**CS Summer Practice Report**

In order to fulfil the reporting requirements of either CS 200 or CS 300 Summer Practice, you need to provide clear and concise answers to the following questions in ENGLISH. Submit form and then you are done! Your answers will constitute your report.

* Required
  1. **Your student ID \***

214993915

* 1. **Your First & Last Name \***

Betül Şeyma Kaya

* 1. **Your @std.sehir.edu.tr email address \***

betulkaya@std.sehir.edu.tr

* 1. **Internship Start Date \***

June 18, 2018

* 1. **Internship End Date \***

July 20, 2018

* 1. **Internship Company Name & Address (where did you do your internship?) \***

Eyüp Sultan Belediyesi - NİŞANCI MAHALLESİ EYÜP SULTAN BULVARI NO: 72

* 1. **Business area (business sector) of the Internship Company \***

*Mark only one oval.*

Automotive Chemicals Consumer Services Education

Energy Finance Food Healthcare

Information Technology Internet Services Logistics Manufacturing

Real Estate Telecommunications Other:

* 1. **Internship Supervisor Title, First Name, and Last Name \***

Mehmet Zeki Özalp and Hüseyin Güç

* 1. **Internship Supervisor's email address \***

[huseyin.guc@eyup.bel.tr](mailto:huseyin.guc@eyup.bel.tr)

* 1. **Internship Supervisor's phone number \***

0 (530) 725 0494

* 1. **Is this report for CS 200 or CS 300? \***

*Mark only one oval.*

CS 200

CS 300

**Practice Specifics**

* 1. **Which department of the company did you do your internship? \***

Information Technology Department

* 1. **What functions and roles does this department perform within the company? (describe briefly and precisely in 1 paragraph) \***

Any information needed in municipal services; set up and manage systems to be fast, efficient and accessible. Establishment and development of an automation system in order to digitize and archive all kinds of official information and documents in the institution and to be able to monitor the operations and processes of the units; to keep the map based data of the city up to date and to be able to report; to provide all kinds of software needed by the units; are essential tasks.

* 1. **What is the specific problem that you worked on? (describe briefly and precisely in 1 paragraph) \***

We worked on management software at the institution. What we want to do is to prepare an application based on managing the Pardus operating system being used. Because such a system is not present and we need to manage multiple clients at the same point. We can implement this system for Windows, but we want to manage clients that have the Pardus operating system. The separate Windows Pardus operating system will be managed separately. In short, a computer with a Pardus operating system will create a small application. The IP address, Mac address, Username and Hostname information of these clients were collected and sent to the server. The server printed this information into the database. They are listed in the graphical interface by reading from the database and can perform operations on the data in these lists. For example, you can connect remotely, install applications, turn off the machine, etc. This program would help people in operating the company’s computers easily and quicker.

* 1. **Why is this problem important to solve and what are are the constraints of the problem? (describe briefly and precisely in 1 paragraph) \***

This program which was being worked on is very important and useful to its users from both sides. Using the made program, server can remotely control some functions of the client’s computer. To put it more precisely, we have multiple clients in a messy structure. Some of them were in the close vicinity, some in the far distance, so everyone had to be able to make the same turn quickly and solve their problems quickly. We needed a mechanism to do this. This project will be able to remotely assist the staff, remote update can be sent. Especially our contacts with remote locations will be extremely fast. For example, when the staff can’t print from the printer, we can connect to the staff's computer, check the printer, and check the driver. We will localize the problem and solve the problem. Or the staff can enter the internet but when there is no page in front of him\hers, we will remotely connect and check the settings of the scanner. This will save time and the internet has given us the opportunity to use it with this project. We will remove the costs (labor, time, vehicles, etc.) in management, solve people's business quickly, and use our time efficiently. Also it would help server follows their employees and have full control.

* 1. **Which programming languages did you use and why? \***

We chose to use the Python language, because there are modules in Python that are relevant to the system we need. The most important of these is paramiko for network access, OS and SAP system modules for operating system level operation. Python, which is a package that meets the needs, can run on multiple platforms and has lots of module support. It can support both windows operating system and support Linux operating system. In addition, it is an object oriented programing language.

* 1. **Which software packages did you utilize and why? \***

Pycharm: (JetBrains PyCharm Community Edition 2018.1.2) We wrote our code with python

Microsoft Office Programs: (Microsoft Excel Worksheet) We saved some of our information from the client in the excel file and saved it in the database.

Pardus Operating System: This operating system is used in Eyüp Sultan Municipality, which is the first municipality that passed the Pardus operation system in 2016.

Windows 8 Operating System

**18. What hardware resources did you need? \***

We did not need a huge hardware resource, just an application running on the computer. Because we did with a simple design. What we need is to be able to connect to a remote computer, to receive information, to process this information, to obtain the output of the desired information. We did not need a lot of hardware around. If we had a mixed system we would have needed 8-10 GB of RAM, 20-30 GB of disk space, but we did not need a lot of resources because our design was so simple.

**19. How did you solve the problem, what techniques did you employ and why? \***

First of all, we divided our project into pieces. We made the pieces work together one by one. We did not consider the event as a whole, but we caught it in small pieces and provided links between each other. Thus, we achieved a modular system and we did not face a big problem, so we had a chance to solve the problem in small pieces and solve it more easily. In this process, we have benefited from the experiences of people who have been involved in this business before. According to our researches we have previously identified the problems faced by people engaged in this business and led accordingly.

**20.** **Among courses you took at SEHIR, which ones were most useful to you in completing**

**the tasks assigned during the internship? Please explain with HOW in a single**

**sentence next to each course. \***

[CS 350 01 (Database Systems](https://lms.sehir.edu.tr/course/view.php?id=3162)): We recorded the information we obtained in the database, I learned basics and introductions of database in this course.

#### [CS 364 01 (Computer Networks](https://lms.sehir.edu.tr/course/view.php?id=3163)): Server, client, socket creation, network operations were the basis of our project and I learned this information in the network course.

**21.** **Do you want to work in this company? If YES, do you think they will hire you, and why**

#### so? If NOT, why not? \*

#### I want to work at Eyüp Sultan within the future, since group works in agreement with their colleague. For this reason, successful projects come out within the institution. Too, this company instructed me the variables of taking duty, self-confidence, enlisting, formal relations, communication with colleague. It encompasses a decent and concordant work environment. I think they will enlist me because Hüseyin Güç said: " I want to see you here. I like to be with people I enjoy working with. I hope you can work here." I would like to thank Huseyin Güç for all the steps of this project. In my conclusion we worked exceptionally well.

**22. Rate how beneficial was this internship to you in gaining new skills/knowledge/insights? \***

*Mark only one oval.*

1 2 3 4 5

Very Little Extremely