University “Politehnica” of Bucharest

Faculty of Electronics, Telecommunications and Information Technology

Web application for managing scholar information

**Diploma Thesis**

Submitted in partial fulfillment of the requirements for the Degree of Engineer in the domain Electronic Engineering, Telecommunications and Informational Technologies, study program Technologies and Telecommunications Systems

Thesis Advisor,

S.I. Dr. Ing. Radu Badea

Student,

David-Theodor DEACU

Year 2021

DIPLOMA THESIS

of student DEACU V. David-Theodor, 441G-TST

1. **Thesis title:** Web application for managing scholar information
2. **The student`s original contribution will consist of (not including the documentation part) and design specifications:**

Web applications – software application that is deployed on a web server – are the most common implementation of a software due to the fact they are independent from the platform type, browser or any other applications. The purpose of this Thesis is to develop a web application that will substitute the existing paper class-book and file storage used for scholar results administration. Specifically, following points will be considered:

1. The base functionality of this application is to allow teachers to add marks for students, such that furthermore students will be able to visualize their marks at any moment.
2. Teachers will be enabled to post exercises (for pupils) that will be automatically assigned to the entire subscription list of a virtual classroom.
3. Besides this goal, the current work will enable statistical analytics and a visual presentation of comparative scholar results.
4. The platform will provide the facility to import and export data sets used to register the new students according to their preferences.
5. **Pre-existent materials and resources used for the project`s development:**
6. The development of a front-end part, whose purpose is to display the data in a user-friendly manner and to provide responsiveness on screen dimension using HTML, CSS, Bootstrap, JavaScript.
7. The development of the back-end part, whose purpose is to manage the flow of the application, to make the connection with the database and to establish security using Java, Spring, Hibernate, Maven.
8. The design and the implementation of a database for storing the required information using MySQL as database engine.
9. **The project is based on knowledge mainly from the following 3-4 courses:**

Computer programming, Data structures and algorithms, Object oriented programming, Databases

1. **The Intellectual Property upon the project belongs to:** U.P.B.
2. **Thesis registration date:**

**Thesis advisor(s),**

Ș. L. Dr. Ing. Radu BADEA

Conf. Dr. Ing. Eduard POPOVICI

Student,

David-Theodor DEACU

**Department director,**

Conf. Dr. Ing. Eduard POPOVICI

**Dean,**

Prof. Dr. Ing. Mihnea UDREA

Validation code:

Statement of Academic Honesty

I hereby declare that the thesis “Web application for managing scholar information”, submitted to the Faculty of Electronics, Telecommunications and Information Technology in partial fulfillment of the requirements for the degree of Engineer in the domain Electronic Engineering, Telecommunications and Informational Technologies, study program Technologies and Telecommunications Systems, is written by myself and was never before submitted to any other faculty or higher learning institution in Romania or any other country.

I declare that all information sources I used, including the ones I found on the Internet, are properly cited in the thesis as bibliographical references. Text fragments cited “as is” or translated from other languages are written between quotes and are referenced to the source. Reformulation using different words of a certain text is also properly referenced. I understand plagiarism constitutes an offence punishable by law.

I declare that all the results I present as coming from simulations or measurements I performed, together with the procedures used to obtain them, are real and indeed come from the respective simulations or measurements. I understand that data faking is an offence punishable according to the University regulations.

Bucharest,

01.07.2021David-Theodor DEACU

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