



FINAL PROJECT

SYSTEM DOCUMENTATION

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Course: INTE2512 Object – Oriented Programming

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1. Product description

Open News is a desktop application which gathers news articles from 5 Vietnamese news sources (VnExpress, ZingNews, Tuoitre, ThanhNien, NhanDan). This app provides a wide range of news content for its users to choose and helps them to keep up-to-date quickly since it classifies news articles into 10 categories (New, Covid, Politics, Business, Technology, Health, Sports, Entertainment, World, Others) and sorts them in the newest order. Open News contains 500 articles in total and has a paging system of 5 pages for each category, which means each category would have 50 articles and 10 article headers will be displayed per 1 page. It is extremely convenient for users who do not have much time to skim through each news website and find the article that they want to read. Open News is suitable for people who want to update news fast with just a few clicks.

2. Installation instructions

Video Guide [for Windows]: <https://youtu.be/NY3wXDKPzLA>

- Step 1: **Download** and **install** IntelliJ IDE for Windows at [Download IntelliJ IDEA: The Capable & Ergonomic Java IDE by JetBrains](#) [1]
- Step 2: **Download** and **install** Liberica 16 Full JDK at [Download OpenJDK builds of Liberica JDK, Java 8, 11, Java 16 Linux, Windows, macOS | BellSoft Java \(bell-sw.com\)](#) [2]
- Step 3: **Download** jsoup at [Download and install jsoup](#) [3]
- Step 4 : Extract the submission file contains the application source code
- Step 4: Use IntelliJ IDEA and open the source code folder of the app
- Step 5: In IntelliJ IDEA, choose File → Project Structure → Libraries → + → choose the jsoup .jar file
- Step 6: Check project structure has the similar config (Jsoup, SDK) with the video
- Step 7: Check the run/debug configuration (SDK , main location) with the video
- Step 7: Run the program (**if fail : go back step 1 and watch video please**)

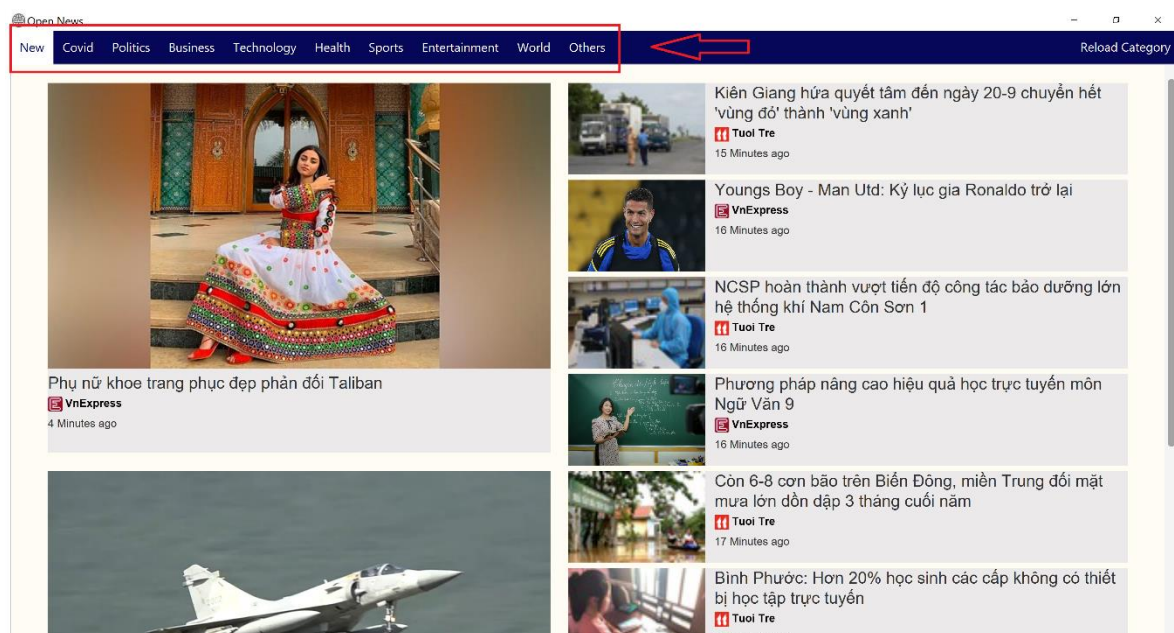
Video Guide [for Linux + MacOS]: <https://youtu.be/V6ICFIEdr5M>

