<Overtime>

Functional specification document<0.3>

Authors:

<Felix Jopkiewicz >

<Fabio Boran >

<Dejan Sunaric >

<Filip Josipovic >

<Eldi Neziri >

Document management

**Document history**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Status** | **Date** | **Responsibility** | **Reason for the change** |
| **0.1** | **Concept** | **24\04\2020** | **Felix Jopkiewicz,**  **Fabio Boran, Dejan Sunaric, Filip Josipovic** | **Creation 1. Draft** |
| **0.2** | **Finished** | **25\04\2020** | **Felix Jopkiewicz, Fabio Boran, Dejan Sunaric, Filip Josipovic** | **Finished functional specification document** |

**This document was created by using the following tools:**

<Functional specification document> Microsoft Word

<Website tool> HTML, CSS

<Programming platforms> Visual Studio, Notepad++

<Repository tool or Backup tool> Github

<Time scheduling tool> GanttProject

<Presentation tool> Microsoft PowerPoint

Content

Content

[1 Introduction 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731948)

[1.1 Purpose and validity of this document 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731949)

[1.2 The correlation with other documents 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731950)

[2 General specifications and limitations 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731951)

[2.1 Purpose 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731952)

[2.2 Overviewing the functionalities 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731953)

[2.3 Limitation and embed stations 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731954)

[2.4 General guidelines and limitations 4](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731955)

[2.5 Requirement source and target audience 5](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731956)

[3 Detailed description of the performance features of the system 5](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731957)

[3.1 Functional delivery contents 5](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731958)

[3.2 Interaction with the surrounding 6](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731959)

[3.3 The demanded functions 6](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731960)

[3.4 Structure and behavior 8](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731961)

[3.5 User interfaces 8](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731962)

[*Description of the user interfaces- User-Interface-Concept* 8](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731963)

[3.6 Database – interface 8](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731964)

[*Description of the Database interfaces. ER- diagram* 8](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731965)

[3.7 Other interfaces 8](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731966)

[3.8 Other developer orientated requirements 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731967)

[4 Employer's specifications for project execution 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731968)

[4.1 Realization requirements 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731969)

[4.2 Acceptability standards and delivery conditions 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731970)

[4.3 Warranty 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731971)

[5 Obligations of the employer 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731972)

[6 Literature 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731973)

[7 Terms and abbreviations 9](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731974)

[8 Attachment 10](https://htldonaustadtat0-my.sharepoint.com/personal/filip_josipovic_studierende_htl-donaustadt_at/Documents/Pflichtenheft.Kleinprojekt.Vorlage%20(1)%20(1).docx#_Toc38731975)

# Introduction

## Purpose and validity of this document

The goal of this document is to describe the used platforms and the background of the whole project

## The correlation with other documents

There is a reference to the requirement statements, which was given to us by our employer.

# General specifications and limitations

## Purpose

The janitor of *htl-donaustadt* complained that students are in the building without him knowing. Under this circumstance he nor rescue teams, such as the police or the fire brigade, have an overview over the remaining people in the building, while this in information may be crucial especially during e.g. a fire. Our team does not just want to provide a save surrounding for the students who stay at the regular schooltime but also for the more committed ones, which stay in school after their regular classes.

## Overviewing the functionalities

It provides the students with the opportunity to stay longer after school and having the people of authority knowing so. Besides that, it will also provide the person responsible a good overview over the situation regarding student’s extra stay.

## Limitation and embed stations

Regarding the platforms every member of project team Overtime is going to use:

Visual Studio, Notepad++, Microsoft 365, GanttProject and Github.

The following systems count as external systems:

The school server of *htl-donaustadt*, where our finished Website is going to be hosted. The Website is going to appear as a new option on the school’s official website.

## General guidelines and limitations

* + Developer
    - Software
      * Operating systems: Windows 10 64 bit
      * Platforms: Visual Studio, Notepad++, Microsoft 365
      * Coordination tools: Ganttproject
      * Repository tool: GitHub
    - Hardware
      * CPU: Intel core i5 and better
      * Memory: 128 GB and more
      * Interface: USB
      * RAM: 8 GB
    - Interfaces to other devices
      * Server of *htl-donaustadt*
  + Customer
    - Software
      * Chrome Version: 81.0.4044.138
      * Internet Explorer Version: 11.778.18362.0
      * Mozilla Firefox Version: 76.0.1
    - Hardware
      * Any device that supports the above browsers

