**Remote Services:**

So far only the API of GitHub will be needed

In case we decided that information from Trello will be useful .. then Trello API will be also needed

Using of Trello API is totally a decision for the instructors.

The way they like the assessment to be, will affect our decision. So what I mean here is that it is not a technical decision it is an academic decision.

Last semester, I used Piazza -a similar website to Trello- as part of one of my courses.

It helped student interacting with each other and with the instructor.

Although the assessment did not cover students' contributions to piazza, however some instructors may think it should.

So to sum up we need

1- GitHup API (A must)

2- Trello API (Subject to instructors' preferences)

While we work new API's may be needed, but for now this seems acceptable

**Client:**

From our previous conversation, web application seems to be more convenient at the end.

**Why web applications?**

Web applications are the future of applications, No pre installation is required or updating, Accessible from anywhere and no storage on the local machine and other known benefits of web applications

This application should be accessible from anywhere. Instructors should be able to invoke the rest services of their students' public repository.

The most important thing is that it easier to get statistics and integrate with rest services via web application.

Web applications can be easily extended to be a web-based mobile application (i.e easy to develop multiple views on multiple frameworks).

The application we want to develop will perfectly fit with web application, there are no restrictions that may prevent developing it as a web application.

**Domain**

**Entities**

**Location of the model**

It could be a separate component (web service) that represents the business model of our logic, which supports the separation of concerns.

**Programming Languages and Frameworks**

Three possible approaches to develop our project

1- Java EE approach. So using Java, JS, HTML, CSS, JSP.

2- PHP approach. So using PHP,, JS, HTML, CSS.

2- ASP.Net approach.

**Storage**

Most of the information can be generated using GitHub API in order to generate the assessment following a predefined algorithm to do that.