

Color Key
black=existing
blue=new
green=new
gray=Java library

Revision 6:
Fixed some items in EditNewsMakerView.
Added missing toString method in NewsStory.
Changed private helper method name in EditNewsMakerView to clarify function.

```
+NewsDataBaseModel
-serialVersionUID: long
-actionListenerList: ArrayList<ActionListener>
-newsSourceMap: Map<String, String>
-newsTopicMap: Map<String, String>
-newsSubjectMap: Map<String, String>
none: NewsMakerModel
-newsMakerListModel: NewsMakerListModel
-newsStoryListModel: NewsStoryListModel
+NewsDataBaseModel()
+NewsDataBaseModel(newsMakerListModel: NewsMakerListModel,
newsStoryListModel: NewsStoryListModel)
+getNewsSourceMap(): Map<String, String>
+getNewsSources(): String[]
+setNewsSourceMap(newsSourceMap: Map<String, String>): void
+getNewsTopicMap(): Map<String, String>
+getNewsTopics(): String[]
+setNewsTopicMap(newsTopicMap: Map<String, String>): void
+getNewsSubjectMap(): Map<String, String>
+getNewsSubjects(): String[]
+setNewsSubjectMap(newsSubjectMap: Map<String, String>): void
+containsNewsMakerListModel(newsMakerListModel: NewsMakerListModel): boolean
+containsNewsStoryListModel(newsStoryListModel: NewsMakerListModel): boolean
+getNewsMakerListModel(): NewsMakerListModel
+getNewsMakerNames(): String[]
+getNewsMakers(): DefaultListModel<NewsMakerModel>
+setNewsMakerListModel(newsMakerListModel: NewsMakerListModel): void
+addNewsMakerModel(newsMakerModel: NewsMakerModel): void
+replaceNewsMakerModel(newsMakerModel: NewsMakerModel): void
+removeNewsMakers(newsMakers: DefaultListModel<NewsMakerModel>): void
+removeAllNewsMakers(): void
+sortNewsMakerListModel(): void
+newsStoryListIsEmpty(): boolean
+containsNewsStory(newsStory: NewsStory): boolean
+getNewsStoryListModel(): NewsStoryListModel
+setNewsStories(): DefaultListModel<NewsStory>
+addNewsStory(newsStory: NewsStory): void
+setNewsStoryListModel(newsStoryListModel: NewsStoryListModel): void
+setNewsStoryListModelFromArray(newsStoryArray: NewsStory[]): void
+addNewsStory(newsStory: NewsStory): void
+removeNewsStories(newsStories: DefaultListModel<NewsStory>): void
+removeAllNewsStories(): void
+addActionListener(l: ActionListener): void
+removeActionListener(l: ActionListener): void
+processEvent(e: ActionEvent): void
```

```
+NewsMakerListModel
-serialVersionUID: long
-newsMakerDefaultListModel: DefaultListModel<NewsMakerModel>
+NewsMakerListModel()
+NewsMakerListModel(newsMakerListModel: NewsMakerListModel)
+isEmpty(): boolean
+size(): int
+contains(newsMakerModel: NewsMakerModel): boolean
+get(newsMakerModel: NewsMakerModel): NewsMakerModel
+getExactMatch(newsMakerName: String): NewsMakerModel
+getPartialMatch(newsMakerName: String): NewsMakerModel
+getNewsMakers(): DefaultListModel<NewsMakerModel>
+get(index: int): NewsMakerModel
+getNewsMakerNames(): String[]
+add(newsMakerModel: NewsMakerModel): void
+replace(newsMakerModel: NewsMakerModel): void
+remove(newsMakerModel: NewsMakerModel): void
+removeListofNewsMakers(newsMakers: DefaultListModel<NewsMakerModel>): void
+removeAllNewsMakers(): void
+setNewsMakersFromNewsMakerListModel(newsMakerListModel): void
+sort(): void
```

```
+NewsMakerModel
-serialVersionUID: long
-actionListenerList: ArrayList<ActionListener>
-name: String
-newsStoryListModel: NewsStoryListModel
+NewsMakerModel()
+NewsMakerModel(name: String)
+getName(): String
+getNewsStoryListModel(): NewsStoryListModel
+addNewsStory(newsStory: NewsStory): void
+setName(name: String): void
+setNewsStoryListModel(newsStoryListModel:
