Developing a Robust Event Management Software for IT-Novice Event Organizers

by

Muzaidy Bin Mohamad

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(Information Communication Technology)

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Universiti Teknologi Petronas

Bandar Seri Iskandar

31750 Tronoh

Perak Darul Ridzuan

CERTIFICATION OF APPROVAL

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A project dissertation submitted to the

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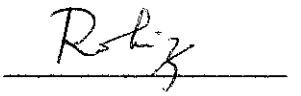
Approved by,



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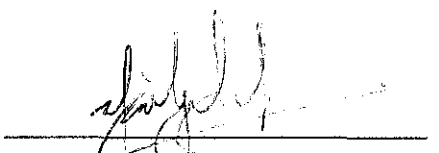

(MUZAIDY BIN MOHAMAD)

ABSTRACT

Event management software was developed for event organizers to manage their events much more effectively. However, most software is too complex to be used by many users, especially the IT-novice users. The purpose of this report is to provide the preliminary information related to the research topic, in which to develop a robust event management software for IT-novice event organizers. The current problem is that there is a lack in terms of standard software that can be used for all event management. To have such standard software would require the user to fine tune the software to suit the nature of the event to be planned. Therefore, the software must be easily modified by the event organizers which are assumed to be IT-novice users. There will be five chapters in this report, in which the first will provide introduction to the research topic, with some background information, problem statements, objective and scope of study. In the second chapter, some literature reviews are included, explaining key idea related to this study. Then, the methodology used in the study is also proposed in the third chapter, including feasibility analysis of continuing this project. Chapter four will present the results of the questionnaire that was conducted among UTP students and lecturers and also the prototype that had been developed including several discussions. Finally a conclusion in the final chapter will summarize this report as a whole, including recommendation in continuing this project.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Event management software was developed to help event organizers from various backgrounds manage their events much more effectively. One simple example is online attendee management software. When compared to the old-fashioned paper-based methods, today's fully automated systems provide digital methods to handle various tasks at a fraction of the cost. 90% savings or more can be yielded going from paper-based to automated web-based methods of attendee management [1]. Now, the same concept had been used on developing software that could manage specific events based on users' needs. Yet, most software is too complex for most users. Hence, the purpose of conducting a research on this topic is to help IT-novice event organizers use the event management software with minimal learning curve. It is hoped that the software could improve event management performance immensely in term of productivity and financially.

1.2 PROBLEM STATEMENTS

Currently most known software that is developed for event management is already fixed to manage a specific event. For example Wedding Assistant [2] is an event management software for wedding planning while Ennect Event Suite [3] is a software for managing training event. Hence, the current problem is identified as a lack in terms of standard software that can be used for all event management. However, having standard software would mean that the software user will need to fine tune or modify the software in such way to cater for the nature of the event to be planned. Hence, easily modified software would be needed by the event organizers, whom in this case are assumed to be non-IT expert users.

1.3 OBJECTIVES

The objective of this study is:

- To develop user-friendly and interactive event management software that can be manually tailored by non-IT expert event organizers to plan and manage various types of events.

The software to be developed is envisioned to be able:.

i. To create an intelligent system to automatically provide suitable recommendations

   - Instead of the user manually keeping track of the events, the system will always update the user on certain area that the user need to concern with, usually by referring to the specific objectives of the event as specified by the user. The system is intelligent enough to provide suggestions that would help user organize the events effectively and efficiently

ii. To develop a robust system that can be manually tailored by non-IT expert event organizers

   - The system should be dynamic in the sense that it can be easily configured by an IT-novice user to cater for the user's event management needs. Hence, the system should be user-friendly and the complexity of the system should be transparent to the user

1.4 SCOPE OF STUDY

The main scope of study for this project is to identify how event management could be done by using decision support systems.

The targeted audience for this research and the upcoming system would be any individual who had the experience in managing events at any level. However, stress should be made that these people must be total novice in Information Technology and its application. For that scope, the research would focus on students and lecturers in UTP, in order to minimize system complexity and size. There is limited timeframe that is permissible to develop the system.

Due to the nature of the novice users, the Graphical User Interface (GUI) of the software must be user-friendly and interactive for the event organizers.

CHAPTER 2

LITERATURE REVIEW

2.1 Definitions of Terms

2.1.1 Event Management

Event by itself is the occurrence that is happening at a determinable time and place, with or without the participation of human agents. It may be a part of a chain of occurrences as an effect of a preceding occurrence and as the cause of a succeeding occurrence. [4]

As the base general meaning, event management is the application of project management process to the creation and development of certain activities, particularly festivals, events, meeting and conferences. [5]

In the real world, events are technically any activities that always bring people together for a common purpose.

These events are usually managed by event managers, who are responsible to calculate budgeting, establishing dates and alternate dates, selecting and reserving events site, providing logistic support, selecting suitable speakers, arranging décor that are relevant and much more. As a career, event managers are highly lucrative and are sought after. In United States alone, the median annual wages of the event managers in May 2008 were $44260. [6]

There are many type of events, generally categorized into two; corporate events and private events. Corporate events usually involve conferences, seminars, business dinners, product launches and board meetings, whereas private events include but not limited to weddings, birthdays and picnic. [7]

In this study, the event will focus on trip, seminar, stage, training, meeting and food dining.

Trip event is defined as an event in which people would be going from one place to another. [8]

Seminar is defined as a meeting event for people who would exchange ideas, or in other word a conference. [8] Seminar is commonly formal, informative and intellectual. It can be either a one-way communication or two-way communication between the speaker and the participants.

Stage event would include any event that would be conducted on a raised and level platform, where usually theatrical performances are presented. [8] This would include theatre, on-stage performance or prize-giving ceremonies. Most attendees are guests who would sit on chairs located in front or around the stage.

Training event is an event which brings a person to an agreed standard of proficiency, usually by practice session or instruction by the facilitators. [8] A training event is conducted by experienced personnel who will train the participants to achieve their target goals.

A meeting event is an assembly or gathering of people, most commonly for a business, social or religious purpose. [8] Meeting could be either formal or informal and the participants could be as few as two people or as many as possible. Usually there is an objective of the meeting, where in the end the participants would mutually conclude the meeting to an end together.

Food dining event is an event where there will be food served for the attendees, regardless sit-down dining or buffet style [8]. Usually dining would be the main point of the event, but most of the time it would be accompanied with other activities such as prize giving or small performances. Examples of food dining events are Grand Dinner and Barbeque Party.

2.1.2 Robustness

Robust is defined by Jen (2003) as the feature persistence in systems, in which the system is capable to switch among multiple functionalities, hence incorporating several mechanisms for learning, problem-solving and creativity. [9]

In this study robust can refer to the ability of the system to be able to tailor its functionalities based on user settings. Hence, the system itself has a database of different event types, in which each type has different features and functionalities. Should an event is selected by the user; the system will allow itself to provide functionalities that are related to such event, based on knowledge in the database.

2.1.3 Novice

Novice is a person who is new to or inexperienced in a certain task or situation. As such, a novice is also considered as a beginner. [9]

For this study, a novice user is a user of a system who is inexperienced in using IT-based technology, including this event management system. The novice user is unable to program the system by himself as he lack the knowledge of programming. Usually it would take a while for a novice user to be familiar with an IT-based technology, but with help and guidance they will become more experienced.

