**BILKENT UNIVERSITY**

**ENGINEERING FACULTY**

**DEPARTMENT OF COMPUTER ENGINEERING**

**CS 399**

**SUMMER TRAINING  
REPORT**

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**Performed at**

**KPMG Turkey IT Consultantcy**

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# Introduction

I interned at KPMG. Their main focus is to give consultancy and maintenance services to firms about internal software applications. KPMG works mostly on commissioned projects associated with third party companies during the development process. We have 2 projects that I had a chance to make a contribution.

The main reason why I chose to intern at KPMG, is because after inspecting the technologies which are used in consulting, I reached that KPMG is the sector lead consulting firm that gives importance to machine learning and attaches importance to coding principles . The technologies that are used in KPMG are the pioneers in the sector.

At last, when the first day of my summer training came, my supervisor talked to me and gave information about the work-flow and the projects they are working on. Since KPMG is a corporate company, they already sent my pc and accounts that I am going to use in the company before I arrived.Therefore, I dive into work on my first day. My supervisor motivated me about the projects that I am going to contribute.

When I started my internship one of the engineers from our department joined the army, so I worked on some of his assignments . For the first project I enhance my skills on the reactjs and javascript. My supervisor gave me the frontend part of the project as a first assignment to make practice and get used to the language and the environment.

After first week spending sufficient work in react and the libraries that KPMG use, I got used to the workspace that developers use in KPMG. Since it was not so complicated, my supervisor evaluated my react skills and learning capabilities by using my first project. Since javascript similar to the project that we made on the CS353 Database Systems course as both projects I made a contribution on the frontend part therefore it was not a challenge for me to get used to the system. The project was a internal project for the tax department  basically helps the consultants to make calculations about the tax rates. Because of the pandemic, software developers work from home. Therefore, I asked my questions via mail or zoom chats to senior developers in the KPMG. Worked with the senior developer from my department Erkin in every project. He helped me a lot about the challenges and the conflicts about the implementation and connection of the project to the database.The biggest challenged part of my intern was to adapt the regulations of the corporate companies and the language that was spoken in the company.

At the end of the second week, I started to work on the bug fixes in an application which is run in the tax department in KPMG.

My motivation to become an intern in KPMG was the corporate structure of the company, especially. I always wanted to feel the atmosphere of the software developers in the consulting companies, therefore it was a pleasant experience for me to make my internship such a consulting company that leads the IT technology of the consultancy sector. That was my internship at KPMG, briefly.

# Company Information

## About the company

The main aim of the KPMG IT Advisory is to provide IT maintenance to internal and external projects with its successful IT department. My department had internal projects during my internship but there were no specifications about projects that departmants work on.

## About your department

My department in KPMG consist of 4 business analyst, 2 software developer and manager. The main aim was to handle the need of the companies that request consultancy about their internal software systems. Usually, the requests were focused on the tax calculation software systems. The analysts in the department meets the customer and identifies the needs of the project and designs the technical structure of the project and forward it to the software developer.

## About the hardware and software systems

**Hardware**

KPMG sent me a package before I started my internship. The package includes specially designed laptop, laptop bag, WI-FI router and an envelope which includes account name and password that I need to use during my internship.

**Software**

KPMG uses Windows 10- Professional as operating system in computers. As a developer I request to use some ide Intellij for java and Visual Studio Code for javascript. The KPMG could not provide licence for those softwares mentioned above. The community editions of those softwares downloaded with the help of the IT department.

## About supervisor

My Supervisor:

* Name: Ipek Aktas
* Title: Senior Manager
* Email: iaktas@kpmg.com
* Education: Computer Science, Bilkent University,2012

The department consist of analysists and software engineers. All my associates tried to enhance my coding skills and be a mentor the internship from my first day till the end. They encouraged me to explain the contributions made by me during the daily meeting. They treated me as a software developer who works for KPMG as a full-time.

# Work Done

In subsection 3.1, I am going to describe project (ROBOTAX) that I had a chance to make contribution during my internship.The first project was a react project

Javascript used as a frontend and the backend server runned by java and MySQL used as a database. Since KPMG is a corporate company and using those applications which I contributed to develop, I do not have authorization to share them.

In section 3.2, I am going to explain the project (KDVIADE) which was developed for the tax department of the company in order to keep track of the data which must be given to the government. The technical structure of the project was the same as the previous one. Therefore we just changed the algorithms and frontend part of the project.

In section 3.3, I will be talking about the bug fixing. When the bug founded in the projects, they contact me and explain the situation. Since I participated those projects, most of the times bugs were easy to solve.

**3.1 ROBOTAX**

**3.2 KDVIADE**

**3.3 Bug Fixing**

# Performance and Outcomes

You must have all these sections in your report.

## Solving Complex Engineering Problems

## Recognizing Ethical and Professional Responsibilities

## Making Informed Judgments

## Acquiring New Knowledge by Using Appropriate Learning Strategies

## Applying New Knowledge As Needed

# Conclusions

Here you will write your conclusions. You can discuss your training and the company as well. Give a summary of the most important things you learned.

# 

# References

*The reference examples and style below are adapted from TUBITAK, ACM and IEEE reference style suggestions that can be found at* TUBITAK, ACM and IEEE websites.

Reference examples for web sources:

[1] “Technical Writing Style”. http://www.cs.bilkent.edu.tr/CS399/TechnicalWritingStyle.pdf. [Accessed: Feb 11, 2016].

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[4] Strunk, W., Jr. and White, E.B. “The Elements of Style”. [Online]. https://faculty.washington.edu/heagerty/Courses/b572/public/StrunkWhite.pdf. [Accessed: Feb 11, 2016].

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[12] Zobel J. *Writing for Computer Science*. Springer, 3rd Edition, 2014.

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[14] Fogg, B.J. *Persuasive technology: using computers to change what we think and do*. Morgan Kaufmann Publishers, Boston, 2003.

[15] F. Giannini and G. Leuzzi, *Nonlinear Microwave Circuit Design*. J. Wiley and Sons, 2004.

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Reference examples for articles (journal articles and magazine articles)

[17] J. R. Beveridge and E. M. Riseman, “How easy is matching 2D line models using local search?” *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 19, no. 6, pages 564-579, June 1997.

[18] “Technology threatens to shatter the world of college textbooks”, The Wall Street Journal, vol 91, pages Al, A8, June 1, 1993.

Reference examples for conference articles:

[19] Kha, D. D., Yoshikawa, M., and Uemura, S. “An XML indexing structure with relative region coordinate”, in Proceedings of the 17th IEEE International Conference on Data Engineering, Heidelberg, Germany, April 2001, IEEE Computer Society Press, pages 313-320.

# Appendices

Things such as long code examples, extensive company information, etc., should not be in the body of the report, but here.

**Self-Checklist for Your Report**

*Please check the items here before submitting your report. This signed checklist should be the final page of your report.*

* Did you provide detailed information about the work you did?
* Is supervisor information included?
* Did you use the Report Template to prepare your report, so that it has a cover page, has all sections and subsections specified in the Table of Contents, and uses the required section names?
* Did you follow the style guidelines?
* Does you report look professionally written?
* Does your report include all necessary References, and proper citations to them in the body?
* Did you remove all explanations from the Report Template, which are marked with yellow color? Did you modify all text marked with green according to your case?

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_