​​​**CS**​​**3330**​​ **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**

* 1. Subclasses

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

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

* 1. 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**

1. Code​ ​elements​ ​that​ ​you​ ​utilize:
   1. One​ ​or​ ​more​ ​collection​ ​classes  
      **I**​ ​**utilize**​ ​**an**​ ​**Array**​ ​**List**​ ​**of**​ ​**news stories**​ ​**in**​ ​**NewsViewerController.java (visible**​ ​**on**​ ​**lines**​ ​**52,**​ ​**65,**​ ​**etc.)**
   2. 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.**
2. The​ ​application​ ​must​ ​have​ ​a​ ​clearly​ ​defined​ ​model  
   **The**​ ​**‘Model’**​ ​**of**​ ​**this**​ ​**is**​ ​**located**​ ​**in**​ ​**the**​ ​**NYTNewsManager.java**​ ​**file**
3. 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 NewsViewerController.java on lines 114-122. The two different scenes are FXMLDocument.fxml and NewsViewer.fxml, the contents change on NewsViewer.fxml page.**

1. 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 NewsViewerController.java on lines 256-276.**

1. 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. NewsViewerController.java reads the file you open on lines 169-199. It saves the data on lines 130-160.**