

## MERCAN TRAVEL - COMPUTER SYSTEM USED IN MERCAN TOURISM

Albert Tan Choo Sheng

Kasturi A/P Ganes

Low Yiyiu

Mohamed Nur Aqmal Bin Mohamed Jamil

Ng Hui Cheng

Computer Technology (AICT001-4-1-CT)

UCDF1408ICT(SE)

Asia Pacific University Of Technology & Innovation

### Acknowledgement

We would love to express our special thanks of gratitude to our beloved lecturer, Ms Palvinderjit Kaur A/P Harnek Singh, for being so patient with us and teach us the importance of computer technology in the current generation and guide us through the assignment. We would also love to give thanks to one of our fellow classmate, Gideon Low Ji Dian, who taught us the basics of designing a prototype.

## Table of Contents

Abstract .....	4
MERCAN TRAVEL - COMPUTER SYSTEM USED IN MERCAN TOURISM .....	5
Introduction .....	5
Mercan Tourism Turkey DMC .....	5
Mercan.Travel .....	5
5 Components of Information Processing Cycle .....	6
Input .....	6
Input Data .....	6
Input Devices .....	6
Process .....	8
Business to Business Booking System .....	8
Steps to Book with Mercan.Travel .....	8
Output .....	10
Output Data .....	10
Output Devices .....	10
Storage .....	11
Mainframe .....	11
Network Attached Storage .....	11
Hard Disk .....	11

Communication.....	13
Modems.....	13
Wireless Fidelity .....	13
Router.....	13
Storyboard.....	14
Improvement & Suggestions.....	15
Description of the application.....	15

### Abstract

This document contains the details of the system used by Mercan Tourism, Mercan Travel. After investigating, researching and observing the B2B booking system used in Mercan Tourism, we come up with the 5 major components (Input, Process, Output, Storage, Communications) that is included in a system. We also included the storyboard for the interface of the software we suggested for Mercan Tourism. The prototype of the software will be develop based on Android devices. With this software, Mercan Tourism will be able to interact with their customers through a much convenient interface compared to mobile version of websites. Improvement and suggestions are included towards the end of this document to show that what are the things that could be done to improve Mercan Travel and how this will impact Mercan Tourism on sales and the ease of the users.

## MERCAN TRAVEL - COMPUTER SYSTEM USED IN MERCAN TOURISM

### **Introduction**

#### **Mercan Tourism Turkey DMC**

Mercan Tourism DMC Turkey is used as the subject of the research in this assignment. It is a travel agency, authorized by Turkish Ministry Tourism under operation license number 1446 and it is also a member of Tursab (Association of Turkish Travel Agencies). Since the foundation year of 1985, Mercan Tourism had also been found out to be highly recognized and respected in the Turkish Tourism Market. It is a full service Tour Operator & Destination Management Company (DMC) that offer services in Istanbul and every other significant destinations across Turkey. In Istanbul, they have exclusive tariff agreements with several major hotels and various departments with professional English and Arabic speaking staff serving 365 days and promoting Turkey as the natural choice for the customers. They also provide a wide range of products and comprehensive solutions such as FIT Programs, Group Incentives, Congresses and Business Meetings, VIP Services, Medical and Patient Treatment Programs, Hajj and Umrah, sightseeing programs and others.

#### **Mercan.Travel**

The current system that the company utilized is a B2B (Business-to-Business) online booking system. It is an online booking system solution owned and self-developed by Mercan Tourism itself. It provides business to business destination management services by offering a completely new online booking engine powering hotel reserving, transportation and sightseeing programs all over Turkey. It also has an online search engine installed on the website to ensure a fast, dynamic and reliable way to make reservations online from anywhere in the world with the Internet. By logging in to the website, the customers will be able to access the online booking system and get the best offers or promotions available to the customers.

## 5 Components of Information Processing Cycle

Information Processing Cycle stands for the sequence of events in processing information. This includes [1] **Input**, [2] **Process**, [3] **Output**, [4] **Storage**, [5] **Communication**.

