Requirements Analysis

System and software requirements

I will be collaborating on a project with a friend of mine, the project is a web-based application which uses Java Server Pages (JSP) on a TOMCAT web server and a C++ program for handing data and storage requirements.

We need to work in C++ and Java for creating a server-side application in which they can communicate with each other and share resources and the output of the database can be seen on a webpage.

A model-view-control framework enables front-end and back-end web developers to work more effectively as a team by separating the development processes into different skill requirements for each component part of the framework. In future as development needs change we can deprecate C++ and JSP functionality if it does not suit our needs.

Application Summary: LifeBird

This web application allows users to find, discuss, track and share their achievements with the life bird community. The application collects usage data and statistics which the features are built on to provide the most appropriate information to the users.

The aim of this project is to interact with our target market, to start communicating and understanding them, people aged between 13 and 26. To do this our applications need to be fun, stimulating and diverse because we want to make it easier for our users to track and monitor their lives securely, quickly and honestly.

In order to appeal to 13 year old individuals and 26 year old individuals, different age groups will have a custom dashboard and user interface that is specific to their individual needs and life experiences.

The individual user can choose what kind of information they would like to track in their preferences, submit their latest experiences, goals and achievements and at the start of every week the dashboard will display a review of how their week has gone by monitoring the good and the bad and every week counts as either a plus or a minus to their total score. These reviews help the application find the right information according to their age group that will benefit them, for someone who is having career problems or dietary issues, the information provided by lifebird will be catered to their reading level for example if the user is aged between 18 and 26 they could be given sources to articles that are relevant to them for further research.

Technical Requirements

The application will be designed with the following features; keyword index for customizing user preferences and interests in order to give the use the most relevant information for their needs, goal progress tracking information, experiences – history, latest and new, completed achievements, introduce yourself – open a profile to someone with similar interests as you and follow their achievement track, relevant articles to your interests and experiences, timeline with all of your experiences and past achievements from the beginning of time (since the application went live), reputation – speak to the right people, community overview – happiness, achievements, trending and top community contributors for the week.

User Registration Form

The user registration form front-end will be designed using JavaScript and html5, back-end will be developed using Java Server Pages using Object-oriented Programming and will also be made to work as a proxy server to a C++ Registration Object called from the Java Registration Object.

Although this approach is more difficult to learn that PHP, theoretically the benefits should be faster parsing and database storage than using PHP, access to a broader diversity of API’s, greater control and can also use PHP if JSP/C++ objects are not required.

The user registration form will be used to demonstrate how to work with JSP and using proxy Java objects to interface with C++ objects for simple parsing and database operations.