**Technical assignment - A1 Bulgaria**

**Assignment**:

Create a Simple Student Management System which will store below student details,  Admin should be able to upload download XLS with Student details and also able to see list of Students on screen.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student ID | First Name | Last Name | Gender | DOB |
| AW123 | Alex | Wagner | M | 1/1/01 12:30 |
| BK123 | Bob | Kuran | M | 2/1/87 12:30 |
| GS123 | Genilia | S | F | 3/1/98 12:30 |
| TS123 | Tina | Shaw | F | 1/1/77 12:30 |

       Student ID is auto Generated. (You are free to choose any format you want, here I have taken initials of first name and last name and some number. like AW123 for Alex Wagner.)

       Admin Can add new student by adding entry with empty Student ID.

       If Student ID present, It should modify particular student details.

Below are some Technical hints (You can do required customizations based on your understanding, add more features, use additional frameworks ) :

Backend:

       Build **Spring boot** based rest service which will provide upload/download and list student functionality.

       Rest Operations Details :

  Upload : Should take XLS file stream as input. Validate Entries and store in to the in memory .h2 DB.

  Download : prepare and stream XLS file containing list of students available in .h2 db.

  List : Returns List of Students.

UI :

       Build UI view with **React with Redux** which should have upload download options and List of Students.

       Add basic loading and error indication

Must :

       Make sure that one can run both React (with NPM) and Springboot app (with java jar … ) locally and your front end can communicate with backend.

Some Optional features:

       Add CSS styling so the blog has a decent look and is **easy to use on any device**

       Use “infinite scrolling” instead of pagination / load more button

       Logging

       Definition first approach with Swagger