Purple College

Palomino IT Co.

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Introduction

Details on the client and project

We are an IT consultancy called Palomino. We work basically supporting small and medium companies to set up the information technology required. Our skills are giving ideas, building the structure, networking and especially in development of softwares that attends the customer's needs.

We are currently working on a project for Purple College, which is a language School based in Dublin with a branch in Cork city. The college has 50 employes in total, 30 in Dublin and 20 in Cork. We received a document where they specify Dublin as the main campus, where they have the departments of HR, Accounts, Admissions, Marketing and Lecturers and also manage both campi. Cork has only the Lectures Department and a small office.

Purple College needs help for implementing a system where they can manage their students records and information will be available in realtime for both campi. They are currently using paper based records.

Team members and their roles

We are three IT students and the tasks are usualy divided as Fernanda works in the project management, talking to the client, identifying their needs, matching, planning and offering them the best options to achieve the needed results in their companies. Luciana works in the networking setup, looking for the best way to attend the customer's needs, according to the space, devices, servers etc that is available. Ennio has great knowledge on all the hardware setups and software development.

Since Palomino IT Co. is a team, it means that everyone has knowledge and skills to perform and achieve great results. The reaoson we share the work in 3 big areas, is to suit the skills of each partner and efficiency.

Stakeholders

- Students who wants to learn a new language and achieve their goals.

- Students who already finished the course and can give good reviews and feedback about the college.

- Comunity, catoffes, small business around the campi.

- Employees and administrator.

- The comunity around both campi, that participate in the cultural events that the college promote.

- Competitors, that also push Purple College to be up to date and offer more classes.

Assumptions

According with the customer needs we presented the idea of a system that can be implemented in a small company as Purple College. We are presenting a database which will be able to track the records of students and also customize the system for an access of employees records.

Information System

What type of system is required

Purple College needs what is called Relational Database Management System. It is a common choice for the storage of information in new databases, in this particular case, of students and employees and the records can be accessed from both Purple College campi.

What is the business case for such a system

When we were looking for a system that attends Purple College's requirement, We needed to take a few steps to make our idea to succeed. First of all, we know that learning a system is a challenge, especially when many different peope will have access to it, so the system needed to be user friendly, easy to configurate, should allow customization and offers support. Also the costs of implementation needs to be low, as small and medium companies usually have a low budget for information system.

Below we can see how this type of database works.
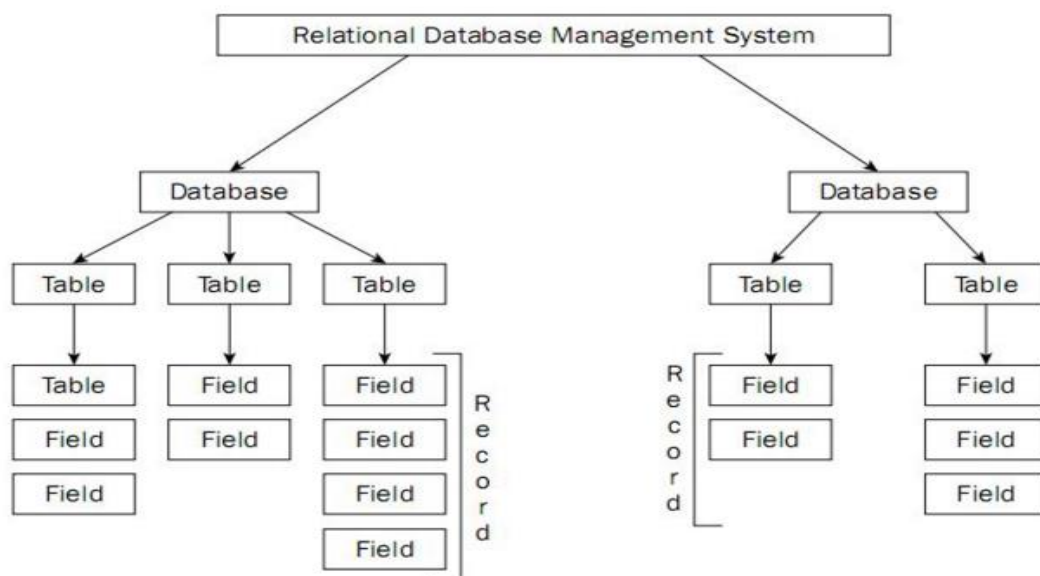
Each "table" will store a sort of data as shown below.