The system should be able to be used easily by these IT-novice users.

According to Dreyfus (1986), to teach novices new discipline particularly involving using IT-based system would require the novices to experience normal situations first. Clear directions and guidance would help a novice to succeed in understanding the system, and to give them what they need most: experience [10]. A simple feature in which inform the novice to ask for help when they need it would be very beneficial.

2.2 Existing Event Management Software

2.2.1 Social Software

There are quite a few even management software available in the market. They are sometimes referred to as Social Software. Social Software refers as computer-based applications that let people connect and collaborate by use of a computer network, usually accessible through the internet. Event organizers had used various social software to provide information and announce news of events in interactive environment [11].

Facebook is an example of a Social Software which is widely used all over the world. In Facebook, there is an application called 'Event' which allows users to create an event, put in all the necessary information and then 'post' it on the user's wall for others to see [12]. The application allows other users who are invited to the event to view the event information and updates by themselves, which in turn allows other people who is not in the guest list, but still able to know about the availability of such event. It is a very powerful tool to inform participants on any event, and with its invitation functionality and guest list, it is much easier for a user to manage his event.

However, the drawback of this application is that it relies heavily on other participants' feedback to such event, which could be a problem if the event organizer really needs a total headcount but not all guest had replied to the invitation.

In this study, the system is different from such application as it has no social networking aspect presented in Social Software. However, this system includes a Decision Support System which would help the user by assisting and managing event effectively. This system would help the user to choose an ideal event plan, in activities and budget area, based on the event types and event target goals. The system is also robust which allows the user to customize its functionality accordingly as needed.

2.3 Technologies and guidelines for Developing Event Management Software

2.3.1 Decision Support System

One of the main features of this event management system is that the system is able to assist the user in selecting the recommended plans based on event information given by the user, such as event type, event goals, event activities, and event budget. The system allows the user to skip the tedious task of analyzing the event from a whole top-down perspective, and will provide alternatives for user to accomplish the goals of his event.

By definition, Decision Support System (DSS) are interactive computer-based system or subsystem intended to assist decision makers to use communication technologies, data, documents, knowledge and/or models to identify and solve problems, complete decision processing task and to make decision [13].

There are various opinions on the taxonomy of DSS, but mostly had accepted the one created by Daniel Power, who differentiates between 5 types of DSS; *communication-driven DSS, data-driven DSS, document-driven DSS, knowledge-driven DSS* and *model-driven DSS* [14].

Table 1: Types of Decision Support Systems

Type of Decision Support System	**Description**
Communication-driven DSS	Supports more than one person working on a share task
Data-driven DSS	Emphasizes access to and manipulation of a time series of internal company data and sometimes external data
Document-driven DSS	Manages, retrieves and manipulates unstructured information in a variety of electronic formats
Knowledge-driven DSS	Provides specialized problem-solving expertise stored as facts, rules, procedures or in similar structures
Model-driven DSS	Emphasizes access to and manipulation of a statistical, financial, optimization, or simulation model. Model-driven DSS use data and parameters provided by users to assist decision makers in analyzing a situation

2.3.2 Human-Computer Interaction

The interaction between human and computer is important to increase the productivity of a computer system's user, and the effectiveness of the system itself. If by natural the system is easily understood by a user, it would take minimal learning curve for a user to use the system.

Human–computer interaction (HCI) is the study, planning and design of the interaction between people (users) and computers. Interaction between users and computers occurs at the user interface (or simply *interface*), which includes both software and hardware. The Association for Computing Machinery defines human-computer interaction as "a discipline concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them." [15]

Attention to human-machine interaction is crucial, because poorly designed human-machine interfaces can lead to many unexpected consequences. A classic example of this is the Three Mile Island accident where investigations concluded that the design of the human-machine interface was at least partially responsible for the disaster. Similarly, accidents in aviation have resulted from manufacturers' decisions to use non-standard flight instrument and/or throttle quadrant layouts: even though the new designs were proposed to be superior in regards to basic human-machine interaction, pilots had already ingrained the "standard" layout and thus the conceptually good idea actually had undesirable results. [15]

CHAPTER 3

METHODOLOGY

3.0 Introduction

For this study, Rapid Application Model which emphasizes on prototyping has been chosen as the methodology to be followed. This is due to several reasons as stated below:

i. Dynamic gathering of requirements; requirements can be added as on-the-go basis

ii. The developer could straight away build the prototype considering the short time frame of the project

iii. Promotes continuous refinement. Feedback is important in RAD, which can always be used to alter the project to make it better.

iv. Potential issues could be easily identified much earlier on testing prototypes

v. Documentations are also included per on-the-go-basis. Hence, other developer could always jump in and continue the project at any time. In other words, the project is developed in such a ways that any other people could always read the documentations and understand how to develop the system.

3.1 Model Selection – Rapid Application Development (RAD) Model

Below is an example of a graphic interpretation of the Rapid Application Development process flow. Figure was taken from the etonDIGITAL website [16]

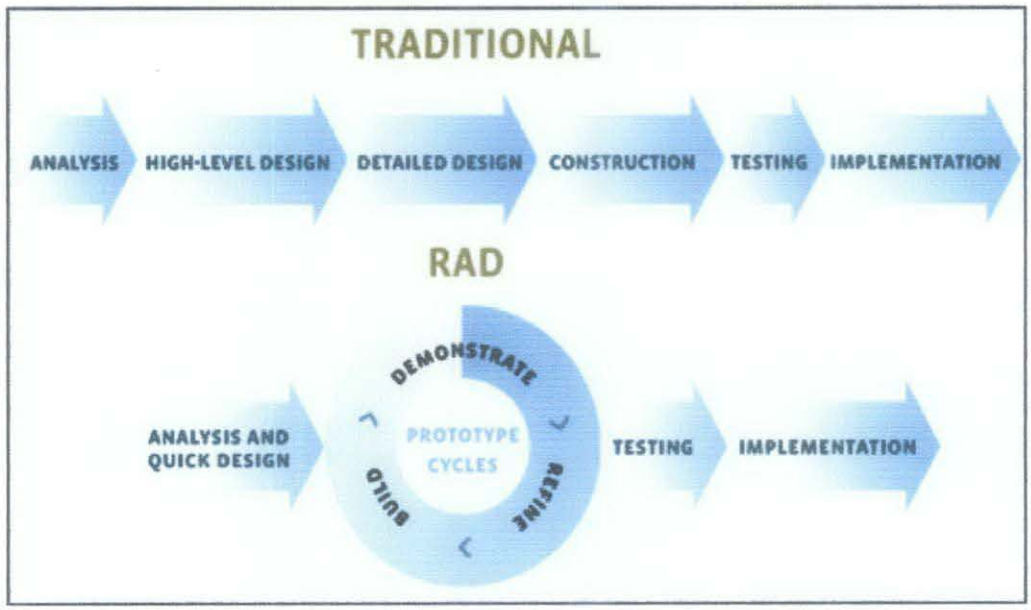

Figure 1: RAD model

There is a significant difference between the RAD model and the traditional (waterfall) model. Instead of going from one step to another, RAD stresses the importance of developing prototypes that are constantly redefined. The initial analysis phase is brief because requirements can be added on the go during the prototype building phase. After the prototype has been deemed to be acceptable by the business owner, it will be tested and finally implemented into the real world.