NewsStoryListModel): void
+removeNewsStory(newsStory: NewsStory): void
+equals(o: Object): boolean
+compareTo(newsMakerModel: NewsMakerModel): int
+toString(): String
+addActionListener(actionListener: ActionListener): void
+removeActionListener(actionListener:
ActionListener): void
+processEvent(actionEvent: ActionEvent): void
```

```
+NewsStoryListModel
-serialVersionUID: long
-newsStories: DefaultListModel<NewsStory>
+NewsStoryListModel()
+NewsStoryListModel(newsStoryListModel: NewsStoryListModel)
+isEmpty(): boolean
+size(): int
+contains(newsStory: NewsStory): boolean
+get(index: int): NewsStory
+getNewsStories(): DefaultListModel<NewsStory>
+add(newsStory: NewsStory): void
+remove(newsStory: NewsStory): void
+removeListofNewsStories(newsStories: DefaultListModel<NewsStory>): void
+setNewsStories(newsStoryListModel: NewsStoryListModel): void
+setNewsStoriesFromArray(newsStoryArray: NewsStory[]): void
```

```
+NewsStory
-serialVersionUID: long
-date: LocalDate
-length: int
-topic: String
-subject: String
-newsMaker1: NewsMakerModel
-newsMaker2: NewsMakerModel
#NewsStory(date: LocalDate, source: String, length: int,
topic: String, subject: String,
newsMaker1: NewsMakerModel,
newsMaker2: NewsMakerModel)
+getDate(): LocalDate
+getSource(): String
+getLength(): int
+getLengthInWords(): int
+getTopic(): String
+getSubject(): String
+getNewsMaker1(): NewsMakerModel
+getNewsMaker2(): NewsMakerModel
+setDate(date: LocalDate): void
+setSource(source: String): void
+setLength(length: int): void
+setTopic(topic: String): void
+setSubject(subject: String): void
+setNewsMaker1(newsMaker1: NewsMakerModel): void
+setNewsMaker2(newsMaker2: NewsMakerModel): void
+equals(o: Object): boolean
+compareTo(newsStory: NewsStory): int
+toString(): String
```

```
«enumeration»
+PartOfDay
MORNING
AFTERNOON
EVENING
LATE_NIGHT
+toString(): String
```

```
«enumeration»
+Month
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
+toString(): String
+toInt(): int
+fromInt(int): Month
```

```
«enumeration»
+NewsContent
SOURCE
TOPIC
SUBJECT
+toString(): String
```

```
«enumeration»
+NewsMetric
LENGTH
COUNT
+toString(): String
```

```
«enumeration»
+NewsMedia
NEWSPAPER
ONLINE
TV
+VALUES_LIST: List<NewsMedia>
+toString(): String
+valuesAsList(): List<NewsMedia>
```

```
+NewspaperStory
-serialVersionUID: long
NewspaperStory(date: LocalDate,
source: String, length: int,
topic: String, subject: String,
partOfDay: PartOfDay,
newsMaker1: NewsMakerModel,
newsMaker2: NewsMakerModel)
+getLengthInWords(): int
+getPartOfDay(): PartOfDay;
+equals(o: Object): boolean;
```

```
+TVNewsStory
-serialVersionUID: long
-partOfDay: PartOfDay
TVNewsStory(date: LocalDate,
source: String, length: int,
topic: String, subject: String,
partOfDay: PartOfDay,
newsMaker1: NewsMakerModel,
newsMaker2: NewsMakerModel)
+getLengthInWords(): int
+getPartOfDay(): PartOfDay;
+equals(o: Object): boolean;
```

```
+OnlineNewsStory
-serialVersionUID: long
-partOfDay: PartOfDay
OnlineNewsStory(date: LocalDate,
source: String, length: int,
topic: String, subject: String,
partOfDay: PartOfDay,
newsMaker1: NewsMakerModel,
newsMaker2: NewsMakerModel)
+getLengthInWords(): int
+getPartOfDay(): PartOfDay;
+equals(o: Object): boolean;
```

```
«interface»
Serializable
```

```
«interface»
Comparable<T>
+compareTo(o: T): int
```

```
«interface»
ActionListener
+actionPerformed(e: ActionEvent): void
```

```
UserInterface
-convertToOutputFormat(newsStory: NewsStory,
newsMedia: List<NewsMedia>): String
