

# COMP4 Coursework

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# Chapter 1

## Analysis

### 1.1 Introduction

#### 1.1.1 Client Identification

My client is Josh Campbell, he is 24 years old. He uses computers regularly for design work, so has experience of computer systems. He uses his computer to design flyers, handouts, banners and visual graphics for projection, as well as surfing the web, email and various social media networks. He rarely uses hard copies other than to preview his work before sending it off to print. Josh uses a 2012 Mac Pro with the latest version of Apple's operating system, OS X (10.9).

Josh is the head of the media department for Cambridge Community Church. This involves being responsible for the large amount of Audio and Visual equipment used on the church's Sunday services. This currently involves spreadsheet with limited info on each item.

Josh would like to have a database management system to be able to hold information about each item and their various attributes. He would like this database to be located on the church's central server so that it can be accessed by all staff if it is deemed necessary. He would use this database to store location, value and insurance details in case of damage or theft. He would like all of the information kept as a virtual copy as well as a hard copy to be kept as a visual backup in case of hard drive failure or corruption. He would also like to keep the location of each item as up to date as possible and if the location changes, he would like to be notified by email when it is entered/updated in the system.

### 1.1.2 Define the current system

The current system consists of multiple excel spread sheets. There is one spread sheet for each of three locations; main office, main church building, and storage. Each spreadsheet consists of items located there as well as information on the value of each item, the quantity and the total value for the items with multiple entries. Each spreadsheet is divided up into equipment type (i.e Cabling, lighting, audio, visual/camera's)

### 1.1.3 Describe the problems

There are a number of problems with the current system. One of the problems is that there is no notification system to tell you when information is getting outdated or something is changed. For example, if an item is bought or sold, the total costings for that item will be updated and no-one will be notified. Another problem is that the current system doesn't show the PAT testings for all the items, these tests go out of date every 6 months and there is no way of being notified when a new PAT test is needed on an item.

### 1.1.4 Section appendix

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## 1.2 Investigation

### 1.2.1 The current system

#### Data sources and destinations

In the current system, there is currently only one data source, the client himself. There are potentially more

Algorithms

Data flow diagram

Input Forms, Output Forms, Report Formats

### 1.2.2 The proposed system

Data sources and destinations

Data flow diagram

Data dictionary

Volumetrics

## 1.3 Objectives

1.3.1 General Objectives

1.3.2 Specific Objectives

1.3.3 Core Objectives

1.3.4 Other Objectives

## 1.4 ER Diagrams and Descriptions

1.4.1 ER Diagram

1.4.2 Entity Descriptions

## 1.5 Object Analysis

1.5.1 Object Listing

1.5.2 Relationship diagrams

1.5.3 Class definitions

## 1.6 Other Abstractions and Graphs

## 1.7 Constraints

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1.7.1 Hardware

1.7.2 Software

1.7.3 Time