Document

• Represents the main model of the data of this software • Handles writing files to the filesystem • Creates clone instances	• None

Document Manager

• Handles creation of new objects of type Document • Handles template creation	• Document

VersionsManager

• Controls the versioning system. • Enables/disables the versioning system • Sets the mode / strategy of operation (Volatile/Stable) • Communicates with the front end to accomplish most functional requirements	• VersionsStrategy • LatexEditorView

Interface
VersionsStrategy

• Puts new version of document in the versioning system • gets previous version of document • sets entire history of documents • returns entire history of documents • removes latest version from the versioning system	• Document

VolatileVersionsStrategy	VersionsStrategy
• Stores document versions in Memory (ArrayList) • Returns most recent version stored. • Returns entire history of document versions (ArrayList) • Can "be fed" entire document history in form of ArrayList	• Document • VersionsManager

StableVersionsStrategy	VersionsStrategy
• Saves the document versions on the filesystem in .tex format • Returns previous version of Document • Returns entire document history from filesystem • Can "be fed" entire Document version history to be saved on the filesystem	• Document • VersionsManager

VersionsStrategyFactory	
• Creates objects of VolatileVersionStrategy or StableVersionStrategy based on Input	• VersionStrategy

LatexEditorController	
• Creates and stores command-type objects • Triggers commands according to input from the GUI	• LatexEditorView • Command (Interface) • CommandFactory

Interface Command	
• executes command	

CommandFactory

• Creates instances of command classes that implement command interface	• VersionsManager • DocumentManager • EditCommand • AddLatexCommand • rollbacktoPreviousVersionCommand • SaveCommand • LoadCommand • CreateCommand • enableVersionsCommand • DisableVersionsCommand • ChangeVersionsStrategy

EnableVersionsManager

• Enables versioning system	• VersionsManager

DisableVersionsManager

• Disables versioning system	• VersionManager

AddLatexCommand

• Calls VersionsManager to update contents from the text area to the current Document	• VersionsManager

CreateCommand	
- Gets Document manager to create a new document based on input (type) - Sets document created as current in VersionsManager	- DocumentManager - VersionsManager

EditCommand	
Calls VersionsManager to update contents from the text area to the current Document	VersionsManager

ChangeVersionsStrategyCommand	
Calls VersionsManager to change versioning Strategy	VersionsManager

LoadCommand	
Calls VersionsManager to load document from file	VersionsManager

SaveCommand	
Calls Versions manager to save document to file	VersionsManager

RollbacktoPreviousVersionCommand	
calls VersionsManager to roll back to previous version of the document	VersionsManager

OpeningWindow

- Has the Main() method - Initializes the manager classes of the system - Sets volatile versioning strategy as default - Creates the first window of the GUI	- VersionsManager - VersionsStartegy - LatexEditorController - LatexEditorView

MainWindow

- Adds Latex Commands (Strings) to the caret position - Asks LatexEditorView to update the current document - Updates the text area - Creates the main window of the GUI with the text area - Creates the menu items and calls LatexEditorView to trigger actions accordingly	- LatexEditorView - Document

ChooseTemplate

Creates the GUI window responsible for choosing a starting Latex Template (Book, Article etc)	LatexEditorView

LatexEditorView

- Has the current document - Is the mediator between front end and back end - Loads document from disk - Save document in disk - Decides what is the type of loaded document	- LatexEditorController - Document - VersionsManager