## Hardware

The system requires certain pieces of hardware in order to run properly. These include the following areas of hardware:

I have used Excel to create the project. For the actual system for the party planners I would specify the use of a more up-to-date PC system such as a dell vostro 1525 with an Intel core i5 processor system running Windows 7 as the quality of the output will be better and the planner may need to run several versions at the same time.

A monitor is required for the system as an output device to display images. CRT (Cathode Ray Tube) monitors are big but have strong screens with glass screens that don't get damaged easily. However, they make quite a lot of heat and noise. They also take up a lot of space due to their size. The more common monitors are the thin TFT (Thin Film Transistors) monitors that take up less space as they are smaller than CRT monitors.

They also make less heat and noise than them, but these monitors are more sensitive and a sharp object can permanently damage the screen. Even the colour and contrast isn't as good, which has dull pictures. For JJ party Planners, the best monitor would be a TFT because it takes up less space and makes less noise. The sales assistants won't damage the screens or need high quality pictures so a TFT monitor would be fine as it doesn't cost too much now.

The system is more than fast enough, since the formulae in my spreadsheet are quite simple and don't need a lot of computer power. The data used will only take up about 1 GB so the disk space of 320 GB on the Dell is more than enough for the staff at JJ Party planner so save details and other information on the system.

In order for the staff at JJ Party Planners to print invoices, receipts and reports, a printer will be needed. A laser printer can be used for this because their quality and speed is better than ink-jet printers. Their toners last longer than ink cartridges, as well. On the other hand, toners and colour laser printers are more expensive as is the cost if it needs repairing. Ink-jet printers are cheaper than laser but don't have the quality of laser printers and smudge when they are wet. They are also louder, slower and more expensive per page. This is because cartridges need to be replaced more because they dry out when they aren't used.

Ink-jet printers are more suitable to be used at a home because the quality doesn't have to be great and not a lot of pages are printed. Therefore, laser printers are more useful for JJ Party Planner. I have researched several printers and have chosen a Lexmark 201 from Dabs Computer Systems. The Lexmark 201 printer produces good quality colour images in a short time; although a commercial system would possibly find it too slow. In that situation a laser printer would give greater speed, but colour lasers are very expensive to run.

The capacity of the RAM (Random Access Memory) is also important because it holds temporary data that is lost when the computer switches off. The system can have a RAM of 1GB or 2GB. The desk assistants will need to open up only 2 or 3 windows at once so the RAM doesn't need to be too high. A higher RAM memory will allow more windows to be open at once while working at a good speed. As the receptionists won't open a lot of windows, the system should work fine with just a 1GB RAM. It would work better with a 2GB RAM but this would be more expensive.

However, the data should be stored permanently in the internal memory rather than an external storage device. This is because an internal hard drive has a larger capacity, stores and finds data without losing them and is cheaper per megabyte than an external storage device. It is quicker than them but slower than a RAM and they can crash to stop the computer working, which can damage the disk and lose data stored in that area.

Data can also be stored in a USB memory stick or external hard drive which are more portable and hold more data than CDs and floppy disks. However, these devices themselves can get lost as well as their data and the bit that is put into the USB port can be cut off if it isn't cared for properly. Due to more memory and the fact that the data stays in the computer for business use, I would say that an internal hard drive would be better to use. The final area is the input devices.

A mouse and keyboard are compulsory for this system because all computers have to input data using them. Keyboards come with most computers now and are an easy way of entering data, but you can make mistakes when doing this and some things you can't do with a keyboard.

Despite these, a keyboard, any keyboard, would be essential. A mouse is also needed to do things that a keyboard can't, such as control the screen by moving and pointing the mouse. Mice work well with keyboards and are easy to use, as well. They only work on flat surfaces and ball mice can get stuck, though. This is why a laser/optical mouse would be more suitable.

## Software

To implement the new system, new software will be needed to create and/or run the new spreadsheet system so therefore I suggest that the user will need to purchase Microsoft Office Excel 2010 as this is the latest spreadsheet package that available as well as that I used the same software to create the model.

This has all the facilities that I needed to create a user-friendly spreadsheet. This includes locking cells so that the receptionists cannot alter the formulae already set up, coloured backgrounds and a wide range of different types of graph, as well as it is very easy to work out, although that will be based on the inputted information.

For this task I used spreadsheets and bar charts. Of course, it also lets me put formulae into my spreadsheet, like other spreadsheet packages, and lets me use cut and paste to produce a report. Microsoft Excel is slightly easier to use than the alternative Lotus 123 and has more features. It is also more widely used so that the council workers may already be familiar with it.

The Excel 2010 software will be easier for the staff at JJ Party Planner to use because they will be more familiar with Lotus 123, since the staff at JJ Party Planners have always been the using the previous version of excel. This will help them as they will be familiar with the software, although the new software has a few more advanced features for them to use, for which they will have to watch tutorials or be taught how to use the advanced features, to make the system better.

MS Excel 2003 is a Windows-based application package that can be used to automate tasks such as calculation and analysis of data, automate financial statements, business forecasting, transaction registers, inventory control, etc. It provides multiple facilities, such as

making graphs and charts, analyzing situations, and helps users at the managerial level in taking decisions.

The features provided by Excel are very useful for managers as well as the supervisors in any type of organization and help them to execute their complex tasks with a minimum effort. MS Excel can be customized in a way that suits a user to achieve his goal. It is extensively used in financial organizations. The features of MS Excel are as follows:

Workbooks: A document in MS Excel is called a workbook. Each workbook contains sixteen worksheets by default. A user can change this number by resetting the default options. Worksheets within workbooks make it easy to bind files of related information. When a user opens a workbook, he can use all the worksheets to perform a task.

Using keyboard: The following table provides different keyboard shortcuts for selecting a row, column, current cell, worksheet, etc.MS Excel allows fast searching and instant replacing of data. To search or replace the data entered by a user, he can use the Find or Replace command from the Edit menu.

Inserting or Deleting Rows and Columns: MS Excel provides the facility to insert rows or columns into the existing worksheet. Inserting a row of data shifts the rest of the rows down and removes the last row of the worksheet. Similarly, inserting a column shifts the rest of the columns to the right and deletes the rightmost column. This occurs because the total number of rows and columns remain the same in any case.

Functions and formulas: The built-in formulas are called functions. MS Excel provides analyzing data and manipulating text by using different functions. Users can easily calculate percentage, interest, average, etc. by using built-in functions.

Auto-calculation: MS Excel spreadsheet allows a user to automatically recalculate the whole worksheet every time a change is made in a single cell.

Charts: One of the most important features of MS Excel is a chart. MS Excel allows users to view data entered as tables in a graphical form as charts, which helps a user to easily understand, analyze, and compare data.

Therefore after analysing the two software's Microsoft Office Excel 2010 and Lotus 123, I definitely think Microsoft Excel 2010 will be more useful for the staff at JJ Party Planner and the customers, since it has many different useful features that will help the staff and customers to make the system and the business successful.