

# 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.**