

JULY 20, 2016

PROJECT PROPOSAL

PROJECT TEAM
WELTEC



PROJECT PROPOSAL

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Process responsibilities

Responsibility	Role	Name
Draw up and change	Project member	Hardik Kansara
Execute work instruction	DBA team members	

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Table of Contents

1	Introduction	3
2	Executive Summary.....	3
3	Opportunity Context.....	4
4	Project Requirements.....	4
5	Project Analysis.....	5
6	System Outline	6
7	Approach	6
8	Organization of the Project.....	7
9	Management	9
10	Plans and Procedures	10
11	Staff.....	11
12	Deliverables	11
13	Resumes (CVs)	12
14	Relevant Background Information.....	12
15	Resources	13
16	Client Acceptance	13
17	Appendices.....	13

1 INTRODUCTION

This proposal is requested by Robert Sutcliffe to identify all the parties involved in the project, to identify the processes, tools and methodologies to plan, design and implement the project system. The proposal is due on the 22nd July 2016.

2 EXECUTIVE SUMMARY

This report looks at the proposed plans to build Database evaluator. The proposal looks at the personnel involved with the project, the purpose of the project, the available methodologies to build the website, the client requirements, the planning and management approaches to build the website, the costs and risks involved within the project and the project deliverables with their due dates.

The projects main aim is to produce a evaluator that diagnose and check the basic implementation parameters of SQL Server Instance and Database. The database evaluator will target all version of SQL Server starting with SQL Server 2008 and SQL Server 2012. Older version of SQL servers are not supported by this evaluator.

The project will run under the Software Engineering methodology, which will produce a high quality product and has no associated costs or risks in the implementation of the methodology.

The project has several management controls built in, this is to minimise the risk areas and improve the quality of the product. There are the standard advisor meetings, timecard, diaries and audits. Also change request controls and a methodology are used to control the processes used to develop and change the project.

Evaluator will be developed by using Microsoft Visual Studio and SQL Server Express. The website development tool will be the wordpress with mysql. Customer can download the evaluator from website and upload the file to website so it will be diagnose later. This tool is free to download and use which means there is no real risk and negligible downloading costs.

The execution will have three phases, download evaluator from webpage, execute evaluator against client system, Upload evaluator dump file to website.

The website will have webpage to describe and help customer to understand how to download and execute the evaluator. It will also help customer to upload the evaluator file and get the final result from database expert side.

Website will allowing the users to share the experience of the website and evaluator.

3 OPPORTUNITY CONTEXT

The team need to do a project as part of their degree programme where team needs to find a suitable project client, to develop a solution to meet the client's requirements to fulfil their project. Team can also suggest their own project which is approved by Robert. If it's suggested by team then they need to clarify why they want to do this project with strong justification and what will be skill and technology used?

Database evaluator project is suggested by one of the project team member. So this project is not completely rely on any client. Because of this scope and requirement of the project will be decided by team members in beginning and as per this they want to build the database evaluator which can be executed by any client and fits in any client requirement to gather and evaluate the implementation of SQL Server and database. Project team will develop their own website to promote their product and register clients will download the evaluator and upload the results.

However the project team want to attract clients who has implemented SQL server in their infrastructure and want to know the implementation risk and verify the configuration of databases and SQL Server. The biggest opportunity with this project are first client can simply see what are missing parameters in exiting implementation and second if they have large number of SQL Server instances to be audited then it's very easy by this tool.

4 PROJECT REQUIREMENTS

The project team's requirements are 400 hours of work each of the project member. The project will be due on the 4nd of November 2016.

Team has identify the core requirement of the project and divided into main below categories.

➤ SQL Server Instance

1. Installation
2. Configuration
3. Security

➤ SQL Server Database

1. Implementation of Database (physical structure)
2. Database Configuration Options
3. Maintenance
4. Security

Database evaluator can download and execute against the client system. Evaluator will create one dump file which contains the current information of all above areas of client system. This information will later verify, checked and final report will be generated.

From Project team perspective, they want a light weight and small evaluator which can run on client system and gather all the information which we needs to be audited. Team also need website from where client can download the evaluator as well as upload and download the result. Website will also help customer to know the how to use the evaluator.

Customer
The client's requirements from the project will be a website that is fully functional, highly polished and links the irreverent careers test to currently available WelTec courses.

The project development teams perspective is that they want a successful outcome, namely a website that is functional, delivers the required material with efficiency and flair.

