

Software Application – Full rubric

Indicator	Level of achievement				
	1	2	3	4	5
Analysis of the problem	The student does not identify the main challenges that the problem presents, and is not even able to make a description of the problem.	The student describes the problem and can enumerate some of the challenges and requisites it involves.	The student is able to identify with precision the problem and all challenges and goals involved in solving it.	The student is able to compare, distinguish and discuss the limitations of its identification of the problem.	
Design of the solution	The student is not able to design a valid solution for the posed problem.	The student is able to identify part of the solution for the problem.	The student is able to design a solution for the problem accomplishing all requirements.	The student is able to design and justify a solution for the problem accomplishing all requirements.	The student is able to design and justify a solution for the problem accomplishing all requirements and, moreover, applies all principles, patterns, heuristics, and design guides.
Implementation of the solution	The student is not able to implement the designed solution.	The student is able to partially implement the designed solution.	The student is able to implement the designed solution.	The student is able to implement the designed solution. Moreover, the implementation is optimized and reliable.	
Legibility and organization of source code	The legibility of the solution (code) provided by the student is null.	The code is conveniently indented, and comments help to understand it. Identifiers (variable names, functions, etc.) are descriptive.	The code is conveniently commented, allowing a complete understanding. Moreover, it is structured and organized in different units and components.	The code is conveniently commented, allowing a complete understanding. Moreover, it is structured and organized on different units and components. The functionality of each of such units, as well as the interdependences among them, is clearly identified and justified.	
Interaction with the application	The user interface of the application is not adequate. It does not allow to execute the expected tasks, or its usage is complex or tedious.	The user interface of the application presents some limitations, but does not hinder the use of key functionalities, and is not uncomfortable for the user.	The user interface is detailed and functionally complete. It incorporates error control mechanisms which show descriptive messages.	The user interface has been carefully studied. It is intuitive and fully functional. It incorporates an exhaustive error control and a system for user assistance.	
Justification for development decisions	The student neither justifies nor arguments any of the decisions adopted during the development of the application.	The student justifies some of the decisions with some references that support its way of proceeding.	The student justifies and arguments all decisions adopted, and these are correct and adequate.		
Installation and usage manual	The student does not provide any installation or usage manual.	The student identifies and enumerates the main activities supported by the application and indicates how to make use of them.	The student reports, describes and attaches to the software application complete and detailed information about its usage.	The manual for installation and help provided by the student is well structured, and uses diagrams, graphs and screenshots for clarity.	