

Course name: Object-oriented programming advanced
Term: Spring 2023

SUBMISSION TASKS

INTRODUCTION

Background description

Here we will learn about common system development tools that are used in real working life to develop applications for systems, and among these there are two that stand out above the rest. They are ASP.NET for C# Spring Framework for Java. This task focuses on the first of these and is for you to learn the basics of system development.

Why should you do this?
work?

Web development is big. This is here to give you a taste of putting together applications with many pieces that must be able to work together.

What will you deliver?

The following must be delivered:

1. A GitHub link that leads to a GitHub repository. In this repository there must be two projects.
 - a. One must be an ASP.NET/Spring Boot web page, which must also function as an API. b. The other must be a klient application that somehow calls this API.

YOUR TASK

What will you do?

Create two projects.

One must be an ASP.NET or Spring Boot project. This application must have a connection to a database and have the ability to display information. It must have an **HTML page that displays the information**, as well as **an API that** allows you to send this information to someone who calls it with a request. I want the four parts of **CRUD** to work, Create, Read, Update and Delete.

There must be at least one of **GET, POST, PUT and DELETE** must work with your API. Information is sent back to the client **in JSON format**. What kind of object it is that is saved in the **database** and then displayed is optional, as is the choice of the type of database.

The HTML page must have at least **two pages**, a **header**, an **aside**, a **main** and a **footer**, and show the **use of CSS via tag, class and id**. It connects a javascript file to describe to the user what they just did, or something else, just **as long as you use JavaScript to change something on the website**.

Your backend with C# or Java should be used to **connect to the database via a Repository, Controllers to control the API**.

The second application should be a **console application** that, with a number of options, allows the user to send the four kinds of messages to the **API, Get, Post, Put, and Delete**, and have those options do what they should do. They receive a status code and then **notify the user whether it was successful or not**.

How do you solve the task?

Use Visual Studio or IntelliJ. The Internet is at your disposal. Work together or divide the tasks, but check in often to keep the project moving forward. Save things to a GitHub so that everyone on the team can access the project.

It is to your advantage to first figure out what kind of objects you are going to send around, because the objects depicted in all the different parts will control everything else.

Please contact me if anything is unclear.

Structure of the work

The task is performed in groups of 3 to 4. 2 may be OK in exceptional cases.

SUBMISSION AND ACCOUNTING

Submission

The task must be ready and completed for assessment no later than 23:59 on Tuesday 19 May 2023.

Accounting

I thought the task could be reported on Wednesday 17 May 2023.

ASSESSMENT AND FEEDBACK

Assessment takes place with the following grading criteria

For a pass (G) on the project work, the following requirements must be met:

You develop an API/web page and a client that follows the guidelines outlined in the "what to do" section of this document. Because you are working on this in a group, this is only a G assignment, to get VG in the course get G on this and VG on both previous assignments.

How advanced you make the task is entirely up to you. I want you to work together and learn together about the different things needed to put this project together. There are many parts to it.

The following requirements must also be met for a pass (VG) on the project work:

It is not possible to get VG on this task.

Feedback

You should receive feedback on your information no later than 2 June 2023.

Good luck!

Etc., Niklas Cullberg