3.2 Project Schedule

3.2.1 Semester 1 (June 2010 – December 2011)

Most of the time spent in Semester 1 was divided into 2 major tasks, one being analysis and data gathering, and two, trying to develop a working prototype of the system.

Once the initial analysis phase was completed and the process flow has been finalized, research was conducted to indentify suitable platforms for the system.. Thus the final system will be designed using VB Platform and Microsoft SQL as its database.

Table 2: Gantt chart for Semester 1

No	Activities/Week	1	2	3	4	5	6	7		8	9	10	11	12	13	14
1	Selection of project topic															
2	Information gathering								M							
3	Submit prelim report								I							
4	Acquiring of software								D							
5	Determine system flow								S							
6	Social networking analysis								E							
7	Prepare progress report								M							
8	Submit progress report															
9	Seminar 2								B							
10	Review system functionality								R							
11	Prepare interim report								E							
12	Submit interim report								A							
13	Develop prototype								K							
14	Oral Presentation															

Legend:

Personal Milestone FYP guideline milestone

3.2.2 Semester 2 (January 2011 – May 2011)

Semester 2 was spent refining and improving on the initial prototype for the system. Gradual review on the overall functionality and stability of the system was done periodically, along with informal testing sessions with certain parties to ensure that the system requirements agreed upon in the analysis phase are met, as well as to check for coding and output errors.

There was initially a testing phase planned for the system prior to final submission. However, due to time constraints, this plan was dropped.

Table 3: Gantt chart for Semester 2

No	Activities/Week	1	2	3	4	5	6	7		8	9	10	11	12	13	14
1	Develop User Interface															
2	Develop Database								M							
3	Refine System								I							
4	Submit Progress Report								D							
5	Refine System								S							
6	Develop Database								E							
7	Prepare poster & system								M							
8	Poster & Pre-EDX															
9	Submit Dissertation (draft)								B							
10	Refine System								R							
11	VIVA								E							
12	Technical report submission								A							
13	Submit final dissertation (hard copy)								K							

Legend:

Personal Milestone FYP guideline milestone

3.3 Feasibility Analysis

3.3.1 Technical Feasibility

This system is considered to provide medium to high risk by assessing the technical feasibility

i. Risk regarding familiarity with Visual Basic and XAML is low
   - Developer has prior experience in developing application using Visual Basic and XAML
   - Existing information regarding Visual Basic and XAML is readily available on the internet

ii. Risk regarding familiarity with SQL is medium
   - Developer has little experience developing application using mySQL as database medium
   - Developer has little experience in integrating mySQL databases with Visual Basic

iii. Risk regarding familiarity with Decision Support Systems is high
   - Developer does not have background of study in DSS
   - Developer has no prior experience developing applications with DSS
   - References regarding DSS applications can be easily found in the internet

iv. The project size is considered medium risk
   - The project will only be developed by one developer
   - Timeframe to complete project is less than a year

3.3.2 Economic Feasibility

All the development tools that will be used to develop the software are open source software, hence can be readily downloaded from various sources on the internet. Some intangible benefits when implementing this software is that event organizers will become much more proficient in handling any event hence increasing his/her added value to any company.

3.4 Analysis and Data Gathering

3.3.1 Analyzing knowledge level regarding event management among UTP students and lecturers

The first step in the analysis and data gathering phase was to conduct a questionnaire to gauge the understanding of UTP students and lecturers on managing events. The main purpose of this questionnaire was to determine the rationality of proceeding with this system and to see if there was a need and demand for it. Besides that, the questionnaire was also designed to answer 3 key questions:

i) What is the current IT expert level among UTP students and lecturers?
ii) What is their experience in managing events?
iii) What types of functionality should be included in the system?

The complete results of the questionnaire can be found in the Results and Discussion section.

3.5 Equipment / Tools Used

3.4.1 Programming : Microsoft Visual Studio 2010 (Visual Basic Language)

For the task of developing the overall system, Microsoft Visual Studio 2010 was used. The reason for doing so was because of the simple user interface, quite straightforward method of coding and high amount of training material and tutorials with regards to the platform readily available. XAML is used as the declarative language for coding the GUI.

3.4.2 Database : Microsoft SQL 2010 (part of Visual Studio 2010 package)

The databases used in the system were developed using the built-in database platform provided by Microsoft Visual Basic 2010 which as Microsoft SQL 2010. This was chosen due to ease of linkage and ability to perform real time modification, without the need to open another database application.

3.4.3 Others: Adobe Photoshop CS5

As to ensure that the user interfaces were unique and eye catching, most of the design was done using Adobe Photoshop CS5. This is due to its simplicity to develop designs, ease of use and high variety of design features and capabilities.