### Input

Input is a set of data or instructions entered into the memory of the computer through input devices. As mentioned above, there are two types of input, data and instructions. Data are like ‘raw materials’ of a system. It consists of unprocessed text, numbers, images, audio and video. Instructions are insert in programs and as the processor reads the program, they will execute necessary commands and also reads user responses. Input device is a hardware component that allows users to data and instructions. Input has two categories that play as the important elements in the Information Processing Cycle of Mercan Travel. The two categories are input data and input devices.

### Input Data

Mercan Travel is a B2B Online Booking System and it allows user to book trips through it. Therefore, there will be a huge number of input data needed as it needs to prepare the best package based on user customization. Examples of input data used in Mercan Travel are usernames, passwords, company details, customer information and finance support which can be found in *Figure x.x.x* and *Figure x.x.x*. To complete the process of data input, an instruction given by the user is needed to send the data to the system. User can click on the ‘Submit’ button (*Figure x.x.x*) to instruct the system to process the essential data input in the forms.

### Input Devices

Users can use physical keyboard (*Figure x.x.x*) or on-screen keyboard (*Figure x.x.x*) to insert the data in the form provided while pointing devices such as mouse (*Figure x.x.x*) or touchpad (*Figure x.x.x*) are used to direct and control the cursor to send instructions to the system.

A normal keyboard, regardless whether it is physical or on-screen keyboard, could be divided into 3 areas, typing area which consist of all 26 alphabets and symbols, numeric keyboard which is

usually positioned on the right side of the keyboard for user to enter numbers more fluently and function keys that allows users to quickly insert commands to the computer.

Pointing devices controls the movement of the cursor on the screen. A mouse is a pointing device that fits under the palm of hand. There are 5 common types of mouse, mechanical, optical, laser, air and wireless. A touchpad is a small, flat, rectangular pointing device sensitive to pressure and motion.

**Process**

Process is the part where the computer has to actually do something with the input that has been given. The processor will take the user input, interpret it and decide what to do next.

**Business to Business Booking System**

Business to Business (B2B) booking system is when one business organization makes a commercial transaction with another business organization. As for Mercan Tourism, their B2B booking system offers their customers access into their web based booking engine. This engine will enable the customers to book their travel services and give them real time access to make online bookings through the website and also make reservations. Customers can later log on to their website again to access active reservations, view transactions, confirm bookings or download necessary documents.

**Steps to Book with Mercan.Travel**

If a business organization would like to use the B2B booking system by Mercan Tourism, there are 5 steps that they should follow.

***Step 1***

Business organization should register to Mercan.Travel. After registration, the business organization should wait for the approval by Mercan Tourism. After registration, the organization will be contacted via email which was provided in the registration form earlier. The organization will then be able to login and start the reservation process.

***Step 2***

Once logged in, user can choose from more than 125000 hotels and also choose the transportation method and their sightseeing spot.

***Step 3***

Organizations will be able to book the room easily and efficiently since the rates given by Mercan Tourism will be the best price guaranteed and it also integrates various method of self payment to allow convenience for the users. Mercan Tourism covers users from various different countries



speaking different languages, therefore, Mercan.Travel has multilingual features such as English, Turkish, Arabic and many others.

***Step 4***

Mercan.Travel has a very simplify design which is user friendly. It also has an editable product listing and instant confirmation, allowing users to modify their reservations.

***Step 5***

Get vouchers and best available rates from Mercan.Travel to book hotels from over 10000 hotels worldwide for your organization trip.

## **Output**

Output are information given by the computer. Information are data that had been processed into a useful form. Output devices are hardware that conveys and show human-readable information from electronically generated data to one or more people. Output has two categories that play as the important elements in the Information Processing Cycle of Mercan Travel. The two categories are output data and output devices.

### **Output Data**

The essential information of the database will display on the monitor during customers' access to the website of the system, Mercan.Travel (*Figure x.x.x*). Moreover, customers' contact number or email address can be shown on the monitor when developers need confirmation about their booking or inform customers whenever there are changes in the booking.

