## WordCloudGenerator -cloud: WordCloud «constructor»(map: Map<String, Integer>, word: Set<String>) +getCloud() 0..n **GUI**

-fileChooser: JFileChooser

-loadButton: JButton

-generateButton: JButton

-resetButton: JButton

-infoPanel: JPanel -filterPanel: JPanel

-image: JLabel

-filters: List<Filter>

-handler: DataHandler

-cloudGen: WordCloudGenerator

-cloud: WordCloud

-progressBar: JProgressBar

«constructor»()

-initializeFilters(): void -selectFolders(): void

-generateWordCloud(): void

-applyFilters(): void

-applyFilter(wordFrequencyMap: Map<Integer, String>, filter: Filter)

-reset(): void

## Filter

-name: String -pattern: Pattern

«constructor»(name: String, regex: String)

+getName(): String

+applyFilter(word: String): boolean

## DataHandler

-wordFrequencyMap: Map<String, Integer>

-encounteredWords: Set<String>

-progressBar: JProgressBar

«constructor»(folderPath: String, progressBar: JProgressBar)

/ +run(): void

-scanFolder(folderPath: String): void

-readDataFromFile(filePath: String): void

-updateProgressBar(scannedFiles: int, totalFiles: int): void

+getWordFrequencyMap(): Map<String, Integer>

+getEncounteredWords(): Set<String>

Runnable