eTalente

GRADUATE SOFTWARE DEVELOPER

Assessment

SCENARIO

You are joining a data centre division for Enviro-Bank:

This division receives a flat file that contains name, surname, imageFormat and imageData. The image in the file is currently shared as a base64 encoded image data.

TASK

Write a basic implementation of a file parser to convert the contents of the file and store the records into a database.
The base64 image data processed from the flat file must be converted into a physical file with the format as prescribed in the flat file.
You must create a rest controller and name it: ImageController

The database record (AccountProfile) must contain the following fields:

1. Account holder name
2. Account holder surname
3. httpImageLink

Notes:
The httpImageLink must be a link exposed via a rest endpoint, which will give you access to the physical image file that was converted from the flat file.

You should implement the following interface:

```java
import java.io.File;
import java.net.URI;

public interface FileParser {
    void parseCSV(File csvFile);
    File convertCSVDataToImage(String base64ImageData);
    URI createImageLink(File fileImage);
}
```

You should use the following rest controller:

```java
import org.springframework.core.io.FileSystemResource;
import org.springframework.web.bind.annotation.*;

@RestController
@RequestMapping("/v1/api/image")
public class ImageController {

    @GetMapping(value = "/{name}/{surname}/{\\w\\.\\w}")
    public FileSystemResource gethttpImageLink(@PathVariable String name, @PathVariable String surname) {
        //return the result
    }

}
```

Please use an H2 in memory database to persist the AccountProfile data

Your submission must be a Springboot application with a rest endpoint to handle the httpImageLink.

THINGS TO NOTE

1. All code should be written in a package
2. com.eviro.assessment.grad001.yournameandsurname
3. From a technical perspective, as per commonly accepted best practice, each record has a primary key called “id” that identifies it – this is a technical id, and
4. Please model and implement the interface in the way you consider to be the best way from an Object Oriented perspective.
5. As we will be accessing a real database as part of this exercise, please implement an in memory database (H2).

YOU MAY UNDERGO A SUBSEQUENT INTERVIEW REGARDING YOUR SOLUTION, SO PLEASE BE PREPARED TO DISCUSS ANY DESIGN DECISIONS YOU MAY TAKEN / ASSUMED. PERHAPS MAKE RELEVANT COMMENTS IN YOUR CODE THAT WILL GUIDE YOUR DISCUSSIONS LATER.