3.6 System Architecture

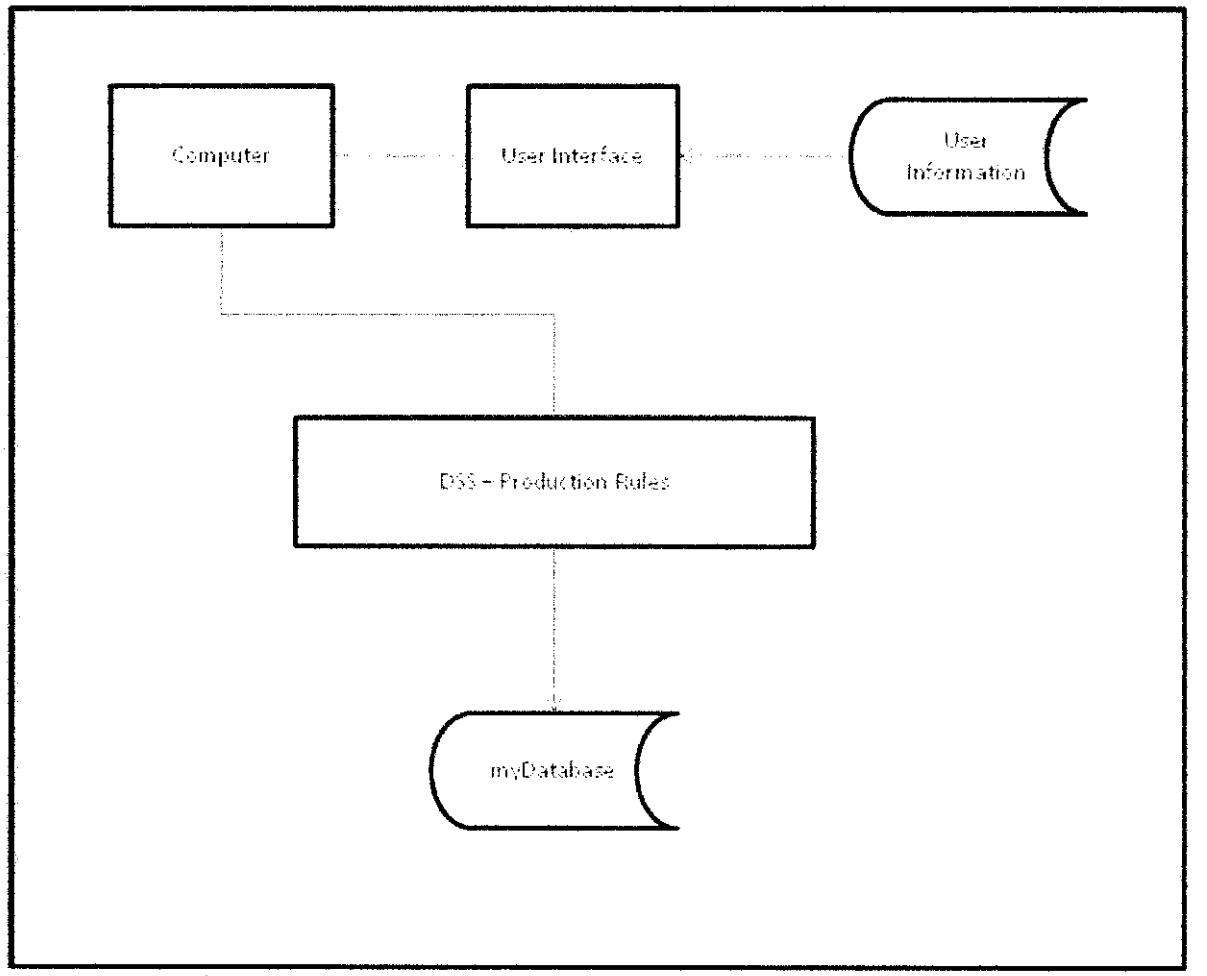

Figure 2: System Architecture for the Event Management Software

In order to avoid additional complexity to the software, iDeal uses a very simple architecture, in which everything is performed on the client's side. The user will interact with the user interface, and the system's preprogrammed functions, decision support system and database will interact with the user. The medium of Internet was originally intended to be used, however this was later dropped as there was limitations with programming capabilities and fear of over complexity in terms of execution.

3.7 Decision Support System Model

For the Decision Support System used in the iDeal, two different models were used, which were Weightage and Production Rules

i) Weightage

This Decision Support System uses the concept of assigning weightages and values to user input given. The actual weightage and values allocated were decided based on its importance and severity.

ii) Production Rules

Another model used for the Decision Support System was Production Rules. Several preprogrammed rules were determined by the developer to anticipate possible user input. Once the user enters his or her details, the data will then be compared to the programmed Production Rules in order to determine the most suitable output.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Analyzing knowledge level regarding event management among UTP students and lecturers

In order to get better understandings of the IT expert level among UTP students and their experience in managing events, a 5 questions questionnaire was designed. The questions are:

i) Do you have any experience in managing events?

ii) If yes (to question 1) what are those events?

iii) Do you feel troubled by the sheer amount of tasks to plan and manage for in such events?

iv) In your opinion, what is your IT expert level – in term of using computer, websites, programming etc.? (Novice, Average, Expert)

v) Would you like to learn more on how to manage your events effectively using a web-based application?

Overall, 30 people successfully completed the questionnaire, of mixed gender. The results for each question are as follows:

i) Do you have any experience in managing events?

Figure 3: Results on experience in managing events of UTP students and lecturers

ii) If yes (to question 1) what are those events?

Figure 4: Results on type of events that were managed before for UTP students and lecturers

iii) Do you feel troubled by the sheer amount of tasks to plan and manage for in such events?

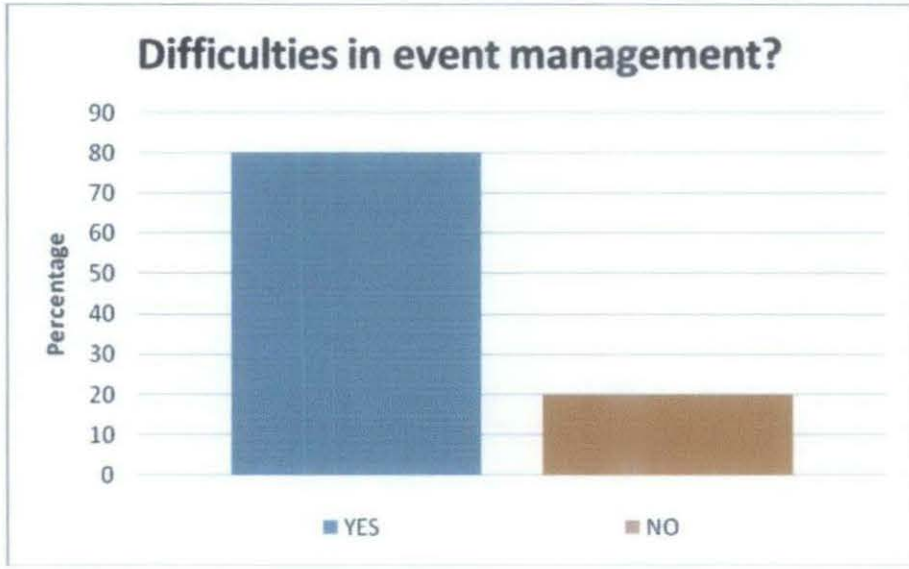

Figure 5: Results on difficulties in event management for UTP students and lecturers

iv) In your opinion, what is your IT expert level – in term of using computer, websites, programming etc.? (Novice, Average, Expert)

Figure 6: Results on IT expert level among UTP students and lecturers

v) Would you like to learn more on how to manage your events effectively using a web-based application?

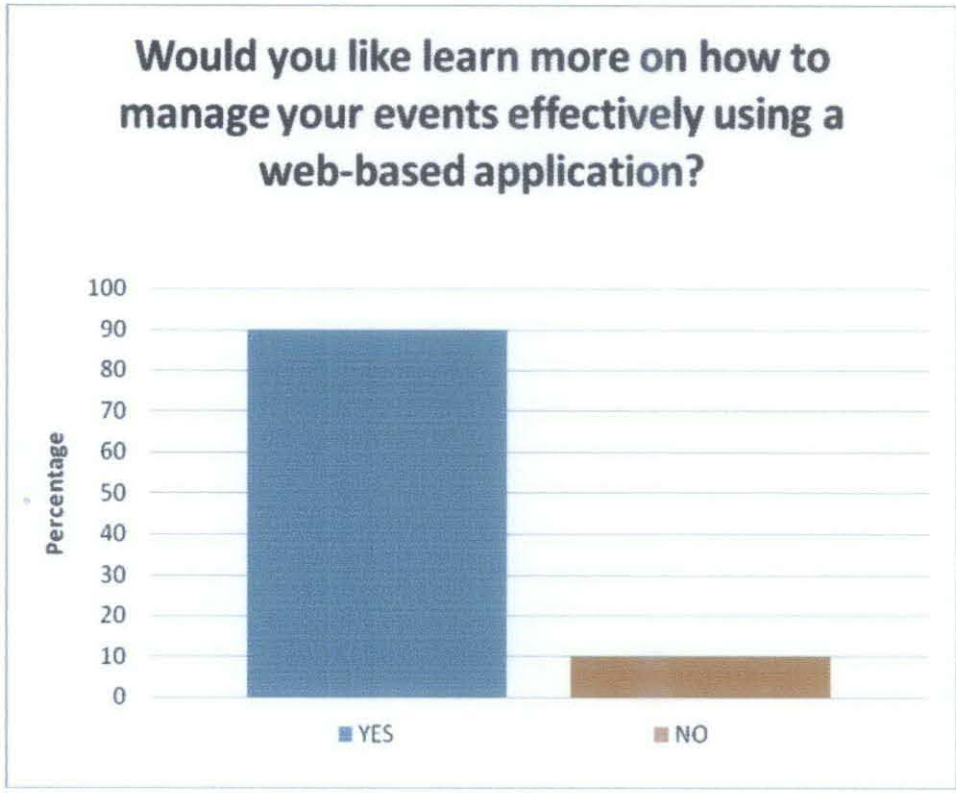

Figure 7: Results on willingness of UTP students and lecturers to learn about effective event management using web-based application

4.1.1 Results Discussion

Overall, an assumption can be made from this survey in which that the students and lecturers of UTP are really interested in knowing how to effectively manage their events using a web-based application. Most of them have difficulties in managing the events on their own.

