

# CS3330 FINAL PROJECT DOCUMENTATION

**UI Development:** This project was created using JavaFX. There are two .fxml documents in the project including FXMLDocument.fxml and NewsViewer.fxml

## Architecture:

Model { NYTNewsManager.java }

Views { FXMLDocument.fxml, NewsViewer.fxml }

Controllers { FXMLDocumentController.java, NewsViewerController.java }

## Required Elements

1. Object Oriented Elements that you write the code for:

### a. Classes

**Dcbk34FinalProject.java, Switchable.java, NYTNewsStory.java, NYTNewsManager.java**

### 2. Subclasses

**NewsViewerController.java is a subclass of Switchable.java**

**(visible on line 46 of NewsViewerController.java)**

### 3. At least one Abstract Class

**Switchable.java is abstract**

**(visible on line 21 of Switchable.java)**

### At least one Interface

**SearchString.java is an interface**

## 2. Code elements that you utilize:

### 2. One or more collection classes

**I utilize an Array List of news stories in NewsViewerController.java (visible on lines 52, 65, etc.)**

### 3. Exception Handling

**There is exception handling on most of the pages, but in NewsViewerController.java on line 97-102, Switchable.java lines 32-55, NYTNewsManager.java lines 74-124 just to name a few.**

3. The application must have a clearly defined model  
The 'Model' of this is located in the NYTNewsManager.java file
4. The UI must utilize multiple scenes and at least one of the scenes will have the contents of the scene graph changed based on the application state

This project has a main "Dcbk34FinalProject" scene that shows a login page then after clicking login it brings you to your NewsViewer.fxml page where you can change the data by clicking on different news stories and searching for different stories on the search bar. Switching between the news stories depends on what the user wants to search for, I have made a search string, so the web view is automatically populated, but the search function that changes the displayed content and loads the news stories can be found in NewsViewController.java on lines 114-122. The two different scenes are FXMLDocument.fxml and NewsViewer.fxml, the contents change on NewsViewer.fxml page.

5. There must be a way to access "About" information that includes information about you and the application

There is a help button on the NewsViewer.fxml page you can click on that has a dropdown with an about button on it. After clicking this an alert is displayed to tell the user more about the file. This alert code to display the alert can be found on NewsViewController.java on lines 256-276.

6. The application must save and load data. The target for saving/loading data can be files, a network service, or a database

The application has the ability to save and load the contents of the search bar. You can save the file and open it, but you will need to hit search to get the contents in the web view. NewsViewController.java reads the file you open on lines 169-199. It saves the data on lines 130-160.