Students Table

Student	ID*
John Smith	084
Jane Bloggs	100
John Smith	182
Mark Antony	219

Activities Table

ID*	Activity1	Marks	Activity2	Marks
084	Vocabulary	8.5	Listening	8.0
100	Vocabulary	7.0	Listening	6.5
182	Vocabulary	8.0	Listening	7.0
219	Vocabulary	9.5	Listening	9.5

What benefits would it bring to Purple College (functions)

Within such a system, Purple College will be able to store and adapt transactional data and securely allow multiple people to have simultaneous access. Also a RDMS (Relational Database Management System) can execute queries against a database, retrieve data, insert, update and delete records, create new databases and new tables, create stored procedures in a database and also set permissions on tables, procedures, and views.

Have you identified any negative aspects of such a system

We found the expenses as a negative point, as setting up and maintaining the database system can be expensive because usually need to purchase special software, if the company gets bigger, a professional programmer in SQL or siminlar system will be required to built and maintain it. Also the data loss could be a negative point as some of the RDMS work in a limited amount of data you can fit into the system., any excess, would result in a loss of information. As last negative point, but not very relevant for the Purple College case, is that once a system is built it is isolated and information can't be easily shared between two systems.

Proposed Systems Development Methodology

SDLC

SDLC stands for Systems Development Life Cycle. It is a popular methodology used for guidelines in systems development.

It is a step by step process, divided in five parts:

1. Planning
2. Analysis
3. Design
4. Implementation
5. Maintenance

Each part of the cycle has a set of procedures to be followed.

We are going to do our project to Purple College based on this methodology.

SLDC

<u>List some points for each proposed stage of development</u>

1. Planning

This is the identification phase, when customer needs are evaluated. We are going to schedule a meeting with Purple College to listen to their requirements and try to understand exactly what they have today and what they want to be done.

2. Analysis

This is the study phase. Having all the information we got from Purple College, we are going to have a meeting between ourselves in Palomino IT to analyse the current situation in the college and what should be done to achieve their needs.

3. Design

This is the phase when the proposed system is going to be designed. With all our knowledge we are going to build the system according to their requirements and plan how implementation is going to be done.

4. Implementation

In this phase project is finally implemented. We are going to contact Purple College to schedule a day, following deadline requested by them. Then our team will be going to their two branches to work on systems implementation.

5. Maintenance

In this phase system is already implemented but some changes or updates must be done eventually. And also problems in the systems might happen. We are going to offer this support to Purple College with conditions stated in contract.

Barriers to Systems Implementation

Change Management Issues

As Purple College has student records being done in paper at the moment, people are used to it and they might assume it is the best and easiest way. So it is very possible that we will face certain resistance to change.

There might be also some computer illiteracy problems. Some people are not comfortable with technology. Some training should be provided if necessary.

Other concerns

Some college employees will have a lot of work in the beginning, because all the information from paper will have to be transferred to the new system, so it is accurate. But once it is done, student records management will be much easier.

Technology will also have an impact in customer's budget, as implementation and future maintenance will be definitely more expensive than paper records. Clients have to expect a decrease in their final profit, because of technology costs.

Systems Implementation Approach

What options are available?

Among many cheaper possibilities. For Purple College we had identified only the data base as the available solution. Or customer is a professional company that looks interested in rearrange the way to

store data. To achieve this target matching security and actual solutions, Data Base is a good technology to be implemented.

Which does your firm recommend for Purple College?

Palomino Co. understand that the Purple College is a small business that fears on spending money on new solutions. The previous procedure where they used to store information in paper forms, was easily handled by the company in a low cost, however, as the company is growing, to keep the previous way to fill up the papers, will make them to spend time and money and can occur in a big data loss.

In our offer to Purple College, the data base can be implemented according with the size of the company, so it will be able to customize the system according with the college growth, what makes the cost more affordable.

Based on those ideas our firm recommends the data base as the best solution. Security and information on real time are the main points to makes the base of this recommendation.

Conclusion

Purple College is a small business with big ambitions. The desire of build a competitive and to get a more professional system for the company, was the reason that made Purple College to come to us. Palomino Co. Could dentify and advice the best option that fits the current requirement needed. As we had analyzed the information given by the College, the result of the projects were based on the

condition of the needs of the company and the actual technology existing in the market.

With a total of 50 employees, Purple College is a small company that requires better organization and methods to maximize their services and profits.

Technology implementation is always an investiment that have to be treated with attention, sometimes it can be expensive. However, when well analyzed and planned, this initial investiment will become a benefit and in a after while, it becomes an important tool to increase profit.

Believing on the idea of a low cost and benefit, Palomino Co. had identified the Data Base as the system that will support the requirements of Purple College, and as all the type of technology updates on the system and supports are required, also sometimes those updates are followed by a grown of the company that needs more capacity from que hardwares, it is a positive investment that will accelerate the capacity of the company to answer the requirements of their customers.

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