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# Bibtex Entry Manager

## Definition of project

The purpose of this project is to provide a web browser-driven tool that can allow multiple users to work on sets of shared BibTeX records that are stored on a central database. It involves extending an existing project which already provides features for adding, editing and deleting BibTeX records.

## Progress to date

I decided to re-implement the project using Microsoft’s .NET framework as it is an area in which I would like to become an expert. I am using C# as my development language in Visual Studio 2010 with Microsoft SQL Server 2008 as my DBMS.

I have analysed the previous two projects for their main strengths and weaknesses – I adapted some of the old code used in the Java version – in particular the parser which converted .bib files to individual records as well as some of the core classes which represent entries.

I have decided that I want to follow as many good software engineering practices as possible while developing the product. I have so far incorporated Unit Tests (using the NUnit framework) and Continuous Integration (using CruiseControl.NET), though I have found that setting up and following this rigorous process has held back progress in the development of the model and the front-end (web interface). I have also found it quite helpful to use version control (using Subversion).

I have implemented the core aspects of the project, namely the model and the ability to interact with a database. I have chosen to use a tool, NHibernate, which I came across while working on summer placement in summer 2010.

The project has arrived at a stage where development of the front-end will accelerate, which I shall discuss in the final section below.

## Plan of work

With the database and the core model implemented, I don’t believe it will take a large amount of time to push the functionality of adding, deleting, editing and viewing capabilities. I also intend to address some of the shortcomings of the two previous projects by allowing users to add items to a tree-based hierarchy of groups together with full import/export functionality (with a choice of formats, time permitting).

Searching was a shortcoming on the previous projects because it did not allow a search across all fields. I hope that by the end of the project, the user will be able to search across all fields in the database. Further to the searching issues, it is important to deal with concurrent access issues and allow for users to set permissions on the entries they upload.

I would also like to dedicate some time to ensuring that the user interface is as usable as possible. If time permits, I would like to run a user evaluation to assess the success of my website design.