To convert a CSV file to an HTML table using Java, you can follow these steps:

Read the CSV file: Use a library such as Apache Commons CSV to read the CSV file.

Generate HTML content: Create an HTML table structure and populate it with data from the CSV.

Write the HTML content to a file: Save the generated HTML to a file.

Here’s a complete example:

Step 1: Add Dependencies

If you’re using Maven, add the Apache Commons CSV dependency to your pom.xml:

Xml

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<dependency>

<groupId>org.apache.commons</groupId>

<artifactId>commons-csv</artifactId>

<version>1.9.0</version>

</dependency>

Step 2: Java Code to Convert CSV to HTML Table

Here’s the Java code to read a CSV file and convert it to an HTML table:

Java

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Import org.apache.commons.csv.CSVFormat;

Import org.apache.commons.csv.CSVRecord;

Import java.io.FileReader;

Import java.io.IOException;

Import java.io.Reader;

Import java.nio.file.Files;

Import java.nio.file.Paths;

Import java.util.List;

Public class CsvToHtmlTable {

Private static final String SAMPLE\_CSV\_FILE\_PATH = “./sample.csv”;

Private static final String OUTPUT\_HTML\_FILE\_PATH = “./output.html”;

Public static void main(String[] args) {

Try {

List<CSVRecord> records = readCsv(SAMPLE\_CSV\_FILE\_PATH);

String htmlContent = generateHtmlTable(records);

writeHtmlToFile(htmlContent, OUTPUT\_HTML\_FILE\_PATH);

System.out.println(“HTML table generated successfully.”);

} catch (IOException e) {

e.printStackTrace();

}

}

Private static List<CSVRecord> readCsv(String filePath) throws IOException {

Try (Reader reader = Files.newBufferedReader(Paths.get(filePath))) {

Return CSVFormat.DEFAULT.withFirstRecordAsHeader().parse(reader).getRecords();

}

}

Private static String generateHtmlTable(List<CSVRecord> records) {

StringBuilder html = new StringBuilder();

Html.append(“<html>\n<head>\n<style>\n”)

.append(“table { width: 100%; border-collapse: collapse; }\n”)

.append(“th, td { border: 1px solid black; padding: 8px; text-align: left; }\n”)

.append(“th { background-color: #f2f2f2; }\n”)

.append(“</style>\n</head>\n<body>\n”)

.append(“<table>\n”);

// Add table headers

If (!records.isEmpty()) {

CSVRecord header = records.get(0);

Html.append(“<tr>”);

For (String column : header.toMap().keySet()) {

Html.append(“<th>”).append(column).append(“</th>”);

}

Html.append(“</tr>\n”);

}

// Add table rows

For (CSVRecord record : records) {

Html.append(“<tr>”);

For (String value : record) {

Html.append(“<td>”).append(value).append(“</td>”);

}

Html.append(“</tr>\n”);

}

Html.append(“</table>\n</body>\n</html>”);

Return html.toString();

}

Private static void writeHtmlToFile(String htmlContent, String filePath) throws IOException {

Files.write(Paths.get(filePath), htmlContent.getBytes());

}

}

Step 3: Prepare a Sample CSV File

Create a sample.csv file in the same directory as your Java program with the following content:

Csv

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Name,Age,City

Alice,30,New York

Bob,25,Los Angeles

Charlie,35,Chicago

Step 4: Run the Program

Compile and run the Java program. It will read the sample.csv file, convert its contents to an HTML table, and save the result in output.html.

Explanation

readCsv: Reads the CSV file using Apache Commons CSV and returns a list of CSVRecord.

generateHtmlTable: Generates an HTML table from the list of CSVRecord.

writeHtmlToFile: Writes the HTML content to a file.

Output HTML

The generated output.html will look like this:

Html

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<html>

<head>

<style>

Table { width: 100%; border-collapse: collapse; }

Th, td { border: 1px solid black; padding: 8px; text-align: left; }

Th { background-color: #f2f2f2; }

</style>

</head>

<body>

<table>

<tr><th>Name</th><th>Age</th><th>City</th></tr>

<tr><td>Alice</td><td>30</td><td>New York</td></tr>

<tr><td>Bob</td><td>25</td><td>Los Angeles</td></tr>

<tr><td>Charlie</td><td>35</td><td>Chicago</td></tr>

</table>

</body>

</html>

By following these steps, you can easily convert a CSV file to an HTML table in Java.

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