- Step 1: **Download** and **install** IntelliJ IDE compatible with your OS at [Download IntelliJ IDEA: The Capable & Ergonomic Java IDE by JetBrains](#) [1]
- Step 2: **Choose** and **install** Oracle OpenJDK 17 in IntelliJ Built-in Downloader SDK (File → Project Structure → Project → Project SDK → Add SDK → Download JDK)

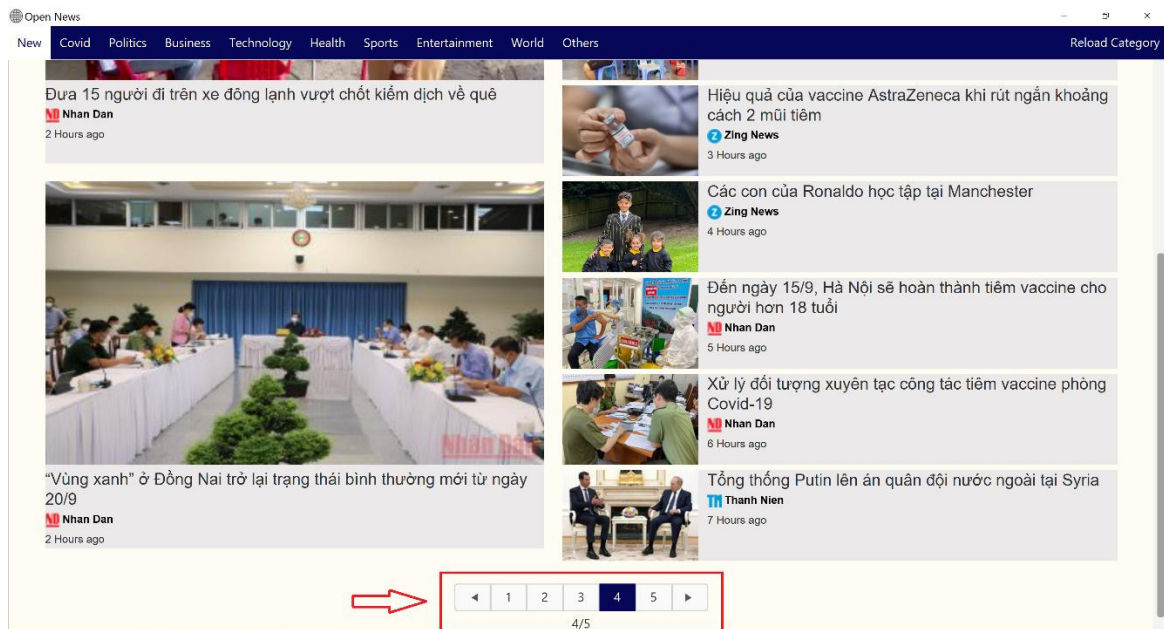
- Step 3 : **Download** and **extract** JavaFX–Gluon 17 compatible with your OS at [JavaFX - Gluon](#) [4]
- Step 4: **Download** jsoup at [Download and install jsoup](#) [3]
- Step 5 : Extract the submission file contains the application source code
- Step 6: Use IntelliJ IDEA and open the source code folder of the app
- Step 7: In IntelliJ IDEA, choose File → Project Structure → Libraries → + → choose the jsoup .jar file and javaFX gluon 17 .jar files
- **Step 8 : IMPORTANT : Load the lib of javafx gluon 17 and jsoup like in the video (choose .jar files from folder lib you have extracted in step 3 and the folder contains jsoup in step 4)**
- Step 9: Check project structure has the similar config (Jsoup, SDK,javaFX gluon17) with the video
- Step 10: Check the run/debug configuration (SDK , main location) the same with the video
- Step 11: Run the program (**If fail: go back step 1 and watch video please**)

3. Completed features

- The app can run precisely as required.
- It has 10 categories tabs to select. By default, the “New” Category is chosen.



- It contains paging system: inside each category, there are 5 pages. Each page displays 10 article headers.



