

Document	
<ul style="list-style-type: none"><li>• Represents the main model of the data of this software</li></ul>	<ul style="list-style-type: none"><li>• None</li></ul>

Document Manager	
<ul style="list-style-type: none"><li>• Handles creation of new objects of type Document</li><li>• Handles template creation</li></ul>	<ul style="list-style-type: none"><li>• Document</li></ul>

VersionsManager	
<ul style="list-style-type: none"><li>• Controls the versioning system.</li><li>• Enables/disables the versioning system</li><li>• Sets the mode / strategy of operation (Volatile/Stable)</li></ul>	<ul style="list-style-type: none"><li>• VersionsStrategy</li></ul>

Interface VersionsStrategy	
<ul style="list-style-type: none"><li>• Puts new version of document in the versioning system</li><li>• gets previous version of document</li><li>• sets entire history of documents</li><li>• returns entire history of documents</li><li>• removes latest version from the versioning system</li></ul>	<ul style="list-style-type: none"><li>• Document</li></ul>

VolatileVersionsStrategy		VersionsStrategy
<ul style="list-style-type: none"> <li>• Stores document versions in Memory (ArrayList)</li> <li>• Returns most recent version stored.</li> <li>• Returns entire history of document versions (ArrayList)</li> <li>• Can "be fed" entire document history in form of ArrayList</li> </ul>		<ul style="list-style-type: none"> <li>• Document</li> <li>• VersionsManager</li> </ul>

StableVersionsStrategy		VersionsStrategy
<ul style="list-style-type: none"> <li>• Saves the document versions on the filesystem in .tex format</li> <li>• Saves new versions of Document</li> <li>• Returns previous version of Document</li> <li>• Can "be fed" entire Document version history to be saved on the filesystem</li> <li>• Returns entire document history from filesystem</li> </ul>		<ul style="list-style-type: none"> <li>• Document</li> <li>• VersionsManager</li> </ul>

VersionsStrategyFactory	
<ul style="list-style-type: none"> <li>• Creates objects of VolatileVersionStrategy or StableVersionStrategy based on Input</li> </ul>	

LatexEditorController	
<ul style="list-style-type: none"> <li>• Enacts commands according to input from the GUI.</li> <li>• Creates manager objects for the different systems (versioning and encryption).</li> <li>• Keeps the current Document.</li> </ul>	<ul style="list-style-type: none"> <li>• Command (Interface)</li> <li>• CommandFactory</li> <li>• VersionsManager</li> <li>• DocumentManager</li> <li>• CipherManager</li> <li>• MainWindow</li> <li>• Document</li> </ul>

Interface	
Command	
<ul style="list-style-type: none"> <li>• executes command</li> </ul>	

CommandFactory	
<ul style="list-style-type: none"> <li>• Creates instances of command classes that extend the SuperCommand class and implement the command interface.</li> <li>• With the help of LatexEditorController, each command class gets an instance of the manager they need.</li> </ul>	<ul style="list-style-type: none"> <li>• VersionsManager</li> <li>• DocumentManager</li> <li>• CipherManager</li> <li>• EditCommand</li> <li>• AddLatexCommand</li> <li>• rollbacktoPreviousVersionCommand</li> <li>• SaveCommand</li> <li>• LoadCommand</li> <li>• CreateCommand</li> <li>• enableVersionsCommand</li> <li>• DisableVersionsCommand</li> <li>• ChangeVersionsStrategyCommand</li> <li>• ChangeCipherStrategyCommand</li> <li>• SaveEncryptedCommand</li> <li>• LoadEncryptedCommand</li> </ul>

Abstract	
SuperCommand	
<ul style="list-style-type: none"> <li>• a super class that holds the common fields of command classes.</li> </ul>	<ul style="list-style-type: none"> <li>• Command</li> </ul>

EnableVersionsManager	
	SuperCommand
<ul style="list-style-type: none"> <li>• Enables Versioning system</li> </ul>	<ul style="list-style-type: none"> <li>• VersionsManager</li> </ul>

<b>DisableVersionsManager</b>		SuperCommand
<ul style="list-style-type: none"><li>Disables Versioning System</li></ul>	<ul style="list-style-type: none"><li>VersionManager</li></ul>	

<b>AddLatexCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>Adds the selected latex command at the caret position inside the Document.</li><li>Keeps a copy of the document in the versioning system.</li></ul>	<ul style="list-style-type: none"><li>LatexEditorController</li><li>VersionsManager</li></ul>	

