**Phase-3 Practice Project: Assisted Practice -**

**3.File upload and download.**

**Source Code:**

**MainController.java:**

**package** com.ecommerce.controllers;

**import** java.io.File;

**import** java.io.FileInputStream; **import** java.io.FileOutputStream; **import** java.io.IOException;

**import** org.springframework.core.io.ClassPathResource; **import** org.springframework.core.io.InputStreamResource; **import** org.springframework.core.io.Resource;

**import** org.springframework.http.HttpHeaders;

**import** org.springframework.http.HttpStatus;

**import** org.springframework.http.MediaType;

**import** org.springframework.http.ResponseEntity;

**import** org.springframework.stereotype.Controller; **import** org.springframework.util.ResourceUtils;

**import** org.springframework.web.bind.annotation.ExceptionHandler; **import** org.springframework.web.bind.annotation.PathVariable; **import** org.springframework.web.bind.annotation.PostMapping;

**import** org.springframework.web.bind.annotation.RequestBody;

**import** org.springframework.web.bind.annotation.RequestMapping; **import** org.springframework.web.bind.annotation.RequestMethod; **import** org.springframework.web.bind.annotation.RequestParam; **import** org.springframework.web.bind.annotation.ResponseBody; **import** org.springframework.web.multipart.MultipartFile;

@Controller

**public** **class** MainController {

@RequestMapping(value = "/") **public** String index() { **return** "index.html";

}

**private** **static** **final** String ***updir*** = "D:/var/tmp/";

@PostMapping(value = "/upload", consumes =

MediaType.***MULTIPART\_FORM\_DATA\_VALUE***)

@ResponseBody

**public** String fileUpload(@RequestParam("file") MultipartFile file) {

String result= "File was uploaded successfully"; **try** {

File directory = **new** File(***updir***); **if** (!directory.exists()) { directory.mkdirs();

}

File convertFile = **new** File(***updir***+file.getOriginalFilename()); convertFile.createNewFile();

FileOutputStream fout = **new** FileOutputStream(convertFile); fout.write(file.getBytes()); fout.close();

**return** result;

} **catch** (IOException iex) {

result = "Error " + iex.getMessage();

}**catch** (Exception ex) {

result = "Unexpected error: " + ex.getMessage();

}

**return** result;

}

@RequestMapping(value = "/download", method = RequestMethod.***GET***) **public** ResponseEntity<Object> downloadFile() **throws** IOException {

String fileName = "static/dump.txt";

ClassLoader classLoader = **new**

MainController().getClass().getClassLoader();

File file = **new** File(classLoader.getResource(fileName).getFile());

InputStreamResource resource = **new** InputStreamResource(**new**

FileInputStream(file));

HttpHeaders headers = **new** HttpHeaders();

headers.add("Content-Disposition", String.*format*("attachment; filename=\"%s\"", file.getName()));

headers.add("Cache-Control", "no-cache, no-store, mustrevalidate");

headers.add("Pragma", "no-cache"); headers.add("Expires", "0");

ResponseEntity<Object> responseEntity =

ResponseEntity.*ok*().headers(headers).contentLength(file.length()).contentTy pe(

MediaType.*parseMediaType*("application/txt")).body(resource);

**return** responseEntity;

}

}

**index.html:**

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html

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head

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title

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File Upload

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title

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<body>

<form method=*"post"* enctype=*"multipart/form-data"* action=*"/upload"*> Upload file&nbsp;

<input type=*"file"* name=*"file"* id=*"file"*><br><br>

<input type=*"submit"* value=*"Upload "* name=*"submit"*>

</form>

</body>

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| --- | --- | --- |
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**dump.txt:**

This is a file which has been downloaded via Spring Boot

**Output:**