Team requirement

*Date
RVR 17/3/1*

5 PROJECT ANALYSIS

The team is composed of a Database Specialist, a Web Developer, a Programmer and a certified Project Manager.

DB The Database Specialist is experienced in handling and administering Microsoft SQL Server that is why it is the target RDBMS of the project. With his skills we are confident to produce a Database Evaluation tool that is up to standards.

Microsoft & C# Given that the target RDBMS is a Microsoft Product, the Database Evaluator will be built using a Microsoft product as well. In this case, the team's Programmer will have to adjust and learn how to program Windows Desktop applications using C#. Visual Studio already has some tools to make the GUI of Desktop applications easier so this will aid the programmer.

Web Development The product website will be built using PHP, Wordpress and mySQL. Many websites are built using the said technologies so finding references to aid in the web development would be easier. Also, Wordpress, being a CMS tool, has a lot of Plugins and Themes that just needs to be imported to use. These plugins will make the web designing much easier. It also has plugins for E-Commerce which is something that the team wants to implement on the site. Lastly, the Web Developer in the team has experience developing websites using the said technologies so they are the logical choice in this case.

Source Code Management For Source Code and Document Management, GitHub will be used to keep track of code and document changes and updates. This is quite easy to use even for first time users given that

there is GitHub Desktop for easy upload. Viber is also being used for the team's means of communicating. A group chat was initiated and ideas, links etc. are being shared through it.

6 SYSTEM OUTLINE

The project team will follow a methodology to build a robust website and database evaluator. The website will have webpage to describe and help customer to understand how to download and execute the evaluator on their system. It will also help customer to upload the dump file and get the final result from database expert side.

A database evaluator is light weight tool which install on client system, connect to SQL server instance and execute. It will generate the dump file which contains all the current information of all the predefine areas of SQL server instance and database. Evaluator either run to check only SQL Server instance configuration or you can execute on instance with single database. You cannot execute the evaluator on multiple database at a same time.

Dump file will uploaded on website by client which will later diagnose by another tool just to verify and cross check all the information against with the SQL Server best practice.

7 APPROACH

This project will use Spiral Methodology. The Spiral Methodology can identify and reduce the inchoate risk of project. It uses the small scope of the exploration risk to develop the corresponding risk plan. After that, then decide whether to do the next phase in the project.

The benefits of using Spiral Methodology in the project:

- Through the creation of a prototype, enables software developers initially clear direction in each iteration;
- Through risk analysis software to minimize the possibility of loss of complete failure;
- In each iteration stage implant software testing, the quality of each stage is guaranteed;

Spiral Model Methodology

The project for the Database Evaluator consists of 2 Prototypes. Each prototype will be given enough time to undergo the four phases of the spiral methodology:

- Phase 1: Identification
 - Explains the planning and the identification of the requirements needed for the project. Identification of the requirements needed will be done on this phase including the communication plan, deliverable dates, task distribution, risks to expect, and understanding how the system works.

➤ Phase 2: Design

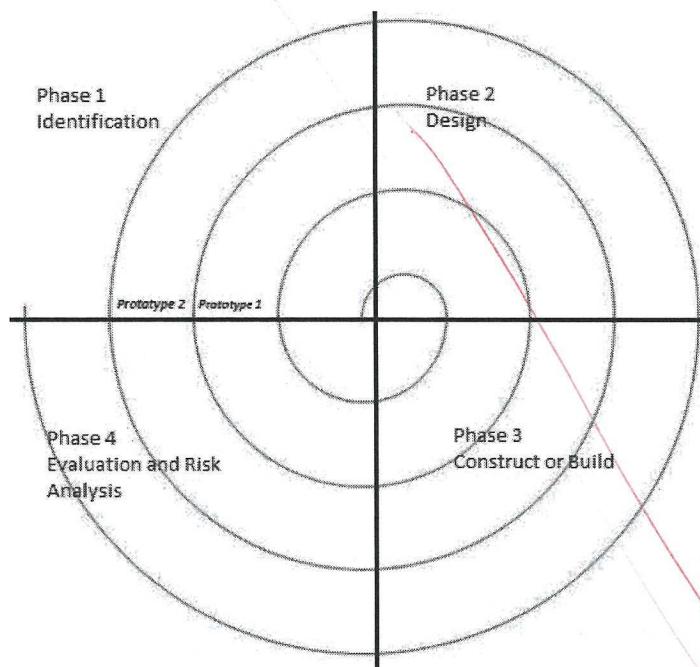
- On this phase, designing of the website and the (.exe) application will take place and be done by the developer. Any ideas for the design and comments about how the system should be built will be discussed by the developer and the group.

