BAY HOUSE SCHOOL AND SIXTH FORM

Chair of Governors Training Tracker

CG4.1 Analysis

John Robinson 09/01/2014

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Analysis

Notes

In this document there may be some sensitive information that can't be displayed due to legal reasons. I have censored this information out to adhere to privacy regulations.

Background

My customer is Ann Williams. She is a member the Chair of Governors (CoG) at Harrison Primary School in Fareham. She has asked me to create a system to track the training of the other members of the CoG. She would like to use the system to create reports to use in regularly occurring appraisals.

Contact Details of the Customer:

Ann Williams, Chair of Governors, Harrison Primary School, 07746 123758 alittleproud@hotmail.com

The reason I have decided to take on this project is because it will introduce me to some new concepts in real life problem solving. This program will help someone to do their given task more efficiently.

My connection to the client is through family. Ann is my auntie.

Investigation and Analysis

Current System Analysis

The current system that Ann is using is supplied by the local council. She has said that this system only gives her access to the times and dates that the governors are going to be carrying out their training. This is the conversation we had via email:



Hello John,

I would like some type of database where I can store a training log for each member of my Governing Body.

I would need to be able to store a list of core training that each Governor has to complete, be able to date when these courses have been booked and again when completed, and list other training that I want them to complete + date when booked and completed.

I don't use any system to store this information at the moment.

Does this sounds like something you can do?

Thanks

Ann Williams Chair of Governors, Harrison Primary School 07746 123758



John Robinson 24/06/2013 To: Ann Williams ¥ Actions v

Hello,

Thank you for the information.

How do you currently keep track of what training each governor has completed?

I am currently analyising the project and aim to have it completed for Christmas.

Thanks,

John

Project





Actions v

Hi.

We rely on Hampshire Governors intranet to log what training is booked and whether its attended or not.

This information is given to us in date format only, which only tells me who has attended what this month etc.

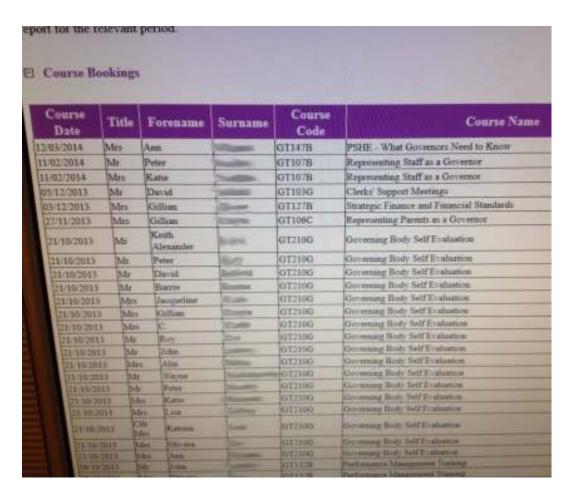
I want a list of my Govenors, ensure they have attended core training and be able to set training targets for them.

Thanks

Ann

This shows some of the current limitations of the system and what I can do to help improve the system.

I then asked if I could see the system and how it works. All she could show me was this webpage which allows her to print off the times and dates of when the governors are to be carrying out their training.



There are many limitations of the current system. For example, the first email Ann talks about wanting to a database system where she can log the training of each of her members. She then says that she has nothing of the sort at the moment as all she has access to is when the training for each person has been booked. Above is an image which shows this. We have the date of the training, the person taking the training and what the course and course code is.

Explanation of Techniques

Emailing Ann was easy and I could ask as many questions as I needed. While Ann is my Auntie, I don't get to see her very often as she is working a lot of the time. Emailing her would mean that I would get a reply when Ann had time to think about the response and give me the information I required. This would also allow Ann to explain herself in full and not have to leave anything to my imagination. I could also reply and ask for more information about something Ann said if it wasn't clear. By emailing Ann, it means the record of the email would be kept for much longer than a conversation in my head if I forgot to write something down.

Being able to arrange a time with Ann to see the current system would backup what was said in the emails and allow me to see how the current system was working in full.

Current System

The current system that Ann is using is a website supplied by the council. This only allows her to print off the times and dates of when the training is. She also keeps a book of who has completed what course and when each governor's election was and when it ends.

