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This week, we begun researching the technologies that we mentioned in our Requirement Analysis Report.

## **M.Ergin SEYFE**

This week we started the design part of our project. First of all, we wanted to see the problems that we will face in the implementation part and tried to solve them. After our team meeting I divided the topics into four general parts. Then I distributed the tasks to every individual team member. My part was studying on the graphical interface. I learned how to draw lines and components on the screen. Moreover, I tried to draw lines between gates. I worked on and tried to improve our design to draw lines that makes it easy for the user to draw cables between components. I have faced with no problem in the drawing part. Meanwhile no complex algorithm is needed but smart line drawing needs some more coding.

## **Mehtap Ayfer PARLAK**

After our weekly meeting we determined the subjects to survey for our project. Since we want to use multiple threads in our simulation program, I searched the threads and their usage in Java. I found some Java classes for threads such as `javax.swing.Timer`, `SwingWorker` and `java.lang.Thread`.

`javax.swing.Timer`, is useful when a program must perform a task repeatedly or performing a task after a delay.

`SwingWorker`, helps performing a task in a background thread, optionally updating the GUI when the task completes.

Basic support for threads in the Java platform is in the class `java.lang.Thread`. It provides a thread API and provides all the generic behavior for threads. (The actual implementation of concurrent operations is system-specific.) These behaviors include starting, sleeping, running, yielding, and having a priority.

Finally I found some thread examples in order to understand the usage and implementation of threads in Java.

**İlgin YARIMAĞAN**

This week I focused on the multithreading mechanism in Java. I started to consider how to construct the currency of threads in our project, how these threads will be scheduled and interact with each other in a more detailed way.

Also I found out that different Java platforms have different multithreading mechanism so considered the effect of this fact to our project's portability. I tried to construct ways to handle this issue.

**Eren YILMAZ**

This week, we begun researching the technologies we will use in details. We shared the work and I was assigned the Python language and its Java port, Jython. Due to some problems I encountered with my computer, I could only study the Python language structure. The language is simple and easily understandable for us, since its syntax is similar to the languages we have seen. The language is a functional language, supporting standart functional language properties.

I couldn't study on integrating Python into a Java application, but it will be finished by Thursday next week.

**Emin ÖZCAN**

This week, each group member was responsible with trying to get information about a material, which will be used in later phases, and was responsible with telling about these materials to other group members. So, my task is getting information about JHDL. I tried learn what is JHDL and how can it be used. I also tried to download some packages, but the official site server is not available now, so i could not achieve to download them, as a result i couldn't compile a JHDL code. However, this site presents very useful information about JHDL and about simulators that are already written by using JHDL. Finally, i informed by friends about JHDL, and i tried to listen and understand their researches in our group meeting.