➤ Phase 3: Construct and Build

- The construction of the product will be on this phase. The production of the website will be assigned to the web developer and (.exe) application will be assigned to the programmer and the database designer. At this phase, the time allotted will be more than the other two phases. This part encompasses the progresses made on the Prototype 1 and Prototype 2 of the project.

➤ Phase 4: Evaluation and Risk Analysis

- The last or 4th phase of the spiral model will include testing, verifying and monitoring the prototype created. Meetings will be held to talk what risks arose for each of the previous phases and will be taken care on the next iteration process.



8 ORGANIZATION OF THE PROJECT

Below is a breakdown of the people involved:

- Project Manager, Test Manager
 - Changming Wu
- Database Specialist, Tester
 - Hardik Kansara

- Web Developer, Tester
 - Kwinno Pineda
- C# Developer, Tester
 - Patrick Cura

Also, here are the main tasks that need to be done:

1. Create the Project Specification and Requirements
2. Create the Test Plan
3. Test the Applications
4. Create the Client Application
5. Create the Project Website Application
6. Create the Database Evaluator
7. Create the Database Evaluation Guidelines and the related Query Scripts
8. Handle the Project Management Aspects for the team

From the details given above, here is a RACI chart that shows which people will be assigned to which tasks:

Tasks	Changming Wu	Hardik Kansara	Kwino Pineda	Patrick Cura
1. Create the Project Specification and Requirements	C I	R A	C I	C I
2. Create the Test Plan	R A	C I	C I	C I
3. Test the Applications	A C	R	R	R
4. Create the Client Application	I	C	I	R A
5. Create the Project Website Application	I	C I	R A	C I
6. Create the Database Evaluator	I	C	I	R A
7. Create the Database Evaluation Guidelines and the related Query Scripts	I	R A	I	C I
8. Handle the Project Management Aspects for the team	R A	C I	C I	C I

For Task 1, the Database Specialist will handle the creation of the project specification and requirements because it is his domain of expertise. He will consult and inform the team of the scope so as to get a consensus if the team can do it as per their current skills.

For Task 2, the Test Manager will handle the creation of the Test Plan document and will consult and inform the developers and specialist regarding the validity of the test that will be created.

For Task 3, everyone in the team will do testing. Each one will test an application that they did not create to avoid biased testing. The test manager should ensure that everyone will contribute to the testing.

For Task 4 and 6, the C# developer will mainly be in charge of creating the client application (the one to be distributed to customers) and the Database Evaluator. Because database knowledge is needed in getting the needed information from a client's computer, the Database Specialist needs to be consulted and asked for help. The other members will be informed of the software development progress.

For Task 5, the Web Developer will be in charge of creating the website that the clients will be using. He will consult the Database Specialist and C# developer as there might be a chance that their applications will interact in the future. All team members must also be informed of the website development progress.

For Task 7, the Database Specialist will handle the creation of the Database Evaluation Guidelines and the Database Queries associated with it. This is the heart of the project and the specialist will have to apply his expertise for this. The query scripts will be provided to the C# Developer who will generate the database evaluation report.

For Task 8, the PM would handle the project management aspects for the team and would constantly consult the team if they have issues and needs.

9 MANAGEMENT

➤ Weekly meetings

In order to track the project management, the development team will use 0.5 hour to have weekly meeting on every Tuesday 11 am – 11:30 am.

In weekly meeting, the development team will summarize and analyze the weekly project status, reflect and discuss issues which cannot be solved, and adjust the project tasks for next week plan.

➤ Advisor Meeting

The development team will use 0.5 hour to have weekly meeting with project advisor on every *XXX and XXX*.

The project advisors will inspect the completed work on weekly schedule of the development team and give the corresponding feedbacks and suggestions.

Each meeting will be recorded including clearly reflected in each project record, party views the current state of the project and decision-making.

➤ Daily administration

Daily administration is for developers to record daily work content, time spent and the problems encountered in the course of their work, ideas and solutions to problems.

➤ Management tool

This project will use Github to manage materials in progress, and the deliverables. It is not only can create a repository to make sure everyone has good access to the work product but also it can backup appropriately and write comments for each changed.