Problems

This doesn't allow her to find out what training certain people have done without actually asking them. The person in question may not even keep track of what training they have or have not done. This creates many problems for Ann when it comes to finding a member of the Governors to carry out a certain task. For instance, if Ann wants to find someone who has taken a legal course, she would have to contact all the members to ask them if they have the legal training.

If Ann were to try and keep a record herself of what each governor has done, the task of doing so is very inefficient and impractical. If Ann were to keep all the details of the governors in a book, when a governor leaves Ann would have to remove that governor from the records. This might require Ann to rewrite out all the records she wants to keep into a new book or on to a new page.

By potentially keeping them in a book, it would be impossible to sort the records. This would make it hard to actually find any data she is looking for. For instance, if Ann wanted to find someone that's completed a Child Protection course in the last year, she can't just sort the records by course or date, she would have to run her finger down the course column and find the people that have done the Child Protection course then find out if they have done the course recently enough for Ann's needs. If they haven't, she'll have to keep looking. This is all assuming all the records are accurate and up to date. If Ann were to accidentally write in the wrong column or write down incorrect data, the data would be useless.

If Ann wants to find out about courses being put on in the future and her internet connection is down or the website she gets the information from goes down, then the information would be temporarily unavailable. While a new system won't help this, this is a problem for the current system. But while the website is unavailable, Ann might miss a course that someone was supposed to attend.

Ann has children that are able to access her office. This means that a paper based system is under potential damage not only from the usual flood, fire theft damage, but also by damage of children. They might write in the book or destroy the data accidentally. This all points to how not having a backup of the records would be a problem for the current system. Should Ann's copy of the book be destroyed, then she would need to hold a governors meeting and re-create the documents.

Technical Ability Assumptions

I believe Ann has a reasonable amount of technical ability. I know for a fact that she has to use a computer on a daily basis to work on office work. This shows that she has a good understanding of office software. She can also use email efficiently so I can assume her technical understanding is a little higher than usual. Though, her understanding of technical terms isn't as good.

Ann has many computers at home and they are usually kept up to date and are running at least Windows XP. This means that I should be able to create a program for somewhat modern technology.

Data Dictionary

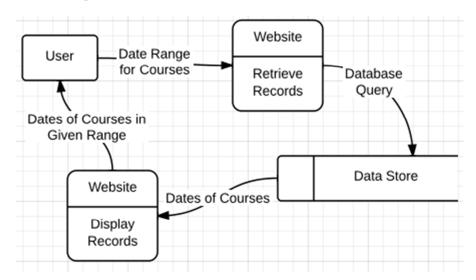
Below is a data dictionary of what information is received by the user of the current system.

Field Name	Description	Example

Course ID	The ID of the course.	LG13
Course Name	The name of the course.	Legal
Date of Course	The date of when the course takes place.	31/7/2014
Time of Course	The time of when the course takes place.	13:30

Data Flow Diagram

Retrieving Course Dates from Website



Here, the user sends a request to the website to pull all the courses within a given time period from the database. The website then sends a query to the database to return the courses with their dates. The website then displays the courses within the specified dates that the user gave.

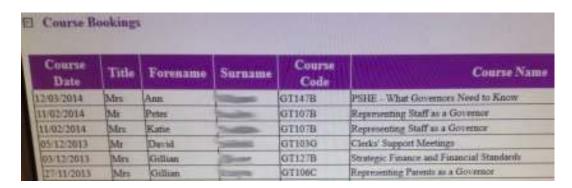
Above is also the same process as to what will happen when Ann wants to find out who has completed what course. She will need to look at the logged page as in the images further up the document and then just run her find down till she finds someone that has completed the course she needs.

Inputs and Outputs

The system will require a login to access the system.

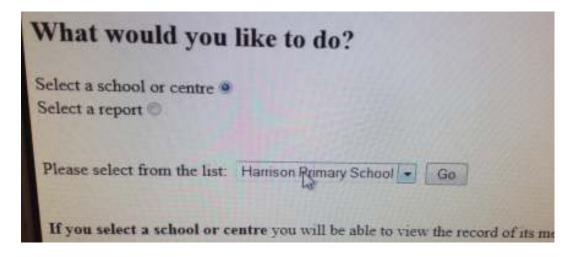


The output of the system is a print out of what courses are booked for what people and when.



