Project Title

Contents

[1. Analysis 2](#_Toc528571910)

[1.1 The problem: identification and background 2](#_Toc528571911)

[1.2 Description of the current system 2](#_Toc528571912)

[1.2.1 Problems with current system 2](#_Toc528571913)

[1.3 Objectives 2](#_Toc528571914)

[1.4 Data Modelling 2](#_Toc528571915)

[1.4.1 Analysis Entity Relationship Diagram // Object Diagrams // Storyboard [delete as appropriate] 2](#_Toc528571916)

[2 Design (12 marks) 2](#_Toc528571917)

[2.1 Hierarchy Chart 2](#_Toc528571918)

[2.2 Normalised Entity Relationship Diagram. 2](#_Toc528571919)

[2.2.1 Entity Description in standard notation 2](#_Toc528571920)

[2.2.2 Design Data Dictionary 2](#_Toc528571921)

[2.3. Form and algorithm Design 3](#_Toc528571922)

[2.3.1 Form1 3](#_Toc528571923)

[2.3.2 Form2 3](#_Toc528571924)

[2.3.1 Form3 3](#_Toc528571925)

[2.4 Report Design 4](#_Toc528571926)

[2.4.1 Report 1 4](#_Toc528571927)

[2.4.2 Report 2 4](#_Toc528571928)

[3 Testing (8 marks) 4](#_Toc528571929)

[3.1 Test Plan 4](#_Toc528571930)

[3.2 Test Results 4](#_Toc528571931)

[4 Evaluation (4 marks) 4](#_Toc528571932)

[4.1 Objectives comparison 4](#_Toc528571933)

[4.2 Improvements 4](#_Toc528571934)

[4.3 Analysis of 3rd party feedback 4](#_Toc528571935)

[5 Technical Solution (42 Marks) 4](#_Toc528571936)

# 1. Analysis

## 1.1 The problem: identification and background

For my project I will be making test equipment management software. This could be used by anyone from home labs to Research and development labs, there could be a single person to a hole facility using the software the software to record test results and trace them. There are two current systems that are used. The first is writing the data down on a piece of paper. The second is imputing the data in to a spread sheet.

## 1.2 Description of the current system

There are two systems currently used. The First system is writing the data down on a sheet paper, this would be done for every combination of test equipment, this would be stored in a folder near the bit of equipment. The second system is using spread sheet software like Excel. The user would in put the data in to a column sequentially. Both of these systems can become very cluttered quickly and for both the format can change across its lifetime.

Graphical user interface, table

Description automatically generatedThis is an example of spreed sheet software being used to show the drifted of a power supply

### 

### 1.2.1 Problems with current system

The first issue with the current system is that the spread sheet quickly become cluttered as all the data is often displayed. As more data is input the issue continues to get worse

The second issue is that the graphs are often difficult to produce and time consuming. As the user must select all the data points

## 1.3 Objectives

My Objectives are:

* Store Test equipment data and standard data in a data base
* Allow users to add data to a data base
* Create graphs of data
* Automatically calculate parameters (Standard Deviation, Deviance, Drift, etc)

## 1.4 Data Modelling

## 1.4.1 Analysis Entity Relationship Diagram // Object Diagrams // Storyboard [delete as appropriate]

# 2 Design (12 marks)

## 2.1 Hierarchy Chart

## 2.2 Normalised Entity Relationship Diagram.

### 2.2.1 Entity Description in standard notation

### 2.2.2 Design Data Dictionary

For each table in your database describe as shown below:

Table XXX

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

Table YYY

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |

## 2.3. Form and algorithm Design

### 2.3.1 Form1

#### 2.3.1.1 Form Screen Shot

#### 2.3.1.2 Structure Chart

#### 2.3.1.3 Class Diagram

#### 2.3.1.4 Pseudo Code

#### 2.3.1.5 Validation

### 2.3.2 Form2

#### 2.3.2.1 Form Screen Shot

#### 2.3.2.2 Structure Chart

#### 2.3.2.3 Class Diagram

#### 2.3.2.4 Pseudo Code

#### 2.3.2.5 Validation

### 2.3.1 Form3

#### 2.3.3.1 Form Screen Shot

#### 2.3.3.2 Structure Chart

#### 2.3.3.3 CLass Diagram

#### 2.3.3.4 Pseudo Code

#### 2.3.3.5 Validation

## 2.4 Report Design

### 2.4.1 Report 1

#### 2.4.1.1 Screen shot

#### 2.4.1.2 SQL and or Pseudo Code

### 2.4.2 Report 2

#### 2.4.2.1 Screen shot

#### 2.4.2.2 SQL and or Pseudo Code

# 3 Testing (8 marks)

## 3.1 Test Plan

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Area tested** | **Test data** | **Description purpose** | **Expected outcome** | **Output reference** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## 3.2 Test Results

Screen shots or link to YouTube

# 4 Evaluation (4 marks)

## 4.1 Objectives comparison

## 4.2 Improvements

## 4.3 Analysis of 3rd party feedback

# 5 Technical Solution (42 Marks)