**urls.csv**

short\_url,full\_url

abc123,https://example.com/page1

xyz456,https://example.com/page2

**Controller Method for Redirection**:

import org.springframework.stereotype.Controller;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.PathVariable;

import org.springframework.web.servlet.view.RedirectView;

import org.apache.commons.csv.CSVReader;

import org.apache.commons.csv.CSVParser;

import org.apache.commons.csv.CSVFormat;

import java.io.FileReader;

import java.io.IOException;

import javax.servlet.http.HttpServletResponse;

@Controller

public class RedirectController {

private static final String CSV\_FILE\_PATH = "urls.csv";

@GetMapping("/{shortenString}")

public void redirectToFullUrl(HttpServletResponse response, @PathVariable String shortenString) {

try (CSVReader csvReader = new CSVReader(new FileReader(CSV\_FILE\_PATH));

CSVParser csvParser = new CSVParser(csvReader, CSVFormat.DEFAULT.withFirstRecordAsHeader())) {

// Iterate through each record (line) in the CSV file

for (org.apache.commons.csv.CSVRecord csvRecord : csvParser) {

String shortUrl = csvRecord.get("short\_url");

String fullUrl = csvRecord.get("full\_url");

if (shortUrl.equals(shortenString)) {

// Redirect to the corresponding full URL

response.sendRedirect(fullUrl);

return;

}

}

throw new ResponseStatusException(HttpStatus.NOT\_FOUND, "URL not found");

} catch (IOException e) {

throw new ResponseStatusException(HttpStatus.INTERNAL\_SERVER\_ERROR, "Error reading CSV file", e);

}

}

}

**Pom.xml**

<dependency>

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

<artifactId>commons-csv</artifactId>

<version>1.8</version> <!-- Or the latest version -->

</dependency>