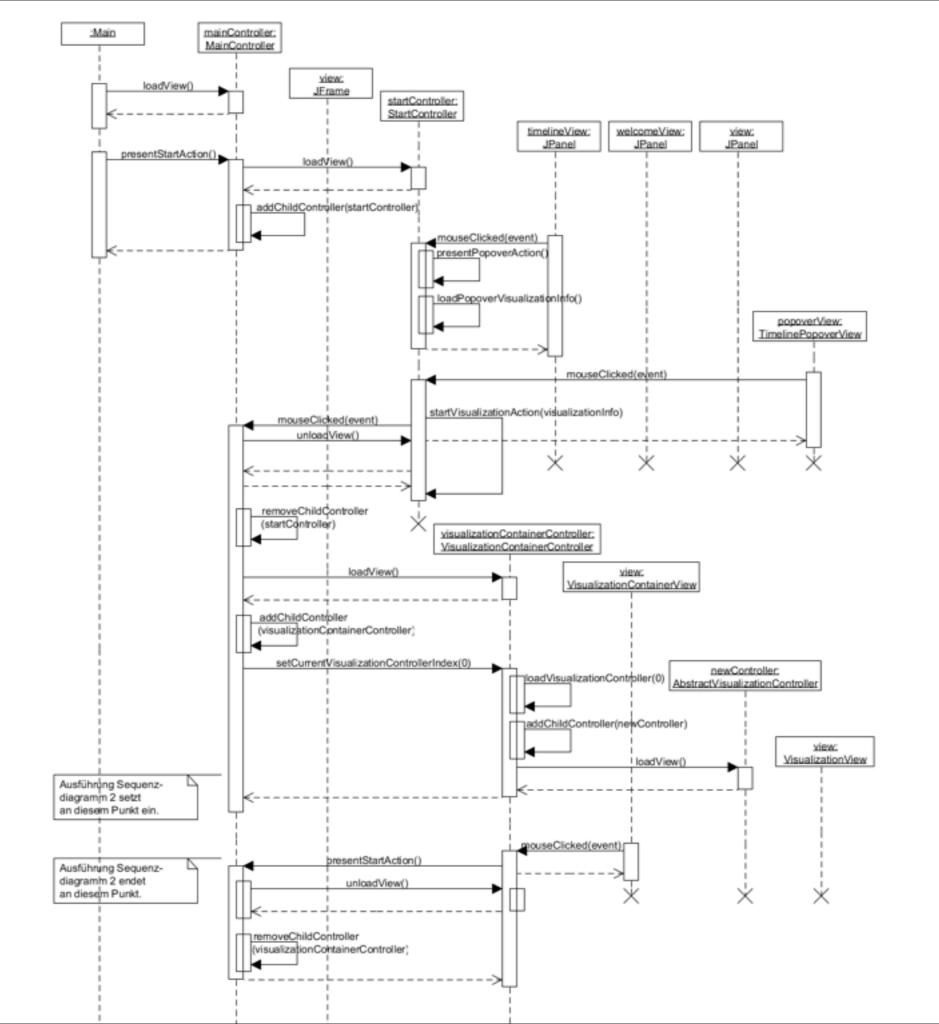


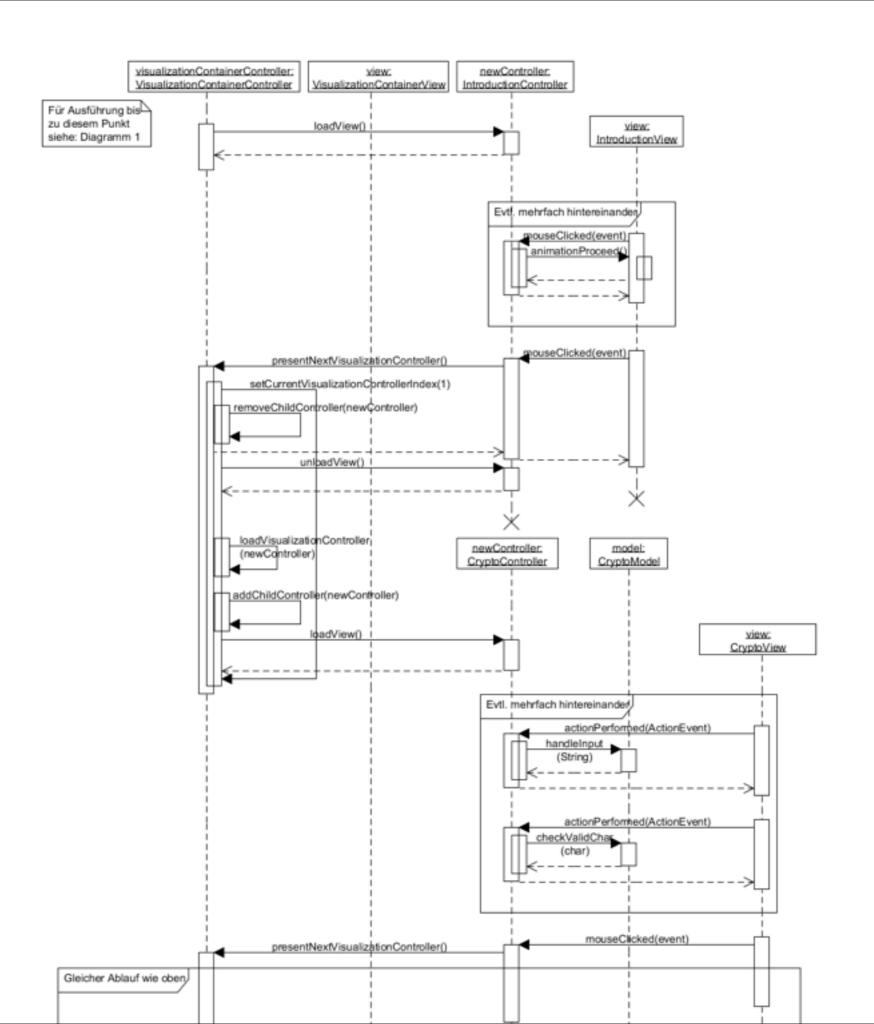






Sequenzdiagramme





Arbeitsteilung

- prinzipiell haben alle überall mitgeholfen, es gab allerdings eine klare Aufteilung der Zuständigkeiten
- Christian, Matthias J. und Matthias P.: edu.kit.iks.Cryptographics und edu.kit.iks.CryptographicsLib
- Wasilij: edu.kit.iks.Cryptographics.Caesar
- Aydin: edu.kit.iks.Cryptographics.Vigenere
- Julien: edu.kit.iks.Cryptographics.DiffieHellman