

```
1 package net.wiredclub.translation;
2
3 import ch.qos.logback.classic.Level;
4 import ch.qos.logback.classic.Logger;
5 import org.apache.commons.cli.CommandLine;
6 import org.apache.commons.cli.CommandLineParser;
7 import org.apache.commons.cli.DefaultParser;
8 import org.apache.commons.cli.HelpFormatter;
9 import org.apache.commons.cli.Option;
10 import org.apache.commons.cli.Options;
11 import org.apache.commons.cli.ParseException;
12 import org.slf4j.LoggerFactory;
13
14 import java.io.IOException;
15 import java.util.HashSet;
16 import java.util.List;
17 import java.util.Set;
18
19 import static net.wiredclub.translation.TranslationStatusCode.STATUS_HELP;
20 import static net.wiredclub.translation.TranslationStatusCode.STATUS_INVALID_ARGUMENT;
21
22 /**
23  * A helper tool for command line arguments.
24  * For specified options either the default value or the given
25  * command line argument will be used for TranslatorConfig.
26  */
27 public class CommandLineHelper {
28
29     public static final String DEFAULT_TRANSLATION_DIRECTORY = "translations";
30     public static final String DEFAULT_SOURCE_LANGUAGE = "en";
31     public static final String DEFAULT_REPOSITORY_PATH = ".";
32
33     private final DeepLHelper deepLHelper;
34     private final FileHelper fileHelper;
35
36     public CommandLineHelper() {
37         this.deepLHelper = new DeepLHelper(new JsonHelper());
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38     this.fileHelper = new FileHelper();
39 }
40
41 public CommandLineHelper(DeeplHelper deeplHelper, FileHelper fileHelper) {
42     this.deeplHelper = deeplHelper;
43     this.fileHelper = fileHelper;
44 }
45
46 public TranslationConfig getTranslationConfig(String[] args) throws TranslationException, IOException {
47     Options options = defineOptions();
48
49     try {
50         return parseArguments(options, args);
51     } catch (ParseException e) {
52         displayHelp(options);
53         throw new TranslationException("Error: Arguments could not be parsed. " + e.getMessage() + "\n",
54             STATUS_INVALID_ARGUMENT);
55     }
56 }
57
58 /**
59  * Options for command line.
60  *
61  * @return Options
62  */
63 Options defineOptions() {
64     Options options = new Options();
65
66     Option sourceOption = new Option("s", "source", true,
67         "Source language (default is '" + DEFAULT_SOURCE_LANGUAGE + "')");
68     options.addOption(sourceOption);
69
70     Option targetOption = new Option("t", "target", true,
71         "Target language (default all directories of path argument except source)");
72     options.addOption(targetOption);
73
74     Option pathOption = new Option("p", "path", true,
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75         "Path to translations directory from repo root (default is '" + DEFAULT_TRANSLATION_DIRECTORY + "')");
76     options.addOption(pathOption);
77
78     Option repoOption = new Option("r", "repo", true,
79         "Path of repository (default is '" + DEFAULT_REPOSITORY_PATH + "')");
80     options.addOption(repoOption);
81
82     Option verbose = new Option("v", "verbose", false, "Turn on more output (default is off)");
83     options.addOption(verbose);
84
85     Option help = new Option("h", "help", false, "This help");
86     options.addOption(help);
87
88     return options;
89 }
90
91 /**
92  * Parse command line arguments. If mandatory arguments are missing ParseException is thrown.
93  *
94  * @param options command line options which are allowed
95  * @param args     command line arguments given by the user
96  * @return the configuration of translation tool
97  * @throws ParseException if an argument is invalid, ParseException will be thrown
98  * @throws TranslationException if json cannot be parsed wraps JsonProcessingException
99  * @throws IOException if request to deepl.com cannot be completed
100 */
101 TranslationConfig parseArguments(Options options, String[] args)
102     throws ParseException, TranslationException, IOException {
103     CommandLineParser parser = new DefaultParser();
104     CommandLine cmd = parser.parse(options, args);
105
106     if (cmd.hasOption("help")) {
107         displayHelp(options);
108         throw new TranslationException(STATUS_HELP);
109     }
110
111     Logger root = (Logger) LoggerFactory.getLogger("ROOT");
```

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112     root.setLevel(Level.toLevel(cmd.hasOption("verbose") ? "ALL" : "INFO"));
113
114     String repositoryDirectory = cmd.getOptionValue("repo", DEFAULT_REPOSITORY_PATH).trim();
115     String translationsDirectory = cmd.getOptionValue("path", DEFAULT_TRANSLATION_DIRECTORY).trim();
116
117     String sourceLanguage = cmd.getOptionValue("source", DEFAULT_SOURCE_LANGUAGE).trim();
118     List<String> sourceLanguages = deepLHelper.sourceLanguages();
119     if (!sourceLanguages.contains(sourceLanguage)) {
120         throw new ParseException("Source language '" + sourceLanguage + "' is not allowed. "
121             + "Possible values are: " + sourceLanguages);
122     }
123
124     String targetLanguage = cmd.getOptionValue("target");
125     Set<String> targetLanguages;
126     if (targetLanguage == null) {
127         // find in parent directory all other directories which are not the source directory
128         targetLanguages = fileHelper.discoverLanguageDirectories(repositoryDirectory + "/" + translationsDirectory);
129         targetLanguages.remove(sourceLanguage);
130     } else {
131         targetLanguages = Set.of(targetLanguage.trim());
132     }
133
134     List<String> possibleLanguages = deepLHelper.targetLanguages();
135     if (!new HashSet<>(possibleLanguages).containsAll(targetLanguages)) {
136         throw new ParseException("Some target languages " + targetLanguages + " are not allowed. "
137             + "Possible target languages are: " + possibleLanguages);
138     }
139
140     return new TranslationConfig(sourceLanguage, targetLanguages, translationsDirectory, repositoryDirectory);
141 }
142
143 /**
144  * Display an explanation of the translation tool.
145  *
146  * @param options command line options which are allowed
147  */
148 void displayHelp(Options options) {

```

```
149     String header =
150         "\nTranslationTool reads all keys from source language, finds differences to each target file and "
151         + "differences to previous commit of source. Changed translations are then retrieved from "
152         + "https://www.deepl.com/translator and stored for each target language(s). The order of "
153         + "existing keys is preserved, but new keys are added at the end of the target file.\n\n";
154
155     String footer = "\nExample: translation-tool -s en -t de -p \"translations\" -r .";
156
157     HelpFormatter formatter = new HelpFormatter();
158     formatter.setOptionComparator(null);
159     formatter.printHelp("translation-tool", header, options, footer, true);
160 }
161 }
162
```