EDB Results Administration

Project Plan

Course: Project Management

Date: 25 November 2013

Group : 02

Students: Joe Smith – 12345

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# Project Statement

## Formal Client

Ms. Mariëlle Fransen, teacher at Fontys ICT, the English Stream department. Fontys University of Applied Sciences is located in the Netherlands. One of the schools at Fontys is the School of Information and Communication Technology (ICT), which is located in Eindhoven. English Stream is a department in Fontys ICT, where the education is entirely given in English.

Ms. Fransen is coordinating the four Databases courses at Fontys ICT: Databases 1 (EDB1), Databases 2 (EDB2), Databases 3 (EDB3) and Databases 4 (EDB4). She is responsible for keeping the contents of the courses up-to date with the newest trends in the industry. Next to teaching these courses, she develops the lesson material, practical assignments, etc.

## Project Leader

Mr. Tanza of the ICT department ICSS from Fontys ICT Eindhoven is the projectleader. Mr. Tanza is located at building R1 floor 3 room 34.

## Current Situation

Each of the four databases courses is organized as follows: (1) presence at the theory lessons is not compulsory, (2) each week students must solve several practical exercises, and (3) at the end of the course a student has to take an exam. Theory lessons are given by several teachers and practical lessons are given both by several teachers and several student assistants.

For each class, for each student, records about presence in the theory and practical lessons, submitted practical assignments and exam mark is must be archived. This is done by each teacher and student assistant separately, in Microsoft Excel files or on paper.

## Project Justification

The way course results are archived is not optimal. Because records are kept separately by each teacher and student assistant, in order to loop at the status of one student, one has to know who were involved teachers and student assistants for that student’s class.

Keeping records by different people in different files (or even on paper) is not suitable for data recovery. In case an Microsoft Excel file or paper gets lost, there is not back-up to recover the data.

Because results are not archived centrally, it is not possible to make reports. Ms, Fransen would like to be able to generate various reports. For example, a report showing how many students solved or did not solve a certain practical assignment or exam question could indicate that this topic should be covered better in the lessons.

**The goal of this project** is to develop a software application that will use a centralized storing of the relevant data. This will make it possible to:

1. easily find the status of each individual student, regardless which teachers/student assistants were responsible for the student,
2. make automatic backups of the stored data, and
3. make various reports about the results of students.

## Project Product

The goal of this project is to develop a software application that will allow all involved teachers and student assistants to save data about:

* presence in theory and practical lessons,
* submitted practical assignments, and
* exam mark including achieved points for each exam question.

All data will be saved in a database.

## Project Deliverables and Non-Deliverables

In this project the deliverables are:

* Only the executable version (the “.exe” file) of the software application will be delivered.
* A database where the data about presence, practical submissions, and exam results will be saved, and
* A user manual will explain how teachers and student assistants can use the application.

We will not deliver:

* The source code of the software application will not be delivered.
* A training for users will not be offered, since the user manual can be used to learn how to work with the application.
* The reports about the results of students (see point 3 in the Project Goal) will not be made. However, we will develop and use a database to store all data, so that later it is possible to make the necessary reports.

## Project Constraints

***English Language***

Due to the fact that most of the student assistants do not speak Dutch, both the application and the user manual must be in English.

***Java Programming Language***

Teachers have different types of computers (Microsoft and Apple), so the software application should be able to run easily on every type of computer and tablet. Therefore, you should use Java to program the software application.

***Oracle Database***

The school already has an Oracle Database server installed. Therefore, you should use an Oracle database for saving the data.

## Project Risks

|  |  |
| --- | --- |
| risk | alternative scenario |
| The Fontys IT department decides to stop using the Oracle server. | Switch to using a Microsoft Access database. |
| It takes too long to learn Java programming language. | Switch to using Microsoft C# as a programming language. |
| The user manual is not finished in time. | None. |

# Project Phasing

*design*

*initiation*

*building*

build the application

design the application

build the database

design the database

*deploying*

*testing*

test the system

start-up the project

deploy the system

write the user manual

***M3***

***M4***

***M5***

***M1***

***M2***

Deliverables for milestone **M1** are:

* Detailed division of work amongst team members.
* Installed Visual Studio 2013 on computers of all developers,.
* Specified user requirements (i.e., which functionality does the new software system has to offer).
* The Projectplan

Deliverables for milestone **M2** are:

* Class diagram for the software program with description of every class.
* Entity-Relational diagram for the database with description of tables, columns and column types.

