**G52GRP**

**Democratic Conferencing Tool**

**Interim Report – November 2009**

**Group:** gp09-sdb

**Supervisor:** Dr. Steven Benford

**Group Members:** Robert Golding, William Redrup**,** Tammie Seo**,** Christopher Lensvelt**,** Henry James**,** Zhongda Zhu

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G52GRP Interim Report

# Introduction

The purpose of this report is to present gp09-sdb’s progress regarding our project up until this point.

# The Problem

To clarify, gp09-sdb’s project is to design and create a Democratic Conferencing Tool. Our primary aim is to introduce a new product to an existing market, with ideas both new and familiar to those who are interested in such products, as we feel it is important to research other successful systems whilst we intend to implement our own original features on top. The name given to the system is DemoConf, though this is subject to change at any point before the final planning stage.

# Background Information/Research

## Survey of Existing Systems

We have carried out research into similar systems, in order to gather a better understanding of features that are considered ‘a must’ for this type of project, and those that could perhaps be improved upon. Two particular projects that caught the attention of our researcher were Google Wave, which unfortunately is currently limited to invitation testing only (could be considered a closed beta), and Effusia Business Messenger, a very popular tool for conferencing in the business sector. More on this can be found in the research notes.

## Market Research

## Technical Research

We carried out some initial research into the suitability of different platforms for developing our application. Broadly, there were two areas in which we concentrated our research: web-based platforms and desktop-based platforms. The group looked into a number of different options regarding each type of platform. For example, an application that extends a social networking website (such as Facebook) could be used. This would mean that a large part of the system would already be present (such as the user sign-up and login/authentication modules).

After some discussion, it was decided that our system should take the form of a web-based application. We therefore did not carry out any detailed research into desktop-based frameworks, as we would not need them for our project.

It was decided very early on in the ideas stage that DemoConf would be a web-based application. The primary reason for this decision was accessibility for potential users. The technical discussion regarding which software we shall be using to develop the project has been decided on, this being Django, an effective and simple web framework. Other platforms were discussed such as Facebook applications; however we felt the easily viewable profile pages which Facebook is based on are not suitable for our system as people may not want to share their personal information with the other users accessing the application.

Features of DemoConf:

* Democratic system (Moderated by the users, rather than administrators)
* Simple conference room system, allowing users to kick-start discussions easily.
* Effective feedback idea, providing the speaker an insight into how well their argument is being received.
* Fair speaking limitations, allowing for all users to become a potential speaker within the conference.

Current objectives:

* Discuss and decide on the framework we will be using primarily to develop the system.
* Develop a suitable time-plan highlighting important milestones for the project, ensuring all deadlines are easily recognizable.
* Design a number of fitting interfaces for the system, which we can potentially choose from.
* Begin the initial prototyping stages.

# Requirements Specification

# Initial Design & UI

Here is an initial UI design, drawn up before a number of the features were decided upon:



This is of course, not a finished design, however it includes the basic features we wish to include – Users online list, chat window, user status, etc. The list of features has grown substantially since this design was created, and the next versions will reflect that.

# The Platform/Implementation

Firstly, the group had to decide whether to develop our application in one of two ways: a web-based application, or a desktop-based application.

## Web-Based

|  |  |
| --- | --- |
| Advantages | Disadvantages |
| Faster development | Limited to one-way communication (request-response) |
| User-interface layout simplified (HTML + CSS) | Interactive UI is more difficult (requiring JavaScript or Flash) |
| Does not require installation of a client |  |
| Truly multi-platform |  |
| Possibility of SaaS (Software as a Service) |  |

## Desktop-Based

|  |  |
| --- | --- |
| Advantages | Disadvantages |
| Two-way communication possible (via sockets) | Slower development (custom protocol may be required) |
| Implementing an interactive UI is easier | User-interface implementation is more difficult |
|  | Requires installation on all client machines |
|  | Hard to make truly multi-platform application |
|  | SaaS is ruled-out |

The group felt that the advantages of a web-based application are so great that our development should focus on this style.

Though the fact that a web-based application is forced to adhere to the request-response nature of HTTP may require some creative programming, we feel that this is an obstacle that can be overcome.

Next, the group needed to decide on a language and/or framework to use for the development of the project. Broadly, we had two options at this point - we could either write the entire application from scratch, or use a web framework to ease the development and speed up the process. However, frameworks can hamper development if they are too inflexible - so this choice is vital.

There are a number of web frameworks that would be suitable for a project such as this - Ruby on Rails, CakePHP, and Django to name but a few. However, Rob has prior experience programming using the **Django** web framework, which is written using the Python programming language. Though there was a belief that Django would be suitable for our project – the only way to know for sure was to build a prototype, to act as a “feasibility study” – in order to find out whether we could indeed implement our project using Django. The results of this study are recorded in the next section of this report.

# Initial Implementation/Prototyping

# Problems Encountered

# Time Plan

Still to be added:

More recent UI designs, information about play-testing session, research notes, summary of progress to date.