```

```
+SelectionView
-serialVersionUID: long
-newsDataBaseModel: NewsDataBaseModel
-jmb: JMenuBar
-jmFile: JMenu
-jmLoad: JMenuItem
-jmSave: JMenuItem
-jmImport: JMenuItem
-jmExport: JMenuItem
-jmNewsMaker: JMenu
-jmAddNewsMaker: JMenuItem
-jmEditNewsMaker: JMenuItem
-jmDeleteNewsMaker: JMenuItem
-jmDeleteNewsMakerList: JMenuItem
-jmNewsStory: JMenu
-jmAddNewsStory: JMenuItem
-jmEditNewsStory: JMenuItem
-jmSortNewsStories: JMenuItem
-jmDeleteAllNewsStories: JMenuItem
-jmDisplay: JMenu
-jmPieChart: JMenuItem
-jmText: JMenuItem
+SelectionView()
+registerFileMenuListener(
fileMenuListener: ActionListener): void
+registerNewsMakerMenuListener(
newsMakerMenuListener: ActionListener): void
+registerNewsStoryMenuListener(
newsStoryMenuListener: ActionListener): void
+registerDisplayMenuListener(
displayMenuListener: ActionListener): void
+setNewsDataBaseModel(
newsDataBaseModel: NewsDataBaseModel): void
+actionPerformed(actionEvent: ActionEvent): void
+getSelectedNewsMakers(): int[]
+getSelectedNewsStories(): int[]
```

```
+AddEditNewsStoryView
-serialVersionUID: long
-newsDataBaseModel: NewsDataBaseModel,
-newsStory: NewsStory
-jmb: JMenuBar
-jmFile: JMenu
-jmLoad: JMenuItem
-jmSave: JMenuItem
-jmImport: JMenuItem
-jmExport: JMenuItem
-jmNewsMaker: JMenu
-jmAddNewsMaker: JMenuItem
-jmEditNewsMaker: JMenuItem
-jmDeleteNewsMaker: JMenuItem
-jmDeleteNewsMakerList: JMenuItem
-jmNewsStory: JMenu
-jmAddNewsStory: JMenuItem
-jmEditNewsStory: JMenuItem
-jmSortNewsStories: JMenuItem
-jmDeleteAllNewsStories: JMenuItem
-jmDisplay: JMenu
-jmPieChart: JMenuItem
-jmText: JMenuItem
+AddEditNewsStoryView()
+registerFileMenuListener(
fileMenuListener: ActionListener): void
+registerNewsMakerMenuListener(
newsMakerMenuListener: ActionListener): void
+registerNewsStoryMenuListener(
newsStoryMenuListener: ActionListener): void
+registerDisplayMenuListener(
displayMenuListener: ActionListener): void
+setNewsDataBaseModel(
newsDataBaseModel: NewsDataBaseModel): void
+actionPerformed(actionEvent: ActionEvent): void
+getSelectedNewsMakers(): int[]
+getSelectedNewsStories(): int[]
```

```
+PieChartView
-pieChart: PieChart
-newsMakerModel: NewsMakerModel
-media: String
-content: String
-measure: String
+PieChartView(newsMakerModel: NewsMakerModel,
media: String, content: String, measure: String)
-constructTitle(): String
-constructWedges(): List<Wedge>
+actionPerformed(actionEvent: ActionEvent): void
```

```
+PieChart
-title: String
-wedges: List<Wedge>
+PieChart(String title,
List<Wedge> wedges)
+setTitle(String): void
+setWedges(List<Wedge>): void
+paintComponents(Graphics): void
```

```
+Wedge
-double percent
-text String
+Wedge(percent: double,
text: String)
+getPercent(): double
+setPercent(percent: double):
void
+getText(): String
+setText(text: String): void
```

```
+TextView
-jtText: JFrame
-newsMakerModel: NewsMakerModel
-newsMedia: List<NewsMedia>
-sortCriteria: List<SortCriterion>
-listOfStories: String
-summaryLine: String
+TextView(newsMakerModel: NewsMakerModel,
newsMedia: List<NewsMedia>,
sortCriteria: List<SortCriterion>)
-constructNewsStoriesAndSummary(): void
-constructTitle(): String
+actionPerformed(actionEvent: ActionEvent): void
```

```
+EditNewsMakerView
-serialVersionUID: long
-newsMakerModel: NewsMakerModel
-newsDataBaseModel: NewsDataBaseModel
-jlNewsStoryList: JList<NewsStory>
-jspNewsStoryList: JScrollPane
-jpNewsStoryList: JPanel
-jtName: JTextField
-jbName: JLabel
-jbRemoveFromStory: JButton
-jpName: JPanel
+EditNewsMakerView(newsMakerModel:
NewsMakerModel, newsDataBaseModel:
NewsDataBaseModel)
+getSelectedNewsStoryIndices(): int[]
+enableRemovalButton(): void
+actionPerformed(actionEvent: ActionEvent): void
```

```
+MediaTypeSelectionView
-serialVersionUID: long
-jcbNewspaper: JCheckBox
-jcbTVNews: JCheckBox
-jcbOnline: JCheckBox
-jlbMediaType: JLabel
-jbBlank: JButton
-jbCancel: JButton
-jbOkay: JButton
-jpCompletionButtons: JPanel
-jpMediaType: JPanel
+MediaTypeSelectionView()
```

```
NoozFileProcessor
-serialVersionUID: long
-jcbNewspaper: JCheckBox
-jcbTVNews: JCheckBox
-jcbOnline: JCheckBox
-jlbMediaType: JLabel
-jbBlank: JButton
-jbCancel: JButton
-jbOkay: JButton
-jpCompletionButtons: JPanel
-jpMediaType: JPanel
+NoozFileProcessor(newsMakerListModel:
NewsMakerListModel,
newsStoryListModel: NewsStoryListModel,
newsDataBaseModel: NewsDataBaseModel)
+readNoozFile(fileName: String, sourceMap: Map<String, String>,
topicMap: Map<String, String>, subjectMap: Map<String, String>): NewsDataBaseModel
+writeNewsText(fileName: String, listOfStories: String): void
+processLine(line: String, sourceMap: Map<String, String>,
topicMap: Map<String, String>, subjectMap: Map<String, String>): void
+decodeDate(dateString: String): LocalDate
+decodeLength(lengthString: String): int
+decodeNewsmakerName(parts: String[], startIndex: int): String
+decodePartOfDay(partOfDayCode: String): PartOfDay
```

```
SubjectComparator
+SUBJECT_COMPARATOR:
SubjectComparator
+compare(newsStory1: NewsStory,
newsStory2: NewsStory): int
```

```
DateComparator
+DATE_COMPARATOR:
DateComparator
+compare(newsStory1: NewsStory,
newsStory2: NewsStory): int
```

```
LengthComparator
+LENGTH_COMPARATOR:
LengthComparator
+compare(newsStory1: NewsStory,
newsStory2: NewsStory): int
```

```
SourceComparator
+SOURCE_COMPARATOR:
SourceComparator
+compare(newsStory1: NewsStory,
newsStory2: NewsStory): int
```

```
«interface»
Comparator<T>
+compare(o1: T, o2: T): int
```

```
+NewsController
-newsDataBaseModel: NewsDataBaseModel
-selectionView: SelectionView
-editNewsMakerView: EditNewsMakerView
-viewDialog: JDialog
+addEditNewsStoryView: AddEditNewsStoryView
+editNewsStory: NewsStory
-mediaTypeSelectionView: MediaTypeSelectionView
-selectedMediaTypes: List<NewsMedia>
+NewsController()
+setNewsDataBaseModel(newsDataBaseModel: NewsDataBaseModel): void
+setSelectionView(selectionView: SelectionView): void
-loadNewsData(): void
-saveNewsData(): void
-importNoozStories(): void
-exportNewsStories(): void
-addNewsMaker(): void
-editNewsMakers(): void
-deleteNewsMakers(): void
-deleteNewsMakerList(): void
-addNewsStory(): void
-editNewsStories(): void
-sortNewsStories(): void
-deleteNewsStories(): void
-deleteAllNewsStories(): void
-displayPieCharts(): void
-displayTextViews(): void
```

```
-FileMenuListener
+actionPerformed(actionEvent: ActionEvent): void
-NewsMakerMenuListener
+actionPerformed(actionEvent: ActionEvent): void
-NewsStoryMenuListener
+actionPerformed(actionEvent: ActionEvent): void
-DisplayMenuListener
+actionPerformed(actionEvent: ActionEvent): void
+EditNewsMakerNameListener
+actionPerformed(actionEvent: ActionEvent): void
+RemoveNewsMakerFromNewStoriesListener
+actionPerformed(actionEvent: ActionEvent): void
+AddEditNewsStoryListener
+actionPerformed(actionEvent: ActionEvent): void
+MediaTypeSelectionListener
+actionPerformed(actionEvent: ActionEvent): void
```

```
NoozDriver
-newsDataBaseModel: NewsDataBaseModel
-selectionView: SelectionView
-newsController: NewsController
+main(args: String[]): void
```