MIDDLE EAST TECHNICAL UNIVERSITY

DEPARTMENT OF COMPUTER ENGINEERING

SENIOR PROJECT
FALL 2006

PROJECT PROPOSAL

1. COMPANY INFORMATION

1.1. Company Name

kodadı yazılım

1.2. Team Members

- 1347178 Mustafa Azak (Optimist, Gatekeeper)
- 1347392 A. Görkem Ekmekci (Timekeeper, Summarizer)
- 1347699 Aylin Köstekli (Recorder)
- 1347756 Fulya Oktay (Project Leader, Initiator)
- 1347996 Tayfun Tekin (Devil's Advocate)

* Structure is tentative

2. PROJECT INFORMATION

2.1. Project Name

kodadı: *AJAXDEV*

2.2 Project Topic

Ajax, shorthand for Asynchronous JavaScript and XML, is a web development technique for creating interactive web applications. Ajax came with JavaScript and was enabled by previous versions of JavaScript, but developers have started to use it to create rich internet applications (RIA) recently. The purpose of using Ajax is to develop a website which doesn't need to refresh whole page in order to exchange data from server. This creates a more responsive webpage and saves service time. Before Ajax, to create rich internet applications either Macromedia Flash programs or IFrames which is a property of HTML were used. Flash programs are not browser independent and they are loaded slowly. IFrames are inefficient and difficult to implement. Ajax removes those disadvantages and provides more efficient, user-friendly RIAs. Our aim is to develop an environment in order which developers can create a website having the features we described above. We will try to create a user-friendly environment which allows non-experienced developers to build beautiful websites. Besides, experienced programmers will be able to edit and debug scripts by using our tool.

2.3. Possible Application Areas of our Design

Our tool will be used for developing websites that are enriched with Ajax. This will enable:

1. Real time form data validity check: To check the validity of data (userids, passwords, etc.) entered by user to a form before sending the request.
2. Automatic completion: To complete the form data such as emails, name-surname and address automatically before the user has entered.
3. Master-detail forms: To show up the details when the user has chosen master values. Ex: When the user has clicked on the product categories, related items should appear immediately without refreshing the whole page.
4. Sophisticated controllers for user interface: To be able to use controllers like tree structures, menus, progress bars without refreshing the whole page.
5. Data refreshing on the page: HTML page should be able to show up the changes by continuously examining the server.
6. Server side declarations: To wait for the declaration of server to warn the user with a message, refreshing the data on the page, directing the user to another page.

2.3. Initial Idea of the Project

We chose to implement AJAX development environment because it became popular recently and it is now a milestone for web application developments. We believe that it will be widely used in near future by the applications which have extensive database connections and user interactions. Our aim is to develop a nice looking, easy-to-use, user-friendly development environment which basically supports web applications powered by AJAX. Even a non-programmer user will be able to use our product and create websites easily.

2.4. Possible Features to be Developed

After the first review and meeting, we decided on the following features:

- A user-friendly development environment.
- The user can create web pages without coding by using design view.
- User will be able to edit and write scripts using code view.

- User will have basic Ajax samples to use in his/her application.

- There will be a debugging feature for Ajax components which are JavaScript, Document Object Model and XML.

- User will be able to preview his/her application in a web browser.

- User will be able to observe the database he/she created and write queries.

- User will be able to see tutorials about AJAX components.

- There will be an easily used editor to write scripts.

- We will provide a Web service to the user to make data transfers.