Processes

The first process seen is logging into the system. The user then has to select their school like so:



The system will show the user what courses have been booked by what person and when. There is also a course code which is displayed. This is shown above.

Problem Definition

Aims

- To be able to add/remove governors
- To be able to add/remove courses
- To be able to log into the system(with a table of users) to help keep the information on the database secure
- To be able to add/remove users from the login table
- To be able to track a course being taken by a governor with a time and date

Limitations

For this project, I have decided to move to an online/remote database system. For this, I will be using SQL. As I am going to have to learn how to access and retrieve information from this new database, I will have to allocate some time to learn it. This may put my scheduling of time out of place. I may need to incorporate some contingency time to allow learning this.

In addition to learning about SQL, I am also going to be implementing a GUI. Because of this, I am going to need to learn more about how to implement a GUI. This will take some extra time and I will need to account for this.

As I will be using an SQL server, I will have to either work out a way of having it hosted externally through a third party web hosting service, or host it locally on Ann's computer.

If the database is hosted locally, it means Ann will only be able to access the program when the computer hosting the MySQL server is turned on. Also, this means that only computers on Ann's network will be able to access the system meaning it won't be accessible anywhere else without opening the connection on the firewall first. Should Ann host it locally, she may have to leave the computer on all the time. This would be a cheaper option but may require more maintenance.

The downside to hosting it externally is that it will cost to host it. However, the system can be accessed from anywhere with an Internet connection as long as the computer being used has the program installed. However, this will allow other governors to access the system but only if they have access to the program itself.

As I only have access to the tools at college, I may be limited in what software (IDE) I can use to create the program. I know that I have access to Net Beans (my choice of Java IDE for this project) and a locally hosted MySQL server that I can access. I may not have access to any other tools that I may require. As a result, I may be held back ton creating something such as a graphics asset for my GUI, for example.

The system will not be able to interface with the current system in place by the council as I doubt there will be an API (Application Programming Interface) that I can hook into and use.

Dependant on how much I learn about implementing the GUI, the user may not be able to select and update multiple governors at once. For instance, if many people complete a course at the same time

and the user wishes to update this in the database, they would have to go through and select each user one by one and update their completed courses.

The system will not be able to communicate via email to the governors to let them know when a new course is available. This feature would be useful to let governors know when a new course is available for them to take but I believe this to be too far out of my understanding to be able to implement as a feature.

Objectives

Main:

Here is a list of the objectives that I wish to achieve with the system.

- To maintain information about governors
 - To be able to add new governors
 - o To be able to amend information about governors
 - To be able to mark governor as inactive, if leaving post
- To be able to maintain information about courses
 - To be able to add new courses
 - To be able to amend information about courses
- To be able to track what courses each governor has completed
- To be able to find out when a governor had completed a course
- To print out specialised reports on:
 - o Who has completed a specific course
 - o Who has completed what courses in a given time frame
 - o What courses are going to be completed in a given time frame
 - List of governors and details

Reports:

- To be able to retrieve /print a list of courses completed by a governor
- To be able to retrieve/print a list of governors that have completed a given course
- To be able to retrieve/print a list of courses being taken and whom are taking them within a given time

Aesthetics:

I aim to create and include a logo for use throughout the program. I anticipate it will appear on every page. First I will ask Ann if she has a governor's logo that I could use instead. If there is a logo, I will hopefully be able to deduce a colour scheme from it. If this is not possible, I will go with a basic blue and grey colour scheme seen in much professional/commercial grade software.

Performance:

The system should be easy to navigate and should be similar to other programs with logical placement of key buttons (OK, Exit, Help, etc.).

Should the user encounter an error, the message should follow some initiative and make sense to the user.

The system should avoid the use of technical terms that aren't necessary to improve the user friendliness of the program.

If the user requires help at any point where help can be made available, it should make sense to the user and be useful and/or understandable in the context of which it is displayed. Help should be easy to find and not be filled with useless information.