Another major finding is that most of the respondents believe that they are novice in their IT skills. Hence, it is vital to make sure that the application is designed to be user-friendly and easily-configured by such IT novice users.

4.2 Methods Included in the System

4.2.1 Determining recommended plans

4 main types of input are required from the user

i) Event Information
   a) Event name
   b) Event type
      i. Trip
      ii. Seminar
      iii. Stage
      iv. Training
      v. Meeting
      vi. Food Dining
   c) Venue
   d) Date / Time

ii) Event Goal
   a) Profit
      i. Tangible/intangible profit
      ii. Target profit goal
      iii. Allocated budget
   b) Non-profit
      i. Allocated budget

iii) Event Activities
   a) Number of Participants

iv) Event Budget
   a) Expenditure Cost

For example, below is the input for an event *x*:

i) Event Information
   a) Event name: Photoshop CS3 Workshop
   b) Event type: Training

ii) Event Goal: Profit
   a) Allocated budget: RM200.00
   b) Target profit goal: RM400.00

iii) Event Activities
   a) Number of Participants: 50

iv) Event Budget
   a) Expenditure Cost: RM300.00

After these user inputs have been analyzed, the system will first check the event type database, which in this case 'training' and check the important features of a 'training' event. The system realizes that the goal is to achieve profit of RM400.00, with allocated budget of RM200.00. However, looking at Expenditure Cost of RM300.00, the system realizes that the event will lose money, hence not achieving 'profit' goal. The system will then propose a plan for the user, to charge fee for each participant, in this case RM10.00 per person. With that, RM400.00 of target profit goal will be achieved.

Once the user has agreed upon the given plan, his or her plan will be saved for future reference. Figure 6 illustrates a detailed flowchart of the process.

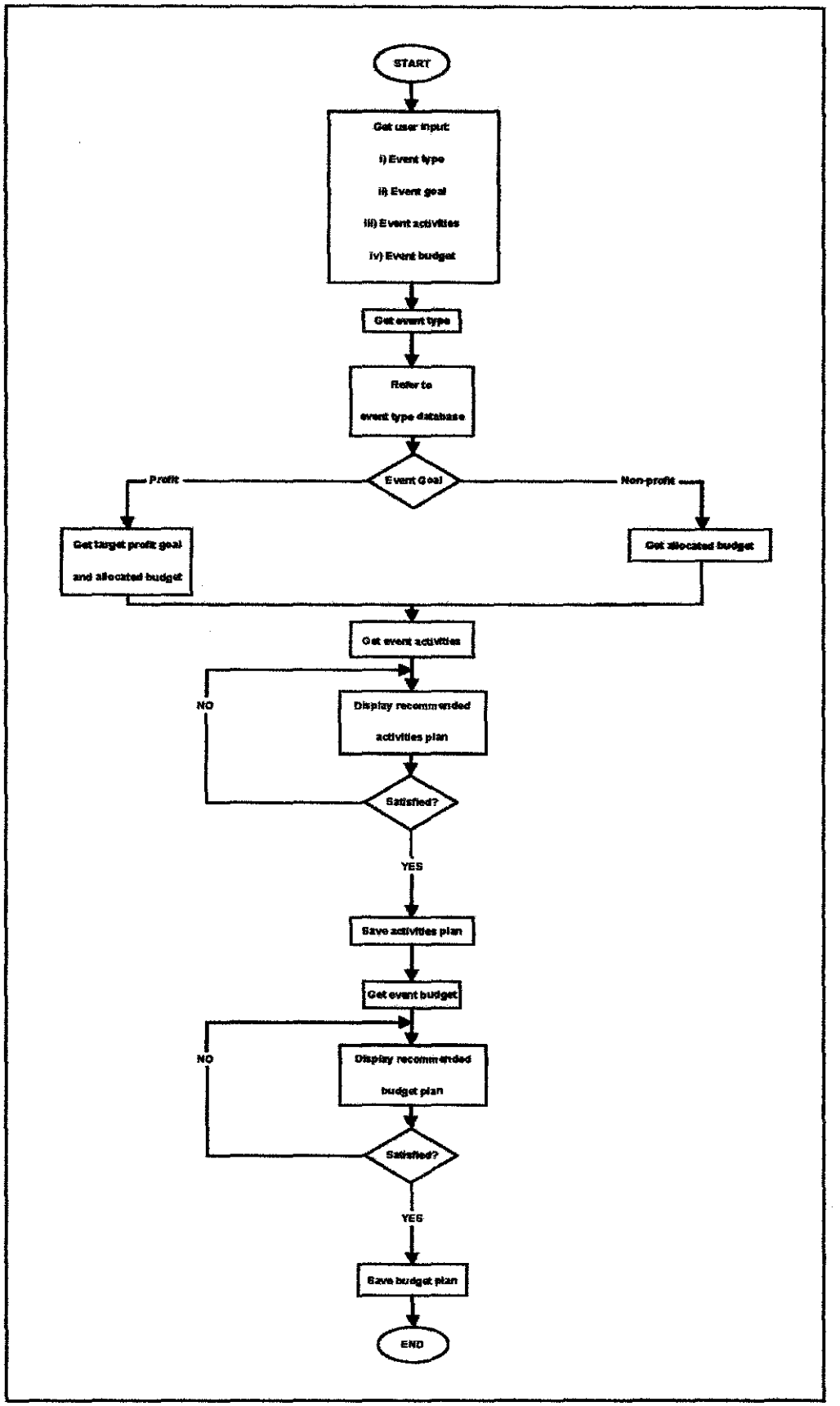

Figure 8: Flowchart of determining recommended event plans

4.3 Prototype Development

The software is codename 'iDeal', as it implies how the software is ideal in helping event managers manage their event by providing idealistic suggestion.

Overall, a standard colour scheme of blue and white with black font was used throughout the system as to reflect on the colours of the iDeal logo.

The homepage of this application is as shown in Figure 9. This page is allows users to select which event that he or she wants to manage. A white background, complimented with white buttons and black font was used to attract the attention of the user to the major functions of the system. Minimal text was used as to avoid the user from being too flooded with information.