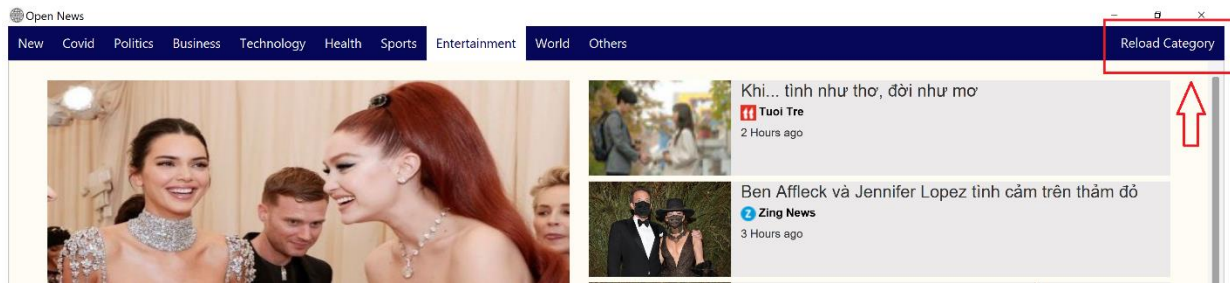
- Each article header displays following information: the title, the source, the upload time, and a picture of that article.



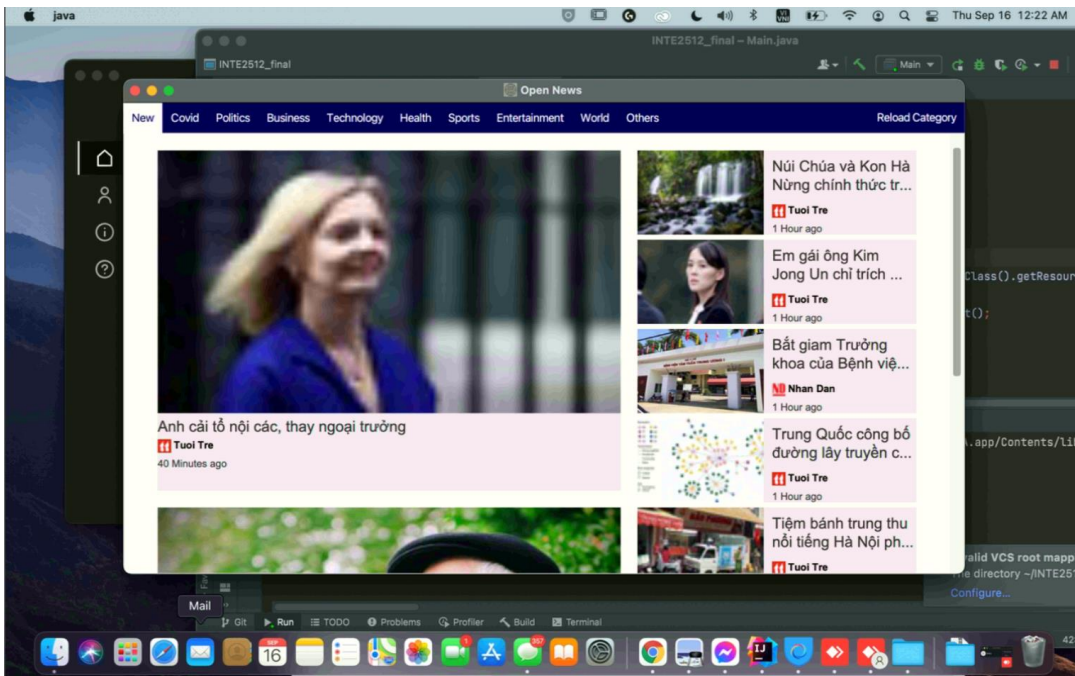
- The app also has the “go back” button inside an article’s content for users to navigate backward easily.



- Finally, the app has a feature called “Reload Category” button, which users can use it whenever they want to reload the app to update the newest news.



- Working on cross-platform (Windows , Linux , MacOS)



4. Known bugs and work-around

- Open News used to have some banner and ads displayed inside an article, but we fixed it.
- Sometimes there will be missing articles in a category. Please press the Reload Category Button to refresh the article list in that category.
- The application may sometimes unable to finish loading. Please press the Reload Category Button if you are waiting for too long (because of slow internet or “broken sea cable”).

5. Project demo video

<https://youtu.be/d3pwbbKWDkA>

6. Acknowledgement

First, we extremely appreciate the huge dedicated supports from our lecturer *Mr. Quang Tran* and our advisor *Mr. Bao Ho*, who have provided help with every question that we asked as well as have given us helpful advices to improve this app. Additionally, we would like to thank *Stack Overflow* [5] for providing us a huge amount of reliable data to which we can refer. We would also never forget the huge support from *YouTube* [6], which provided us with many useful tutorials for our project. And finally, thanks to all the teammates who have always contributed all their ability and effort to support and complete this project.

7. References

- [1] IntelliJ IDEA, "Download IntelliJ IDEA." jetbrains.com. Available: <https://www.jetbrains.com/idea/download/#section=windows> [Accessed: Sep. 15, 2021].
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