**Criteon A – Planning**

**Description of the Scenario**

My client is Flerina Nagy, a worker in Páduai Szent Antal Gimnázium, which is the school I used to go to until grade six. She worked there as a librarian for close to 30 years now. Back in the days, when I used to go to school there, I have visited the library quite many times, and made friends with her. She is really nice, though in the summer of 2018, I met her and she addressed to me that she wants to quit her job, since it involves a lot of effort.

She explained me how it works. When a student borrows a book from the library, she records everything on paper, which is hard to keep track of, and is something that is easily lost. She always made the mistake of losing those papers, and therefore as a result, not knowing who to contact if a book is not taken back to the library in time. She was working outside of work as well, just to try and organize these papers, or try to find a new and better way to do her work, but she could not.

Based on this information, I wanted to help her by making a web application that makes her job easier. For that, I also needed a supervisor. Since I was already working with someone from my old school, I thought I might as well just ask my old Infomatics teacher, if he could help me with the specific code language that I need with this project. It turned out that he knew a lot about it, so we agreed that he, also known as Antal Varga, would help me in supervising during this project.

**Rationale of the Solution**

My proposed solution to my client’s problem is the following. A friendly and organized database-based web application, which records all the information of students who take out a book from the library. Instead of recording everything on paper, this is a much easier way for Flerina to keep track of the students and the books. Moreover, rather than the librarian filling out this information, she will be only checking the information, the students will do the work if they want to borrow a book. They will have to fill out a form, which asks for their name, their class, their email, their telephone number for contacting purposes in case they do not take the book back in time. Moreover, it will as for the the name of the book, for how much time they want to borrow the book for, and lastly for the current date. After this is filled out, the student can officially borrow the book physically. This will be done for each of the different books. If the same person wants to borrow multiple books, they will have to fill out the form multiple times. The data will be recorded in the database itself, which the librarian can get access to. There, she can check every single information which was filled in, and she can determine the name of the students who are not taking back the books in time for example.

For the program itself, I will be using a coding language so called PHP. “PHP is an open source general-purpose scripting language that is used by most programmers today and is especially suited for web development and can be embedded into HTML.” (php.net) I believe that my solution is effective, because with php, I can create something that will not only perfectly solve my client’s problem but will also change her attitude towards her job, that she has been doing for so long, as well as it will motivate her to continue working more efficiently and conveniently than ever.

I am working inside of a software called Komodo Edit Version 11.1.1. It is a program that lets me write in PHP as well as it recognizes the language and helps with correcting minor mistakes. It is very convenient, since there is a run function included in the program, which most programs do not have with PHP. It is quite a user-friendly software and I enjoy creating my product in it.

To connect it to the internet, I am using a software so called WampServer. “Specifically, it is a web development platform on windows, which allows you to create dynamic web application with a few scripting languages, php included. It is also easy to use and does not need a lot of learning to get used to.

**Success Criteria**

1. A form that will record all information that the students fill in when borrowing a book.
2. A database where all of the different results of the forms are organizedly stored
3. Allow the user to add students on her own
4. Allow the user to edit the results in the database if needed
5. Allow the user to delete results from the database