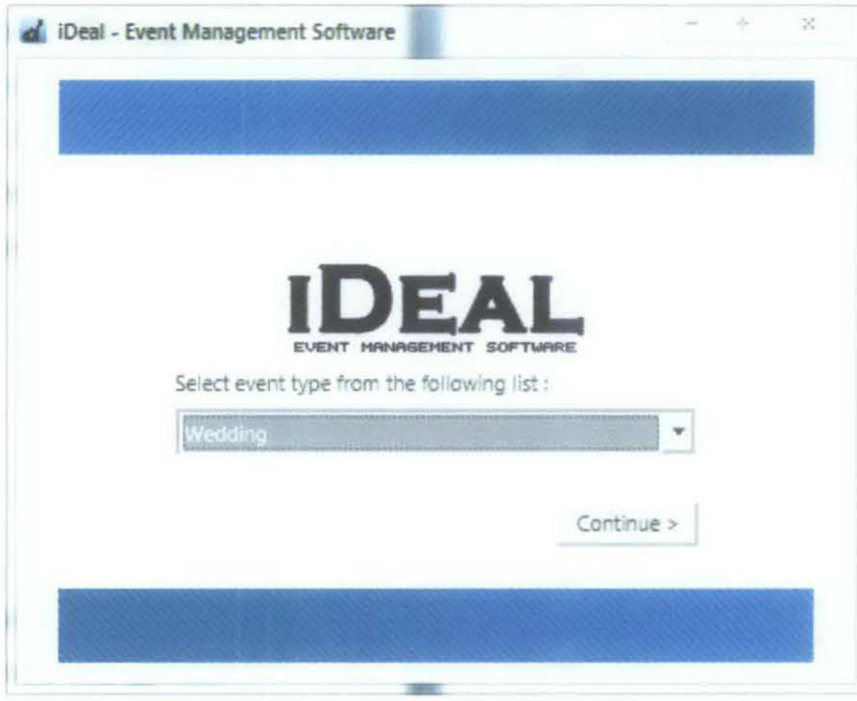

Figure 9: Main event selection screen (Homepage)

Once an event is selected, and Continue button is pressed, a new window will pop up, in this case for a 'Trip' event. In order to extract information from user, using the easiest possible way for a user to understand, a wizard style windows is adopted. This idea is based on how Microsoft Windows prompt user by asking several questions one by one in order to install software into the computer.

Figure 10 shows the first question for 'Trip' event, in which the name is required from the user. The input will be stored in the database.

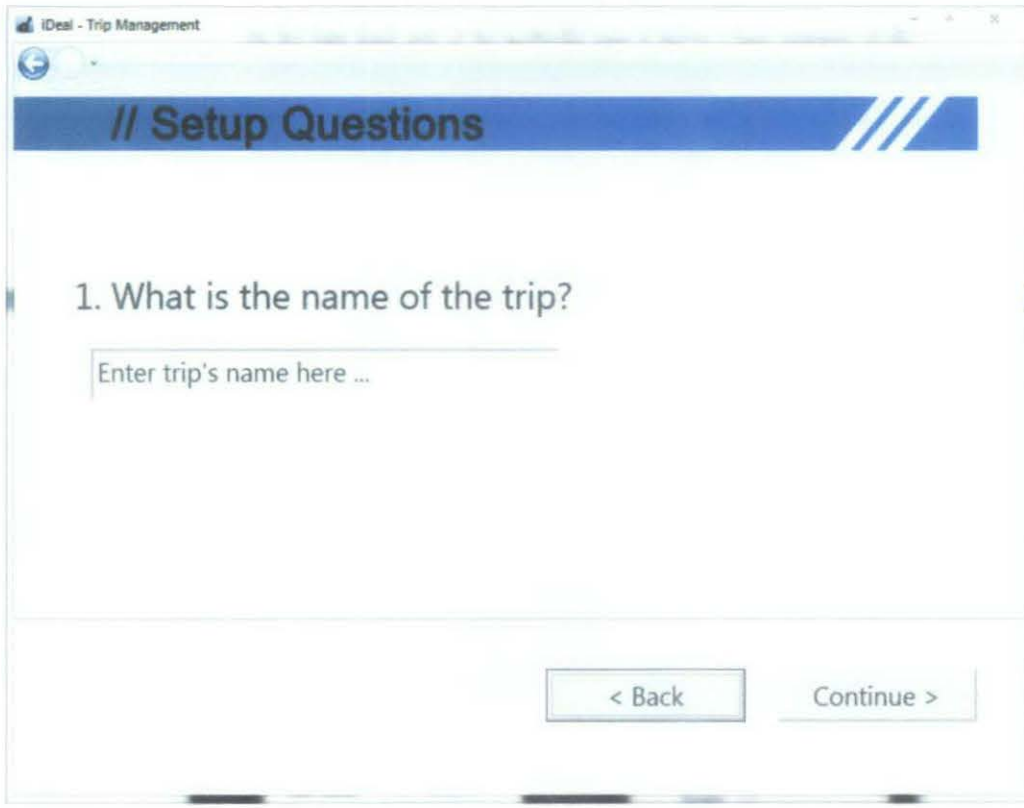

Figure 10: Event Trip Question 1, Name of the Trip

Figure 11 shows the second question for 'Trip' event. The destination input is required from the user.

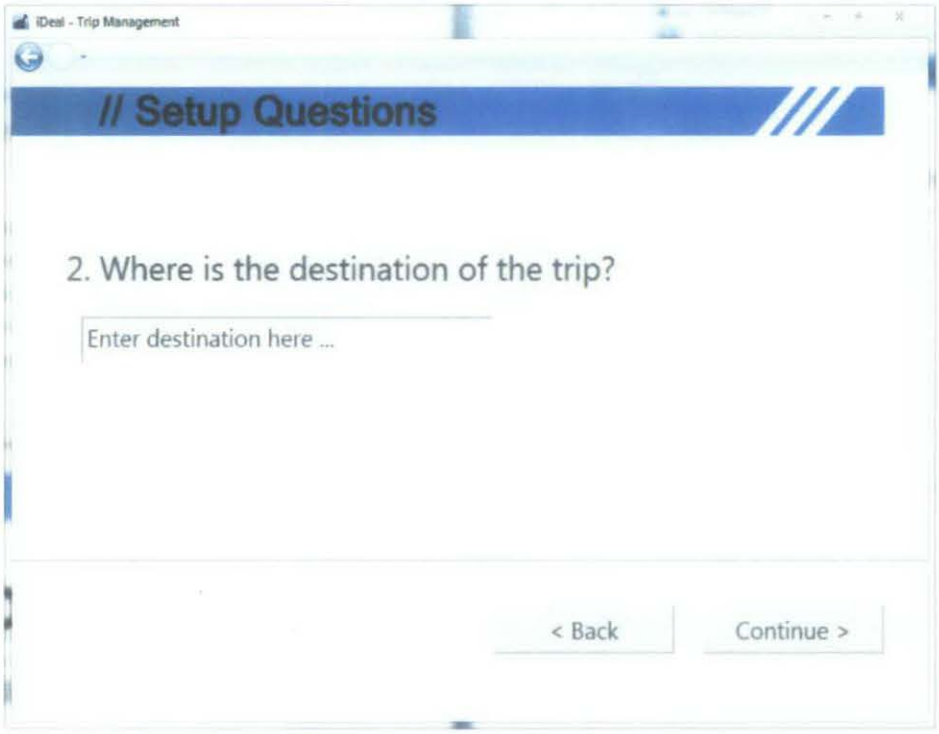

Figure 11: Event Trip Question 2, Destination of the Trip

The next window, question 3 is prompted. The date of the event as well as the time is required from the user.