Deliverables for milestone **M3** are:

* Java application.
* Oracle database.

Deliverables for milestone **M4** are:

* Test report including all succeeded tests, all failed tests and a list of improvements.
* The user manual document.

Deliverables for milestone **M6** are:

* A deployed system consisting of the Java application and Oracle database is running on computers of all teachers.

# MOSQUITO

## Money

1. ***Expenses:***  
   - Database services:
   1. Setup € 500
   2. Maintenance € 50 per month

- Programming:

* 1. Design € 250
  2. Programming €1200
  3. Implementation € 200
  4. License € 50 per year
  5. Maintenance € 50 per year
  6. Developer software € 399

- Disk space 2GB € 35

- Backup space € 5 per month

- Testing:

1. Test environment setup € 250
2. Test effort € 200

- Implementation:

1. Server rollout € 100
2. Support € 250 per year
3. Implementation € 200

- Documentation and instruction:

1. User Manual € 100
2. Helpdesk Supporter  
   training € 100 per person
3. Individual user training € 45 per person

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Total inital cost: € **3434** + € 100 per Helpdesk worker  
 + € 45 per user

Total maintenance cost: € **1010** per year

1. ***Profit:***  
   - Save paper (less paper used: estimate €250 per year)  
   - Save teachers’ time (efficient, better lists: estimate €750 per teacher per year)  
   - Save admins’ time (less hassle: estimate €1550 per year)

Estimated profit (10 teachers): € **9300** per year

1. ***Other benefits:***  
   - All data in one place (less risk, more efficient)  
   - Backup available (less risk, archive available)

## Skills

In this project we need team members with following skills:

* Project Manager
* Customer representative(s)
* Programmer
* Database expert
* Backup expert
  + Helpdesk representative

(See timetable for how long we need which skills)

## Quality

***Quality constraints:***  
- Consistent look & feel for the user interface, easy to use  
- Users have ownership of own data, guaranteed in application  
- The application must confirm to Fontys (web)style standards

***Problem prevention:***  
- We will test the application before general rollout  
- We will test the backup procedure to ensure it works  
- We will test the application with different browsers

***Problem solving:***  
- The programmer will be on standby to be able to solve any immediate problems during the test phase   
- During testing actual users will be involved  
- Before general rollout the customer representative will officially accept the product  
- We will use the prototyping development model to ensure user involvement and immediate problem solving

## Information

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Info Matrix*** | Project Plan | Application Manual | Backup Schedule | Meeting Notes | Test Plan | Implementation Plan |
| Project Manager | Dr | R | R. | Dr | Di | Di |
| User rep | Di | A | Di | R | Di | Di |
| Customer | A | R | A | R | A | A |
| Programmer | R | Dr | Di | R | Dr | Dr |
| DBA | R |  | Di | R |  | Di |
| Backup expert | R |  | Dr | R |  | Di |
| Helpdesk |  | R | R | R | R | R |
| System Mgt |  |  | R |  | R | Dr |

*(Dr=Draw up, Di=discuss, A=Approve, R=receive/read)*

## Time

1. It is estimated that this project will last months ( 13 weeks January through March).  
   The project will start on January 1st.
2. Time planning for project activities is as follows:
   1. Make the project plan 1 day
   2. Start-up the project 4 days
   3. Design the application 3 weeks
   4. Design the database 1 week
   5. Build the application 6 weeks
   6. Build the database 3 days
   7. Test the system 2 weeks
   8. Write the user manual 2 weeks
   9. Deploy the system 1 week
3. In parallel to project activities, several types of meetings will take place:  
   a. Weekly progress meeting  
   b. Reporting to customer  
   c. Acceptation signoff

## Organisation