10 PLANS AND PROCEDURES

➤ Project Plan

❖ Here is a breakdown of the project plan based on the phases of the Spiral Model:

1. Identification

- Tools
- Software
- Basic Requirements

2. Design

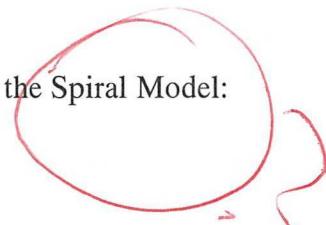
- UI Design for Web
- UI Design for Database Evaluator

3. Construct and Build

- Building of the Web Application
- Building of the Database Evaluator

4. Evaluation and Risk Analysis

- Create Test Plan
- Execute Test Plan
- Create Risk Plan



Releas

- ❖ Here are the tasks to be accomplished for each Prototype Deliverable:

	Web	Database Evaluator	Due date
Prototype 1	<ul style="list-style-type: none"> ▪ Basic Design ▪ Customer Registration ▪ Customer Login and Download of Evaluator File 	<ul style="list-style-type: none"> ▪ Basic Design ▪ SQL Instance Configuration Check <ul style="list-style-type: none"> • Generate Evaluator Dump File • Check Dump File against SQL Best Practice 	31/08/2016
Prototype 2	<ul style="list-style-type: none"> ▪ Final Design ▪ Upload Evaluator Dump File ▪ Get the Final Evaluation Report 	<ul style="list-style-type: none"> ▪ Database Configuration Check <ul style="list-style-type: none"> • Generate Evaluator Dump File • Check Dump File against SQL Best Practice ▪ Generate Final Evaluation Report 	09/10/2016

- See Change Control Form

11 STAFF

The project team of this project as follows:

- Changming Wu: Project Manager, Test Manager
- Hardik Kansara: Database Specialist, Tester
- Kwinno Pineda: Web Developer, Tester
- Patrick Cura: C# Developer, Tester

They will spend 450 hours of work each on this project.

XXX and XXX as the project advisors will inspect the completed work on weekly schedule of the development team and give the corresponding feedbacks and suggestions during the weekly advisor meeting.

We don't have the particular client.

12 DELIVERABLES

- Project deliverables and their estimated completion dates are as follows:

Deliverable	Due Date

Project Proposal	22/07/2016
Project Plan/Gantt Chart	22/07/2016
Scope of Project	29/07/2016
Requirements Analysis	29/07/2016
Analysis and Design Documents	29/07/2016
Testing Plan	12/08/2016
Test Case for Web Application	05/09/2016
Test Results/Record for Web Application	09/09/2016
Test Case for Database Evaluator	13/10/2016
Test Results/Record for Database Evaluator	12/10/2016

- Project milestones and their estimated completion dates are as follows:

Milestone	Due Date
Project Proposal	22/07/2016
Project Plan/Gantt Chart	22/07/2016
Analysis and Design Documents	29/07/2016
Web Application Development	31/08/2016
Test for Web Application	09/09/2016
Database Evaluator Development	09/10/2016
Final Test	14/10/2016
Project Presentation	To be announced

13 RESUMES (CVs)

- See Changming Wu CV.pdf
- See Hardik Kansara CV.pdf
- See Kwinno Pineda CV.pdf
- See Patrick Cura CV.pdf

14 RELEVANT BACKGROUND INFORMATION

This project is about using Microsoft Visual Studio and SQL Server Express to develop Database simulator. Customers can download the simulator from a website, execute simulator against client system, and upload the file to the website so it will be diagnosed later.

— Client Briefing Doc.
— Test Report.

15 RESOURCES

Kwinno Pineda as the Web Developer will use the following material:

- Eclipse Php editor and Notepad ++
- XAMPP
- Wordpress
- MySQL Database

Patrick Cura as the C# Developer For Client Application and Database Evaluator will use the following material:

- Microsoft Visual Studio 2015 Enterprise Edition
- InstallShield Limited Edition for Visual Studio
- Microsoft .NET Framework 4.5.2
- SQL Server Express
- SQL Server Management Studio

All the material will download from the internet.

, and off the developer person responsible

16 CLIENT ACCEPTANCE



Sign off sheet for this proposal, and a statement authorising the commencement of the next identified phase. Include appropriate disclaimers and confidentiality agreement (usually the 3 indented paragraphs below)

We don't have the particular client. Do we still need to make the client acceptance form?

=====
=====
Sam *Jah*

17 APPENDICES

- Change Control form

- project plan*
- Client Briefing doc*
- tender contract*