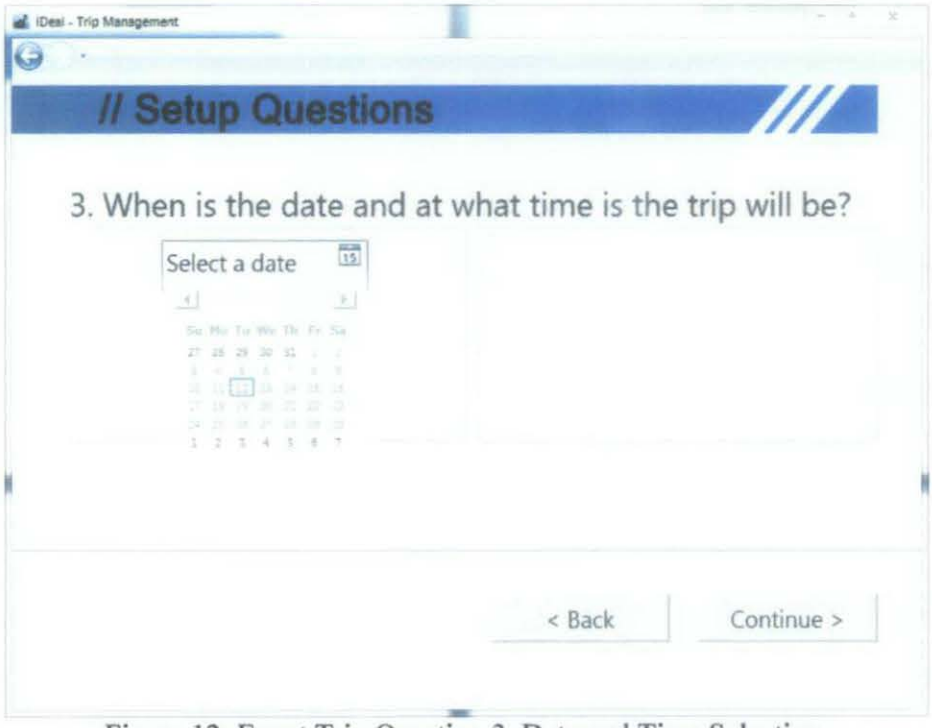

Figure 12: Event Trip Question 3, Date and Time Selection

Next window, the mode of transportation input is required from the user. In this case, it is categorized by the main transportation and the possible alternatives.

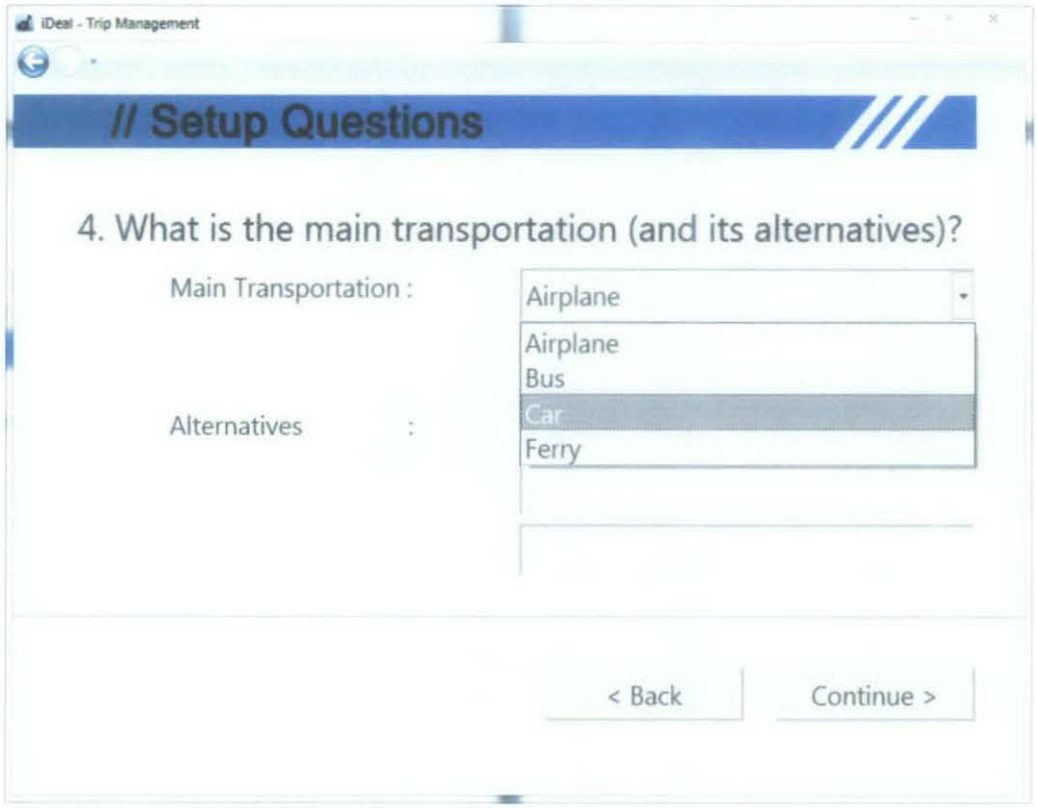

Figure 13: Event Trip Question 4, Mode of Transportation

Since this software is used to manage multiple events, should the user select another event, such as 'Wedding', the following windows will be prompted, in relevance to the wedding event.

The first question in Figure 14 requires user to input both the Bride's and Groom's name. This input is stored in the database.

Figure 14: Event Wedding Question 1, Bride's and Groom's Name

The second question in Figure 15, user is required to select the date and time of the event.

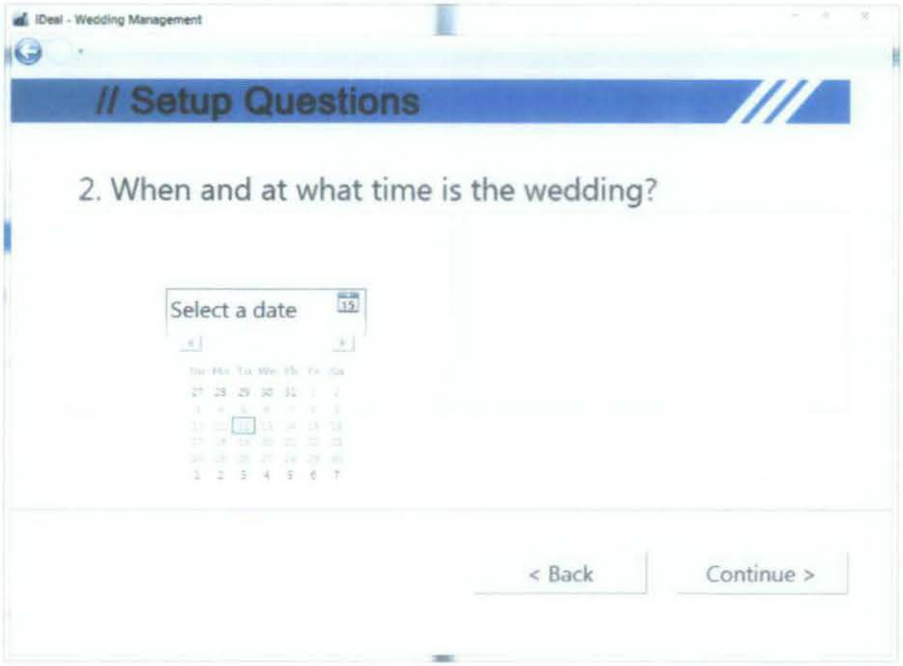

Figure 15: Wedding Event Question 2, Date and Time Selection

The next question, user is required to input the estimated budget used in the event. Based on this input, the projected budget is calculated and shown, using weightage predetermined by the programmer.