<b>CreateCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>Gets Document manager to create a new document based on input (type)</li><li>Sets document created as current in LatexEditorController.</li><li>Keeps a copy of the new document in the versioning system.</li></ul>	<ul style="list-style-type: none"><li>DocumentManager</li><li>LatexEditorController</li><li>VersionsManager</li></ul>	

<b>EditCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>Keeps text area and the document in backend updated.</li><li>Adds a copy of the document in the versioning system.</li></ul>	<ul style="list-style-type: none"><li>LatexEditorController</li><li>VersionsManager</li></ul>	

<b>ChangeVersionsCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>Changes the Strategy of the versioning system</li></ul>	<ul style="list-style-type: none"><li>VersionsManager</li></ul>	

<b>LoadCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>• Loads a file in the system as a new document.</li></ul>	<ul style="list-style-type: none"><li>• LatexEditorController</li><li>• VersionsManager</li><li>• FileLoader</li></ul>	

<b>SaveCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>• Saves the document as a file in the hard disk.</li></ul>	<ul style="list-style-type: none"><li>• LatexEditorController</li><li>• FileSaver</li></ul>	

<b>RollbacktoPreviousVersionCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>• Rolls back to previous version of the document</li></ul>	<ul style="list-style-type: none"><li>• VersionsManager</li></ul>	

<b>ChangeCipherStrategyCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>• Changes the Strategy of the encrypting system</li></ul>	<ul style="list-style-type: none"><li>• LatexEditorController</li><li>• CipherManager</li></ul>	

<b>SaveEncryptedCommand</b>		SuperCommand
<ul style="list-style-type: none"><li>• Saves the document as an encrypted file in the hard disk.</li></ul>	<ul style="list-style-type: none"><li>• LatexEditorController</li><li>• CipherManager</li><li>• FileSaver</li></ul>	

<b>LoadEncryptedCommand</b> <span>SuperCommand</span>	
<ul style="list-style-type: none"><li>• Loads an encrypted file in the system as a new document.</li></ul>	<ul style="list-style-type: none"><li>• LatexEditorController</li><li>• CipherManager</li><li>• FileLoader</li><li>• VersionsManager</li></ul>

<b>CipherManager</b>	
<ul style="list-style-type: none"><li>• Controls the encryption system.</li><li>• Sets the algorithm for encryption (Atbash/Rot13)</li></ul>	<ul style="list-style-type: none"><li>• CipherFactory</li><li>• CipherStrategy</li></ul>

<b>CipherStrategy</b> <span>Interface</span>	
<ul style="list-style-type: none"><li>• encrypts a String</li><li>• decrypts a String</li></ul>	

<b>Rot13Cipher</b> <span>CipherStrategy</span>	
<ul style="list-style-type: none"><li>• Encrypts a String based on Rot13 algorithm.</li><li>• Decrypts a String based on Rot13 algorithm.</li></ul>	

<b>AtbashCipher</b> <span>CipherStrategy</span>	
<ul style="list-style-type: none"><li>• Encrypts a String based on Atbash algorithm.</li><li>• Decrypts a String based on Atbash algorithm.</li></ul>	

CipherFactory	
<ul style="list-style-type: none"> <li>Creates instances of cipher classes that implement the CipherStrategy interface.</li> </ul>	<ul style="list-style-type: none"> <li>AtbashCipher</li> <li>Rot13Cipher</li> </ul>

FileLoader		utilities package
<ul style="list-style-type: none"> <li>Loads a file from the disk as a String</li> </ul>		

FileSaver		utilities package
<ul style="list-style-type: none"> <li>Saves a file in the disk</li> </ul>		

OpeningWindow	
<ul style="list-style-type: none"> <li>Has the 'main' function.</li> <li>Creates the LatexEditorController.</li> <li>Shows the starting window.</li> </ul>	<ul style="list-style-type: none"> <li>LatexEditorController</li> <li>ChooseTemplate</li> </ul>

ChooseTemplate	
<ul style="list-style-type: none"> <li>Shows a window where the user can choose the type of document he wants to write.</li> </ul>	<ul style="list-style-type: none"> <li>LatexEditorController</li> </ul>

MainWindow	
<ul style="list-style-type: none"><li>• Shows the main window and work environment for the user.</li><li>• Handles all user actions with the help of action listeners.</li><li>• For each action the user chooses to do, calls the LatexEditorController to work on it on the backend.</li></ul>	<ul style="list-style-type: none"><li>• LatexEditorController</li></ul>