

CSE 2221 - Project 5

Task

Gain familiarity of the **XMLTree** class, **while** loops, static methods, and RSS technology by creating a program that parses multiple RSS feeds and aggregates them into one HTML document

Original Project Instructions

[Project 5 Instructions from CSE2221 Project Site](#)

Program Requirements

- Ask the user for a URL of an XML file containing a list of URLs to RSS 2.0 feeds
- Ask the user for the name of an output HTML file
- The user-inputted XML should be read into an **XMLTree** object in which each child will be a RSS 2.0 feed that will be processed into individual HTML pages (similar to project 4)
- An HTML file (with the name of the user-inputted file output name) should be created with links to each generated HTML page (from the RSS 2.0 feeds)
- HTML output requirements are as follows:
 - The `<feeds>`'s title attribute value is the HTML page title
 - A heading that is the `<feeds>`'s title attribute value
 - An unordered list where each item is the `<feed>`'s name attribute value that is a link to the `<feed>`'s url attribute value

An example output is provided [here](#). Remember the "View Page Source" hint from the first project!

Example Input

An example input to test your program is given [here](#)

Below is an example of the structure of the XML input provided to the program

```
<feeds title="Title for index page">
  <feed url="the feed source URL" name="name of feed for index page"
    file="name of HTML file for feed" />

  <feed url="..." name="..." file="..." />
  ...
</feeds>
```

Steps

1. Copy and paste your *RSSReader* project to create a new project folder for this project
2. Name the project *RSSAggregator*
3. Open the *src* folder, then open (*default package*)
4. Rename *RSSReader.java* to *RSSAggregator.java*
5. Open *RSSAggregator.java*
6. Update the JavaDoc comments above the class declaration (i.e. program description, author name)
7. Add the following static method to *RSSAggregator.java*:

```

/**
 * Processes one XML RSS (version 2.0) feed from a given URL converting it
 * into the corresponding HTML output file.
 *
 * @param url
 *         the URL of the RSS feed
 * @param file
 *         the name of the HTML output file
 * @param out
 *         the output stream to report progress or errors
 * @updates out.content
 * @requires out.is_open
 * @ensures <pre>
 * [reads RSS feed from url, saves HTML document with table of news items
 *  to file, appends to out.content any needed messages]
 * </pre>
 */
private static void processFeed(String url, String file, SimpleWriter out) {

}

```

8. Edit *RSSAggregator.java* to satisfy all program requirements given in the Program Requirements section

Please make any fixes to the issues that were noted in your project 4 feedback are made! Additionally, there might be some other tweaks you need to make in order for your program to work

9. Create a zip file of your *RSSAggregator* project
10. Rename the zip file (not your project folder) using the naming scheme "FirstName_LastName_DotNumber_ProjectNumber.zip", for example mine would be "Logan_Frank_580_5.zip"
11. Submit to Carmen

Note: This is the last project where I will explicitly tell you to update the project description and author name. I will also no longer explicitly tell you to zip your project, what to rename the zip file to, and to submit to Carmen.

It will still be expected you do the aforementioned. Points will be deducted if you do not.