

CEng 491 SENIOR PROJECT

FALL 2006



Weekly Report

12.10.2006 - 18.10.2006

We had our first meeting to write our proposal and talk about our project topic, just after the project topics were announced. After that, we had 3 meetings which we made various decisions, until now.

Below are some decisions and sub topics that we study on individually;

- Searching for a company that we will contact as our customer to determine the requirements of our project. Sending e-mail and try to talk about our project.
(Aylin Köstekli, Görkem Ekmekçi)
- Searching for the basic requirements of implementing a “Development Environment”.
(Fulya Oktay, Mustafa Azak)
- Searching about “Web Service” topic, and the possible functionality in our project.
(Tayfun Tekin)
- Searching for document and application program for Ajax. *(Tayfun Tekin)*
- Designing a web site for our project. *(Mustafa Azak)*
- Searching about “Requirement Analysis Report”, investigating old reports and determining the main points of report. *(Aylin Köstekli, Görkem Ekmekçi)*

- We determine the topics that we do research about “Requirement Analysis”
 - Text Editor – *Fulya Oktay*
 - Graph Editor – *Mustafa Azak*
 - Parser, Debugger – *Tayfun Tekin*
 - GUI – *Aylin Köstekli*
 - Database – *Görkem Ekmekçi*

Aylin KÖSTEKLİ – 1347699

From the time that our project topic was determined, I have been trying to learn our main concern “Ajax”. Because, it is a new type of application and I have not enough knowledge about this topic. For a few days, we searched for documents that we can benefit from; I read tutorials and articles about Ajax and try to understand the idea and usage of it. I have also investigated the web sites that were created using Ajax. After our first meeting we gave some duties to each group member, my duty is searching for companies that we can contact as our customers for our project. I have looked for the professional companies that are creating rich internet applications from internet, especially in Techno city and Ankara. I sent e-mail to them and ask for if they can help us in determining the requirements of our project. Unfortunately, I haven’t received any reply e-mail yet. So I have tried to identify our requirements from web. I have also searched for “Requirement Analysis Report”, have investigated old reports and have tried to write an “*outline*” for our report. Then as we decided at our 3rd meeting, the subject that I have to search is “GUI”. So I have searched on the web about the GUI design of our IDE. There are various patterns for IDEs, depending on what they are developing. I have investigated especially Web Application Development Environments, how these applications are designed according to their functionalities. I figure out that we can use Swing – a GUI toolkit for Java - for our application environment’s GUI, after we determine our basic requirements.

Fulya OKTAY - 1347756

From the beginning, I mainly tried to make a web search about technologies that we have to know in order to build up the project. We tried to separate the project into modules and understand the problem better. During the meetings, we discussed the project and gave some jobs to each group member. In the second meaning it was decided that I should find out information about how IDE’s are developed. I investigated the websites and forums about most popular IDEs. I have downloaded some of them and tried to discover the functionality we should cover. I found some features which all IDE’s should support. But I couldn’t find any guide to help us to develop a development environment. The best answer to the questions like this on the forums was to download an open source IDE and understand it. Secondly, I read some tutorials on the web. I haven’t used JavaScript or any other scripting language before. Therefore I read JavaScript tutorials which our team member Tayfun has recommended to us to be familiar with the technology. Besides, I read some Ajax tutorials and investigated some tools which are created by Ajax to understand the functionality of the technic. According to the third meeting, my main job was to find out how text editors are developed. I used forums to get information about text editors and comparison of them. I tired

to understand whether it is a big job to develop a text editor or not and found out that Java supports some classes to build a text editor and informed my friends about them. I installed an editor which enables using Ajax tools and investigated it and tried to give an example to the team to imagine the product more easily.

Tayfun TEKİN – 1347996

After our Project topic was determined, we had shared some topics about our project in order to gain some information about AJAX and IDEs for AJAX. I was assigned to investigate Web Services and find documents, application programs for AJAX because of my past experience (summer practice) about it. First of all, I created a Google Group and a mail address(kodadiyazilim@gmail.com) to make our team communication easily which was our team decision at the beginning of the semester. Then, I searched useful documents and web sites for us to understand the technology easily. Although AJAX is a still new technology I found lots of documents, web sites and programs about it and share with my friends via our Google group. After my friends got some knowledge about the technology, I showed a simple PHP example about how AJAX is developed in order to clarify the technologies behind it: XML, JavaScript, DOM at Monday. Secondly, I was assigned to do research about parser and debugger for Requirement Analysis Report. I found lots of useful information about parsers which are HTML and DOM parsers. There a built-in functions and APIs about parsers especially coded in JAVA. Then, I searched for debugger for JavaScript. I found that there are some difficulties in that part because of browser dependency. Errors are caused by wrong DOM usage and this makes difficult to find JavaScript errors. But there are some open source checking tools and APIs that may ease our work.

A. Görkem EKMEKÇİ - 1347392

At our meetings we divided the topics that are needed to be done among the team members. My first task was to find customers whom we can interview with in order to better determine our requirements. I searched for companies over the web and METU Technopolis. I looked for companies who work in web development area because they can be possible customers of such a product. I sent a mail to the companies I found telling about our project and desire to interview with them about functionalities of our product. I sent our project proposal along with the mail. The companies I contacted with are MNG Bilgisayar, Polar Mühendislik ve Danışmanlık Ltd. Şti., Probil, RTB Eğitim Çözümleri, Halıcı Yazılım, Web Design Studio, Iflexion, Lorentz Consulting Group, Fullestop, Konkurent and Pedalo. After doing this I searched for analysis report (software requirements report) templates over the web and examined their contents, then showed them to other team members. Also I looked at some forums and communities about Ajax to get a better feeling of it. Another task that I accepted was to send an e-mail to Google for support but we couldn't find a support page about student projects. Lastly, I examined the database connectivity functionality of some IDEs that allow Ajax in order to understand if a database connectivity tool is needed in our product or not and if needed, what it would look like. I downloaded and installed Tibco, Morfik, Macromedia Dreamviewer, MoreMotion Web Designer 3. Also I watched some videos on Atlas. I examined those products and took notes about whether they support database connectivity and if yes what they provide about it.

Mustafa AZAK - 1347178

First of all, I read some tutorials and articles about AJAX to be able to understand our project topic more clearly and search for the technologies that we may need during the project process. After the second meeting I was assigned to search for the basic requirements of implementing a “Development Environment” and designing a web site for our project. I found out the essential features that every IDE should have for authoring, modifying, compiling, deploying and debugging software. In addition, I downloaded some IDE’s and compared them also search for the additional features that make some IDE’s better than the others. Then, to be able to create a good web site without wasting so much time, we decided to use Mambo which is an open source product for creating web sites. I installed my computer and I learned how to use it but after searching for Internet to learn Mambo, I realize that Joomla ,very similar with Mambo, would be a better choice because it is newer and has some additional features. Currently, I am building the necessary pages for our project. My other assignment was about Graphical Editors in IDE’s for the Requirement Analysis. I read articles to learn more about them and found out that their general name is WYSIWYG (what you see is what you get). I examined various examples and tools to learn what functionalities we need. The most useful features is the drag and drop, it makes the life easier for user. Unfortunately, I could not find any source how we develop a graphical editor up to now, but I believe that after we can examine some open source products we can also create a good Graphical Editor for our AJAX IDE.