Abstract

**PLANA**(Planning of Assignments for Lecturers) is a web application tool for effective teacher planning. With PLANA, teachers can participate in the planning process, make suggestions about the modules which they teach, and schedule hourly workloads for specific modules.

**Introduction**

At our school at the Department of Technology and Computer Science, actual teacher

assignment planning is done using the Microsoft Excel tool. This planning is handled by one responsible person. The modern world with the rapid growth of new technologies makes it

possible to improve various systems, giving them more and more possibilities, automating

many functions and saving a lot of time. This work aims to develop an information

system that enables assignment planning for lecturers. But unlike the existing system,

it should have the following criteria:

• the teachers themselves should be involved in the planning process

• the ability to create groups of modules and groups of teachers

• increased planning flexibility

To achieve these goals, I explored the advantages of web apps over Microsoft Excel and Desktop Application. Comparisons have shown that the Web Application is completely suitable for the set goal.

The next step was to research the **system requirements**, user stories have been identified, graphic concepts were developed. The main stakeholders of the system were identified.

**System Architecture and System Design**

The Plana application is used a layered architecture and it is designed is partially based on the domain-driven design (DDD) pattern from Eric Evans, but in the case of this application the business logic is in the Service layer, and the Repository layer is not used.

**Domain Analysis**

I distinguished concept classes, designated interactions between them, and created a domain model with its attributes.

**Exploration of Technologies**

In a previous project, I did research **on ASP.NET Core Blazor**. Blazor has the main advantage over other famous frameworks of offering C # - developers the possibility to make a whole program on the same (C#) programming language. Thus, the main Technologies such as ASP.NET Core **Blazor, MS SQL** databases were selected for implementation.

**Conclusions**

The conclusions that I want to draw are that the technologies that I used for the project are fully suited to the goals. ASP.NET CORE Blazor easy and intuitive to use.

The result of the work is the achievement of the main goals:

- The teachers are involved in the planning process

- The ability to create groups of modules and groups of teachers

- The person responsible for planning is able to make concrete and provision plans for several years.

Thus, the development went through all phases of creation to create a product.

Namely:

- Analysis of trends in new technologies,

- investigation of customer requirements,

- The idea of creating a product based on selected technologies and concepts,

- Product implementation

- Product test.