

# **ORION<sup>®</sup>**

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This week, most of our time was spent on requirement analysis report.

**Emin ÖZCAN**

This week, we decided to continue to search HDL and to begin the preparation of requirement analysis report. In this respect, we shared the responsibilities. Consequently, my first responsibility is investigation of Verilog. On the other hand, the second one is being an expert on data flow diagram concept. So, firstly, at the start of the week, I made some researches about Verilog from the Internet. Also I obtained some documents from my work fellows. I had investigated Verilog for two days. As a result, I reached a very optimistic decision about it. It is easy and convenient for our project. But, there is an important problem with it. Since we decided to use Java, it is very hard to find a Java interpreter for Verilog. However, we decided to use C or C++ for interpreting HDL codes, but we haven't decided to use which one of them and how to use it. Before starting the requirement report, this problem will be definitely solved.

After the investigation of Verilog, I started to work with DFD concept. For understanding this software engineering concept, firstly I read the related chapter from our software engineering book. Also, I examined some samples from this book. In addition to the software engineering book, I found some documents from <http://senior.ceng.metu.edu.tr>. I have investigated these documents and so, I have some ideas about our project's DFD. As a result, since some related concepts are needed, such as data dictionary or usage scenario, and these can be provided after Friday, I decided to design data flow diagrams after Friday.

**M. Ergin SEYFE**

This week I did a research on Hardware Description Languages (HDL). Till this time I always examined SPICE, so this week I found a chance to compare SPICE and HDL. After the team meeting we decided to use an HDL in our project. Therefore I focused on HDL. The most popular HDLs are VHDL and Verilog. I read tutorials about these two languages and compared them. Then I proposed our team to use Verilog in our project.

Also this week I worked on our analysis report. I specified and divided the duties to every team member. It was my responsibility to draw Use Case diagrams in our project, so I studied Use Case diagrams and learned how to draw these diagrams. Meanwhile I tried to extend our "Application – Feature Comparison Table" and the detailed explanations for every feature in this table.

I prepared interviews with academics and students from our department because the ideas of these people will give us very useful feedback that can be used in understanding system requirements and specifications.

### **Mehtap Ayfer PARLAK**

This week we started to determine our project requirements by using the information that we gathered up to know. Some of the modules, their inputs and outputs are determined generally. In other words we discussed the overall structure of the project and which programs, languages and platforms we will use. Finally, we made an interview with Ismet Yalabik in order to learn their expectations from this program as an assistant of Logic Design course.

### **Ilgin YARIMAĞAN**

This week we had a meeting and mainly discussed about the module structure of our project and how the modules will interact with each other.

We also considered our project in a user point of view and tried to configure the use- cases of our project.

We started to study on the requirement analysis of our project.

### **Eren YILMAZ**

This week, I examined Python language and looked for a way to integrate python as a scripting language into our project. I saw that the language is simple but powerful. Then, I found that there is a Java interpretation of Python, namely Jython. Jython will make our work simpler when integrating Python to our project.

After examining Python, I moved onto Requirement Analysis Report. We met several times this week, and at each meeting, we went further on understanding the internal structure of the program that we plan to develop. To the end of this week, we began writing our requirement analysis report.