Project Name: Building a Contractor's Database

Project Charter

Project:	Contractor
Title:	Contractor's Database
Document number:	1
Version	0.2
Document status:	
Author:	Rashid, Umair
Responsible:	
Date created:	03.10.18
Protection class:	"For internal use only"

Document history

Version	Date	Author	Comment / Change
0.1	19.09.18	Umair	Draft
0.2	10/03/18	Umair	Completed and added more information to goals, and background

Contents

Background/Project purpose or justification

This project was started to provide more efficient way to store and manage data for the user. Currently, the company uses excel and paperwork to keep track of all its data. The biggest problem with this method is data consistency, since excel can accept any values and data can differ along different cells in the same column. This can create a lot of problems due to incorrect calculations. For example, if the wage is entered as twenty-six instead of "26" then it won't be able to calculate that properly. Database can provide that consistency and can be restricted to only one field, so the chance of error is minimized.

Database can also offer security as well. The administrator can limit the data that a user can see and can be different for each type of user. This company has a lot of different users, and some of the data is sensitive so exposing that data can be harmful. Using the database, this data can easily be hidden from the users. Such as sub-contractors can see a list of other sub-contractors working on different projects, but the wage is not visible to them. Any data requested by the sub-contractors can be easily provided to them. They will only be able to see what they are authorized to see. Currently any data requested by the contractors must be manually pulled and filtered based on their access. Implementing a database will significantly reduce the manual effort and will save a lot of time.

Databases also provide a convenient way to search and merge different types of data. Using different excel workbooks to store different type of data and then searching and merging them can be a very cumbersome task. For example, Information about contractors and there locations they are working at can reside in different excel sheets. Comparing and merging this data can be difficult. However, using databases this data can reside in different tables and can be easily viewed using a query.

Storing data in excel workbooks can lead to repetition of data. Whenever, they need to update the data about contractors, the company must update the data at all the location its stored at to keep a consistent record. Often its hard to enter data at all the appropriate locations and this can lead to inaccuracy of data. Database can easily solve this problem since all the data can be linked and easily updated.

All the advantages of implementing the database will provide this company significant benefits. The company is growing, and its data is growing as well if this change is not made soon then any error in data can cause a great loss of time and money. Company will save a huge amount of money because of accurate calculations, and any errors will be easier to identify since searching all the data can be accomplished in a shorter amount of time.

1 Goals

1.1 Goals

Goal	Description
Database development	The administration of a contractor will be made more efficient by being able to add, retrieve, and modify data digitally in the database.
Adherence to a time limit	The database will be fully implemented by November 29, 2018
Solve data isolation problem	The files will have the same format and are easily accessible
Remove data redundancy and inconsistency	The database will make sure that there are no duplicate files or data that is inconsistent with each other.
Security management	The database will have rules that determine specific users that are allowed to access (part of) the database
Backup and Recovery	The database will be have a backup which can be recovered if something in the database is corrupted.

1.2 Milestones

Schedule	Description
October 4	Approved Project Charter
November 2 - 22	Project review
November 29	Project presentation
December 13	Final report delivery

2 Project product description

The database is to allow an easy and yet indirect line of communication existing between all the users that are involved inside and outside of the company using said database. The three main groups that are to interact with this database are the clients, contractors and employers of the contractors.

The database will hold a record of all the completed projects from the past, tracking the progress of ongoing projects, and will record dates for the beginning of new projects. Every project will have recorded in it the client that ordered the project, when the project was completed (if it was marked as completed), the finances of the project, and the time the project required from start to finish.

The Employer user is the user that will supervise the contractor and discuss business with the client. They will be allowed full access to all the information of the database. Every employer will contains name, phone, email address, and list of contracts that each employer is overseeing as well as every project for each client. The 'filtering' for the employer is to just see the relevant categories of data processed, on-going projects, finances of projects and costs, and direct access to communications with clients and contractors.

The Client user will be the person that pays for the project and is allowed to view the progress of their ongoing project. Every client will have a name, address, email, phone number, and cost of project stored in the database. The 'filtering' the clients have is being able to see only the information that is related to their project, such as the finances or progression, as well as the contractor's name and phone number for if-needed communications.

Contractors are the users to make the projects possible to complete. They will be allowed access to viewing different available projects that are to be started down the road and will have an availability for them should they wish to acquire the project work. Every contractor in the database will contain a name, email, phone number, address (For payment purposes), and a list of currently assigned projects.

Each contract stored will contain customer contact information including a name, number, address, and either email address or phone number. Every contract will also store the financial fees and costs for the finalization for the project. Contracts can be entered into the database and stored as future projects, allowing contractors to examine the details of every project and view the schedule to determine if they will be interested in the job, however the finances of the job are not shown. If a contract has been selected and requested, the status of the contract can be changed from future to current or idle to in progress.

To summarize, the database is to deliver a convenient standard of information management that can be updated with ease by the employer whenever the information changes from the other groups.

3 Delivery units

3.1 Delivery units/services

Delivery unit	Description/Comment
Project Charter	Final version of the charter approved
Project Report	A concise document that compiles your whole experience with the project
Design document	E-R Diagram describing the conceptual level of the database
DDL documents	All SQL statements used to create the database (Internal level)
Sample Queries	DML commands showing sample Queries used in regular use of the database
Supplements	Additional documents providing background in the chosen topic. (Optional)

4 Project success criteria

Project success criteria
The project report addresses of reasoning used to generate the design of the database. Data needed and information generated.
Internal and conceptual level definitions are free of errors and complete.
The queries created retrieve useful information for the business.
The project presentation conveys a concise summary of the projects experience.
The team shows understanding of the business, conceptual design and MySQL.

5 High-level risks

Risk	Possible impacts on the project
Hardware Failure	Any hardware failure can really delay the project and can cause significant loss of data.
Software Failure	Any hardware failure can really delay the project and can cause significant loss of data.
Time Management	If any work is not done on time, then the project can be delayed. It can also cause conflicts among Team members which can further complicate things.
Team Conflicts	Any team conflicts can stall the project. We can also run into problems such as team member refusing to do the work or delaying the work.
Staff Co-operation	Staff Co-operation to get the proper data can be very important. As if they fail to make the transition can only delay the project and can produce inaccurate data as well.
Poor Organization of existing data	If the data is not properly organised then it can take more time to properly organise the data that is currently stored, and the whole process can affect project either by delaying it or producing incorrect data.

6 Key stakeholders

Name	Role
Cesar Lopez Castellanos	Instructor that will approve this Project
Tim Donders	Project Manager
Nikola Strobel	System Analyst
Umair Rashid	Data Architect
Krzysztof Latecki	Business Analyst

7 Project startup

The project is deemed started with the following signatures:

	Instructor	Communications Officer	Project manager
Signature			
Name	Cesar Lopez Castellanos	Umair Rashid	Tim Donder
Date	4th October, 2018	4th October, 2018	4th October, 2018

8 Project end

Planned project end:

8.1 Signatures for release

The project manager is released with the signatures provided here following the project closing phase:

	Instructor	Communications Officer	Project manager
Signature			
Name			
Date			