Review the spec and design a test plan

Test plan can be created in accordance with next examples:

https://strongqa.com/qa-portal/testing-docs-templates/test-plan

What should be tested and how?

What should be done manually and what can be covered in automation?

Should be tested by modules:

Main Module:

1. File on path exists, can be read and not empty. (check manually, show in \*.properties file)
2. If lines in File amount more than 1000, than it should be divided on thousands and less part. If lines amount less than 1000, than it also should be read. (automation)

Matchers Module:

1. Check that application gets line by line Strings and matches them to expected array of “Names” Strings.(automation)
2. Check that maps contain Names as Keys and lineOffset, charOffset as values. (it can be checked automatically and using manual smoke tests).

Aggregator module:

1. Check that amount of printed data matches to expected.
2. Check that printed data has format like shown below:

Timothy --> [[lineOffset=13000, charOffset=19775], [lineOffset=13000, charOffset=42023]]

1. Check that program finds and shows in output names line by line without duplications of the searching results. Check that program doesn’t fails when line(or even whole file) doesn’t contain any name

Which scenarios to test?

1. File contains names, matcher finds it and shows output in valid format.
2. File contains text without names from names array. No errors found. Output shows 0 results.
3. File is empty. No errors found. Nothing to match. Output shows 0 results.
4. File can’t be found by path.

Corner cases? Other considerations?