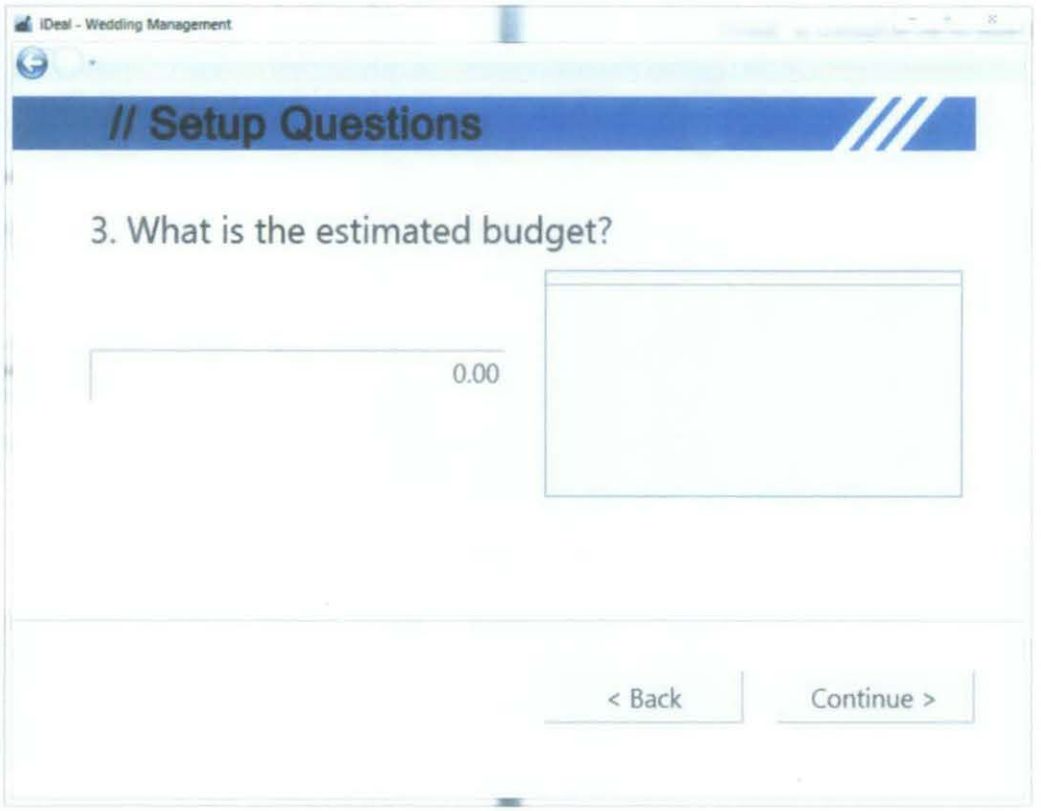

Figure 16: Wedding Event Question 3, Estimated Budget

4.4 Prototype Testing

Several informal 'pilot' testing sessions were conducted by UTP representatives and colleagues to show the functionality of the system prior to the pre-EDX system demonstration. Amongst the feedback received include:

i) Increasing the size of fonts as to make it more visible
ii) Use simple, easy to understand terms instead of technical jargon

These proposed changes were later applied to the system in order to improve its functionality and user friendliness. The software should be easily used by an IT-novice user.

4.5 Discussion

Whilst in the early development phased of the system, 3 major issues were raised, which were the decision to limit the scope of the system, decision to change to stand-alone application rather than web-based, as well as using Visual Basic as a platform to design the application.

4.5.1 Limiting the scope of the software

Because of certain time constraints, and after analyzing the results of the previous mentioned questionnaire, it was decided to narrow down the scope of the software to cater for two events only, which is wedding and trip.

If all seven events are included into the software, many databases is required, which requires more time to develop. Furthermore, user will be bombarded with too much information that it might confuse them and preventing them to use the software effectively.

4.5.2 Decision to change to stand-alone application rather than web-based

After several weeks of testing and analysis while developing the software using web-based technology, in this case, PERL and mySQL, several problems had occur. Maybe due to limited knowledge, there are several technical issues that were unable to be resolved by the programmer.

As deadlines are getting nearer, it is decided to abandon using the web-based technology altogether, and then start developing the software again, however as a stand-alone software. The technology that is used now is WPF (Windows Presentation Foundation) which using XAML as its declarative programming language and Visual Basic as the logical programming language. The syntax is much easier to understand and many of the technical issues found in earlier development can be solved easily using this new technology.

It is worth to note that WPF can be deployed as standalone desktop program, which is really suitable in this case. WPF is used to unify a number of common user interface elements. All of these elements can be linked and manipulated based on various events, user interactions, and data bindings

The consequence of this decision is that the programmer had to learn the basics of new programming language first before starting the new development. However, since initial plan and route map had been established, it is much easier to develop the new prototype now.

4.5.3 Using Visual Basic as Main Platform

For the purpose of designing the application, Visual Basic was deemed the most suitable medium. This was based on the fact that it is developer friendly, flexible and can be easily integrated with databases. However potential issue that might arise is how to 'beautify' the layout of VB, as it is usually bland and uninteresting. Another aspect that needs to be highlighted is how the coding will be done for converting the logs into actual graphs.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

From personal readings and the survey that had been conducted, the project is found applicable and should be developed as it would truly help event managers to manage their events effectively. Plus, the focus group which are UTP students and lectures, majority of them are IT novice, hence it is crucial to develop a system that is robust and easily used by these users. To relate back to the initial objectives that were identified:

i. To create an intelligent system to automatically provide suitable recommendations

   By installing such intelligent system into the application, the application will be able to analyze all input provided by the user and then quickly identify ways to ensure that the user manage the events successfully.

ii. To develop a robust system that can be manually tailored by non-IT expert event organizers

   IT novice users are expected to use this application, hence the major concern is to develop the application in such robustness, where the users can easily alter the configuration to fit their event management needs, while at the same time with minimal learning curve. This can be done by using an intelligent system. The user interface is also crucial for easier usage by the user.

5.2 Suggested Future Work for Expansion and Continuation

There are several recommendations for future work of this system. These recommended future works are intended to enhance the functionality of the system and also make it more attractive and convenient for the user.

One feature that could be implemented is the ability to print all information as a printable format. In this way, user can produce hardcopy of the event information and then can be used later for reference.

Another expansion planned is to expand the number of events that is really working for the software, as currently it only works for two events only, which is quite limited to show the general robustness and multiple functionality of the software.

Lastly, it would be more appealing to users if the software was accessible online. Whilst initially it was planned to make iDeal, the event management software; an online-based system, complexity issues, especially in terms of managing individual databases and limiting the use of the system to UTP personnel only made it impossible in the time frame given. The advantages of making it online include ease of access, ability to make constant amendments and a wider user market which is very lucrative for those who are interested.

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