1. Introduction Kenneth

1.1 Project Background (1 page)

**Project name**

Claybrook Zoo

**Description of the project**

The Synergy Solutions software development company was approached by Matthew Jones, the current zoo manager at Claybrook zoo, who wants us to develop a suite of software products that includes a website, visitor information technologies and records management system.

Four key stakeholders:

1. **Matthew Jones:** The current zoo manager, who is an expert on the existing organisational procedures and practice.
2. **Thomas Smith:** An existing, regular visitor to the zoo, who has a good insight into the current visiting experience available for general members of the public.
3. **Jonathan Rodgers:** A senior administrator within the zoo, who is responsible for running the animal sponsorship scheme.
4. **Phillip Brown:** A local small business owner who is interested in the animal sponsorship scheme if he can perceive potential benefits by way of advertising/positive publicity available through the scheme.

**Current situation**

The zoo does not currently have any technology implemented in the business. All administrative tasks are paper based.

**The problems of the situation**

Concerns about loss of staff, animals and visitors data stored in the zoo, due to it being paper based.

Lack of technology - less outreach

Signage - updated once a year, as not technical.

**The way we want to solve the problems**

Implement technology available to resolve all the concerns of the client.

For example, at the moment the animal’s record is stored on a paper based record form. To resolve this issue, we will develop a RMS (Record Management System), a database, which will allow the members of staff to find the required animal record easily. We will achieve this by allowing complex search criteria combinations which the staff member can use to interrogate the database. This database, therefore, will allow the members of staff to search for animals using multiple search criteria easily. Furthermore, we will also include a graphical representation of the animals held within the database, so that the animals can be easily identified.

To help promote the zoo and the features/benefits that it offers, to the wider members of the public and therefore provide more outreach, again through the implementation of technology we will develop and produce a zoo website. The website will allow potential visitors to look at the critical zoo animals held within the zoo, prior to actually visiting the zoo. The website will also include key information about the zoo, which will also encourage more visitors.

To resolve other issues, such as queuing at the zoo tickets office, we will also investigate the relevant technologies that the zoo can implement to incorporate possible touch-screen features which will be a part of the visitor information technology, such as a kiosk system or a QR driven and Mobile Application that will run on a smartphone that will allow visitors to interact with the existing attractions at the zoo.

1.2 Project Aims and Objectives (1 page)

**End expectations of the project**

At the end of the project we expect to develop a suite of products which includes:

1. A customer facing zoo website
2. A internally facing visitor information technologies
3. A zoo records administration/content management system that will allow key business records for the zoo to be effectively managed.

1.3 Project Development Methodology (2 page)

We will be using the Software Development life cycle(SDLC), which is the waterfall methodology. This methodology is very effective and simple to follow. It focuses or emphasises on a step by step approach, towards developing software products. The steps include planning, designing, building, testing and evaluation and then implementing the software. Once the developed software is implemented, the final phase is the maintenance of the software.

If the software requires an update, as it has become outdated, this then becomes a new problem. To address the problem, the cycle is simply repeated, until the developed software meets the client’s requirements.

I will be going into more detail about each of the steps below.

1. The first step is the Problem Identification. This is where the actual problem is identified. The problem and a possible solution is identified. An example:

Problem: The Claybrook zoo has paper based documents to record staff data.

Possible solution: Design and develop a new software system that will store all the staff data.

1. The second step is the Problem Domain Characteristic Elicitation. Now we need to investigate and record some key information about the system before we start to build it. This information will be gathered by talking to the clients and the current customers of their company. An example:

Talk to the four stakeholders, about the business processes that are currently implemented. Talk to the stakeholders about the problems that they are currently experiencing. Investigate the existing similar solutions to the problem. Finally, check the feasibility of the development.

1. The third step is Requirements Specification. Now, once the problem is fully understood, we can then create a list or a document of the characteristics that the software must have. This includes:

* Functionality (What the software needs to do)
* Performance (What type of performance levels should the software have? This includes: speed, capacity, reliability, usability etc..)
* Client constraints(This is what the client has specified, that the software must include? E.g. existing logo, colours etc..)
* Commercial constraints(This is how much the software will cost and how long it will take to build it ?)

1. The fourth step is System Analysis. This is where we will determine what are the different parts that the software will be made up of ???
2. The fifth step is Systems Design. This is where we determine how the different parts of the software will need to be put together, to make the software work as required. We will develop a blueprint for the structure of the software, (software designs, UML diagrams etc..)
3. The next step is the System build. This is where we will be building the software application, using the software designs developed in the previous phase.
4. The next phase is System testing. Now, we will be testing the software to see if it meets all the requirements that were defined in the requirements specification.
5. Now the System Evaluation step takes place. This is where we evaluate the performance of the developed software, with the target user group. (We evaluate whether the developed software will solve the original problem ?)
6. The next step is the System implementation. This is where we install or set up the developed software for the client in their business. We then allow the client to use the software and then they can evaluate the performance of the software. (Here we can speak to the client and decide if the software has solved the original problem ? )
7. The final phase is the System maintenance. Once the software we developed is implemented, we can now carry out the maintenance of the software. As the client’s business in the future, we may need to make amendments or add some new additional features to the software to meet their requirements. Also, if any errors or other faults are identified in the software, we will need to resolve them on a timely basis.