## Requirement source and target audience

* Students
* Head of *htl-donaustadt* - mister Bonatz
* Housekeeper
* Parents
* Mister Dassler
* Police/firefighters
* Teachers

# Detailed description of the performance features of the system

## Functional delivery contents

* Login with an account (username and password). Username and Password correspond the same login data of the school (school mail and Moodle)
  + The student’s point of view
    - As a student you can access your account and sign in when he or she is going to do overtime on the same day.
    - If a student leaves school earlier than he or she claimed, then he or she must log in again and end the extra time at school.
    - He or she also has the opportunity to stay longer after the extra time if he or she wants to expand her extra stay at school.
    - If the set timer runs out by its own, then the person will not be displayed on the Overtime website anymore.
    - The entry can only be made on the same day, not before. There will be no option to sign in days before or to do advanced booking
  + Person of authority

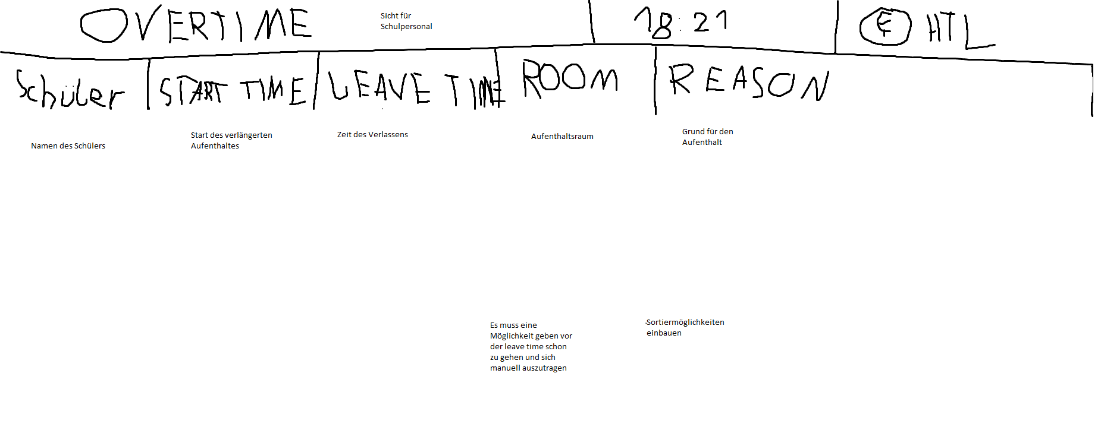
The person of authority does not have to sign in but rather receive an online link from *htl-donaustadt*, which grants them access to an overview over the students who stay longer after school.

## Interaction with the surrounding

* As an authority figure
  + First you click the link provided by the school and then you will be directed to the overview of all students which decided to stay longer after their regular classes
* As a student
  + First you go to the login tab which you will be able to find on the website of *htl-donaustadt* and you log in. Next you will be led to your account, where you can determine if you want to stay longer after school, by writing down how long you will stay after school (start-time till end-time).
  + If you decide to leave school earlier than anticipated, then you must log in again and end your longer stay at school manually. If you leave school at the end of your longer stay, then you will be removed from the system automatically.

## The demanded functions

|  |  |
| --- | --- |
| **Designate** | *Person of authority visits Overtime website* |
| **Summary** | *The person of authority will have an overview over every student that decided to stay longer after school.* |
| **Team/Member** | *Person of authority* |
| **Precondition** | *The website must be finished. The database must be finished. The programming must be finished.* |
| **Process description** | *The person of authority opens the Overtime website. Now the person of authority will see every student which decided to stay longer after school. (The website for an authority person will look like this. See picture below).* |
| **Usages (Include- Relations)** | *While the website opens for the person of authority, the data of the students, which decided to stay longer after school will be loaded for the website.* |
| **Extensions (Extend-Relations)** |  |
| **Alternative** |  |
| **Postconditions** | *If the Overtime website opens successfully, then the person of authority will have an overview over every student that decided to stay longer after school.* |
| **Failure** | *If we won´t be able to finish our project before the deadline, then we will at least try to provide the website for our own class.* |



