

## HW2 – Merge Multiple JSON Files into One File

JSON Files merger assignment is designed around **FileMerger** interface, which has one method named **merge(ObjectMapper, List<File>, PrintWriter)**. The assignment also consists of three other classes: **Configuration**, **JSONFileMerger**, **JSONFileMergerTester**.

Any specific file type merger can implement the **FileMerger** interface and implement its logic on merging files. **merge(...)** method takes three parameters **ObjectMapper** is an object to map/read/parse CSV, JSON etc. files (it's a dependency and coming from the fasterxml jackson external library), **List<File>** represent the files to be merged, **PrintWriter** object to write/merge the files. **PrintWriter** object does not get closed after writing/merging files. It's caller responsibility to close the **PrintWriter** object. **merge** method also throws Exception to the caller so the caller can handle it properly. The **merge(...)** does the merging and looking up of the word so the program would take less time.

**Configuration** class contains three read-only variables and configuration for this assignment.

**JSON\_DIRECTORY** is a directory with JSON files. **MERGED\_FILE** is the file name which will contains the all the content of the other files, (deleted at the beginning of the program if exists and gets recreated). **MERGED\_FILE** will be created inside the **JSON\_DIRECTORY**.

**LOOKUP\_WORD** is the word that will be used to check against the tagline, tags, and title part of the JSON object. Also, a singleton object of **ObjectMapper** instance is available through the configuration class. Finally, it has a method which takes a directory as an input and returns all the JSON files.

**JSONFileMerger** class implements the **FileMerger** interface and implements the logic of merging files to one file. The constructor of this class requires a string which represents the lookup word. **merge(...)** method uses the lookup word against the tagline, tags, title fields of the JSON object.

**JSONFileMergerTester** runs the program to merge files by instantiating a **JSONFileMerger** object.