**Final Status Report**



**BCD Carpentry Project**

**BCD1-0117**

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| **Version** | **Description of Change** | **Author** | **Date** |
| 1.0 | Initial | Tao Sun | 02/06/2017 |
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# Introduction

# Background

BCD Carpentry was founded in 2008 and has been expanded to a multi-cultured medium sized business now. With regard to its human resources management, all the work is conducted manually with the help of MS office software such as Word or Excel spreadsheet. There is no other special management software or system to help the Administrator; therefore, they have an inefficient way of organising staff and budget-related details. To solve these problems listed above and improve the efficiency, BCD Carpentry imminently needs a Human Resource Management System (HRMS) which can manage all the information above using a database system.

Due to the limited time, the project team plans to finish the design and implementation of a database by the end of the first semester in 2017 and present the client a simple interface to store and access the data in the database.

# Project Basic information

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| --- | --- | --- |
| **Project Number** | BCD1-0117 | |
| **Project Name** | BCD Carpentry Project | |
| **Project Supervisor** | Sunil Bedi | |
| **Client** | BCD Carpentry Ltd | |
| **Project Team Members** | **Student Name** | **Student ID** |
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# Process

According to the requirement of Project Handbook, the project was started on 13th March 2017 and was completed on 2nd June 2017. The whole project process conformed to the Project Handbook and the project plan in the project proposal. This project was composed of five stages: project proposal, requirement, database design, development and deployment. Most of the work is focused on database design and implementation. Additionally, the application design and development also cost much time. In the end, the project accomplished its objective.

# Final Status

This project has been implemented successfully. The database was established on client’s spot, and the application was deployed. The client can store and query their information using this system.

# Implemented Contents

* The whole system was established using MS Visual Studio 2015, C#, ASP.NET, IIS Server and SQL Server 2016 Express.
* The database was designed using Visual Paradigm. One trigger, 20 database tables and 23 stored procedures were created in the database (see the details in DBDesign folder). Image files can be managed by the database.
* In order to store and present the information, 33 functions were developed (see the details in SoftwareDesign folder and SourceCode folder). The queried data can be exported into Excel spreadsheets or PDF files.
* Database backups automatically at specified time and interval.
* Some data can be automatically updated periodically.
* When employee’s information is changed, the old information can be stored in a history table automatically.

# Issues

* At the beginning of the project, the IT staff of BCD wanted us to use the technologies (e.g. PHP, MySQL and Apache) to achieve the new system. However, all of the team members are not familiar with them. We planned to implement the system with C#, ASP.Net and SQL Server. After introducing the risk of using new technologies and the advantages of Microsoft’s products, we persuaded the client successfully.
* Some team members had no knowledge of data model and were not familiar with SQL Server and Visual Paradigm. The project team organized two sessions of internal training to teach them the conception of data model, the installation of database and the use of SQL Server Management Studio and Visual Paradigm.
* In the development stage, the time assigned was limited. In order to make the project keep up with the project plan, we had to work overtime.

# Further Improvements

* More functions can be added to facilitate the client’s work.
* The UI can be improved using AJAX
* The architecture can be optimized using ASP.NET MVC
* The security can be enforced using HTTPS protocol