|  |  |
| --- | --- |
| **Designation** | *Student logs in and determines how long he will stay after school* |
| **Summary** | *The student logs into the Overtime website and determines how long he will stay after school.* |
| **Team/member** | *Student* |
| **Precondition** | *The login website and the Overtime website must be finished* |
| **Process description** | *First you go to the login tab which you will be able to find on the website of htl-donaustadt and you log in. Next you will be led to your account, where you can determine if you want to stay longer after school, by writing down how long you will stay after school (start-time till end-time).* If you decide to leave school earlier than anticipated, then you must log in again and end your longer stay at school manually (If you leave school after the at the end of your longer stay then you will be removed from the system automatically). |
| **Usages (Include- Relations)** | *As the student opens the login website, the login website shows up. After the student logged in, the Overtime website opens.* |
| **Extensions (Extend-Relations)** |  |
| **Alternatives** |  |
| **Postconditions** | *If the student logs in successfully, he will be able to determine if he is going to stay longer after school. Now the person of authority will be able to see that that student stays longer after school.* |
| **Failure** | *If we won´t be able to finish our project before the deadline, then we will at least try to provide the website for our own class.* |

## 

## Structure and behavior

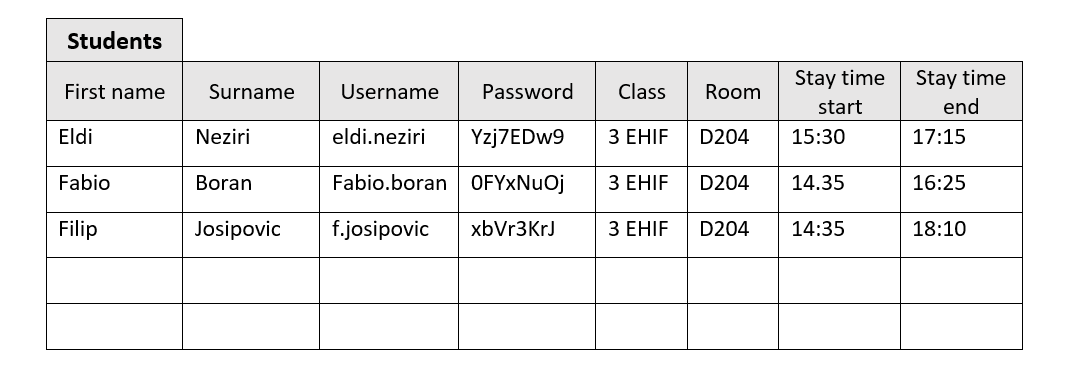
* Student
  + The student opens our Overtime login website, the login system opens and the student types in his credentials. The school login system confirms the identity of the student and directs him to the Overtime website, where he can claim in which room he will stay and how long he will stay (from - to). Now the PHP script gets launched and adds this information into the database.
  + If the student decides to leave school earlier than anticipated, then he has the opportunity to visit the Overtime website again and delete or edit his database entry. Now the PHP script gets launched and deletes or edits the database entry.
  + When the time limit is reached, the PHP script gets launched and deletes his database entry.
* Person of authority
  + The person of authority visits the Overtime website via a provided link. The PHP script gets launched and displays all the needed information from the database onto the website.

## User interfaces

User interface with a few buttons and text fields which perform a specific action.

## Database – interface

The database will contain one table: Student (Please see picture below). The database will be hosted on *htl-donaustadt´s* school server.



## Other interfaces

* *htl-donaustadt´s* school server is an interface for our project because everything that is important for our finished project will be hosted there.
* *htl-donaustadt´s* website will be an interface for our project, because there will be an extra tab on the website, where students will be able to enter the website.

## Other developer orientated requirements

As already mentioned, the data and everything important will be hosted on *htl-donaustadt´s* school server, which is already protected from viruses and hackers.

# Employer's specifications for project execution

## Realization requirements

Photoshop 5, Visual Studio 2017/2019, Notepad++, Lucid Chart, Laptop/PC, Microsoft Paint, Github, Microsoft 365, HTML, CSS, GanttProject

## Acceptability standards and delivery conditions

All files (html Overtime website, html login website, all CSS files, php file...) will be on a USB-Stick.

## Warranty

Bug fixes take place over a period of one week.

# Obligations of the employer

This link provides every information regarding the obligations of the client.

https://www.sozialministerium.at/dam/jcr:1fd1632b-8dd3-453f-9efc-e6988671c95c/AVB\_IT-Software\_28102019.pdf

# Literature

SYP textbook

# Terms and abbreviations

HTML = Hypertext Markup Language

CSS = Cascading Style Sheets

PHP = Hypertext Preprocessor

SQL = Structured Query Language

CPU = Central Processing Unit

USB = Universal Serial Bus

RAM = Random Access Memory

# Attachment