Modern WebAPI

Vision

# Introduction

The document concerns a project implemented at postgraduate studies at the Polish Academy of Sciences in the field of: "Programming on the .NET platform". This document is used to present the system of web communication with the repository of accounts that stores information about : systems, servers and accesses. This system will be a bridge between other systems and will only manage this information and will be used for statistical and change reporting purposes. In this project I will use the latest technologies available in Microsoft.

# Positioning

## Problem Statement

|  |  |
| --- | --- |
| The problem of | The problem with current interfaces is the performance and ease of implementation of changes. |
| affects | The users of this interface will be business users who want to manage data by transferring and receiving data using json files. |
| a successful solution would be | The assumption of this project will be to design a very flexible interface in which changes can be made quickly and with a small contribution from the development team. |

# Stakeholder Descriptions

## Stakeholder Summary

| **Name** | **Description** | **Responsibilities** |
| --- | --- | --- |
| Programmers | Programmers who have the skills to implement such systems and data processing. | 1. They will read the user documentation before using the system. 2. In order to ensure proper functioning of the system, it is necessary to create a login and password that will be used during the authorization of queries. 3. During the implementation of the system, they will test all new solutions on the development environment. |

## User Environment

# The web communication environment is so flexible that it will be possible to use this interface on all platforms, but it will be mainly Microsoft environment.

# The environment in which the web communication interface will be built is .net Core MVC, and the main programming language to be used on the beckend side will be C# and on the database side TSQL. The user documentation will be created using HTML.

# Environment version : ASP.NET Core 2.2

# Database environment version : SQL Server 2017

# Database model mapping : Entity Framework Core

# Product Overview

## Needs and Features

|  |  |  |  |
| --- | --- | --- | --- |
| **Need** | **Priority** | **Features** | **Planned Release** |
| Database design (tables, constraints) |  |  |  |
| Create sequences and triggers that support database events |  |  |  |
| Implementation of the database model in the interface project |  |  |  |
| Creation of the login and authorization process |  |  |  |
| Creation of user documentation |  |  |  |
| Providing paging for large volumes of data |  |  |  |
| Creation of unit tests |  |  |  |
| Error and exception handling |  |  |  |

## Other Product Requirements

|  |  |  |
| --- | --- | --- |
| **Requirement** | **Priority** | **Planned Release** |
| The user activity will be saved in the audit tables. |  |  |
| Specific users will be able to modify the data. Possibility to create accounts with different types of access |  |  |
| Simultaneous operation of multiple users at the same time |  |  |
| Possibility to create and download a report. |  |  |
| Possibility to manage users accounts from the user interface |  |  |

## Requirements not implemented

|  |
| --- |
| **Requirement** |
| Connection to Active Directory |
| Sending e-mail correspondence confirming the changes. |
|  |

# Related documents

The Project Vision is the first document to present a description of the project's functionality and its implementation plan. Currently, there are no other documents related to the Project Vision.

# Document history

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 18/05/2019 | 1.0 | Creation of the Vision Document | Łukasz Dejko |
| 01/09/2019 | 1.1 | Change of the database environment. | Łukasz Dejko |
|  |  |  |  |
|  |  |  |  |