### **Output Devices**

Though various media could be used to relay the information back to the user, but generally customers can view information about Mercan Tourism when they access to the website through monitor while the developer can visually look at the images to arrange the data input from the customers. Furthermore, printer is a paramount for both parties. This is because both parties will use printer to print out the receipt payment as an evidence of their transaction payment and essential documents to be documented for future referencing.

**Storage**

Storage holds data, instructions, and information for future use. Storage device is a hardware that records and retrieves items to and from storage media. The process of the storage device is simple, it reads and writes. Reading functions as a source of input, it prioritizes in transferring items from storage media to memory. Writing creates output, it transferred processed items from memory to the storage medium. When choosing a storage device for storing all the data, Mercan Tourism is concerned of two things, the storage medium's capacity and the access time. Capacity is the number of bytes a storage medium can holds. For a huge company like Mercan Tourism, the capacity of their storage medium must be huge to be able to process huge amount of data. Therefore, they would possibly be targeting to get a storage medium of the capacity of a few terabytes or petabyte. Access time is the time it takes for the storage device to locate item on storage medium. Mercan Travel will need to process a huge amount of data and information every second, therefore having a storage medium with a fast access time will be perfect. This will make sure that the users will not have to wait for the information they want to view to load at a very slow rate. Below are the three storage medium that we think that Mercan Tourism will be using.

**Mainframe**

Mainframe, known as 'big iron' in the IT world, is an extremely high performance computer that provides greater availability and security than a smaller-scale machine can offer. Mercan Tourism uses mainframe to store and process all the data input by the user and convert all the data to human-readable output.

**Network Attached Storage**

It is a type of file-level computer data storage server. Files could be shared within users of the same network. Enterprise usually uses NAS's storage ranging from approximately 2TB - 1000TB.

**Hard Disk**

It is a device that consists of several inflexible, circular platters which store items electronically in

a high-capacity volume.

**Communication**

Communication device is a hardware device capable of transmitting an analog or digital signal over the telephone, other communication wire, or wirelessly. There are few major communication devices needed in order to use mercan.travel.

**Modems**

Best example of communication devices are modems, which is capable of transmitting signals to allow computers to talk to each other over the telephone. It converts digital data into analogue data to transmit it over the telephone. It will also do the opposite when it is receiving data. For example, customers use modems to access Mercan Travel website from the mainframe and allowing developers to update or receive information whenever there are any changes.

**Wireless Fidelity**

Another good example of communication devices is Wi-Fi device. Short for Wireless Fidelity, Wi-Fi utilizes one of the IEEE 802.11 wireless standards to achieve a wireless connection to a network. A home wireless network uses a wireless access point or router to broadcast a signal using WPA or WEP encryption to send and receive signals from wireless devices on the network. Some PCs does not come with a built-in wireless adapter so it requires an external wireless adapter, a thumb-drive-like device which enables the user to connect to the internet. Customers can access Mercan Travel through Wi-Fi by loading its webpage while developers use it to update crucial information in their mainframe system without any internet cable connected to the laptop or computer.

**Router**

Another important network communication device is the router. It is responsible for delivering network traffic to its correct destination. It reads the destination address from the packets of data and deliver the packets to the address. A user will need a router to be able to connect to the internet in order to access Mercan Travel.

## Storyboard

[Storyboard goes here]

### **Improvement & Suggestions**

Mercan Tourism is having a huge amount of customers every day and it's almost impossible for them to cope with the amount of questions asked by the users. Mercan Tourism provides B2B Online Booking System so Mercan Tourism's customers will most probably be large organizations or even tour agencies. The amount of customers each of the tour agencies or organizations has is tremendous. So, we came up with a suggestion for Mercan Tourism that could cut down the amount of questions thrown by the users and also increase their business even more. We came up with an application which is based on the Android operating system. Only registered user will be able to login to the application. No registration will be allowed.

### **Description of the application**

The main purpose of this application is to keep the user connected to their plans and trips faster than ever. We do that by providing a full list of details of the trip to the users. Users can now view all the sightseeing point from images and descriptions to map location. This will allow the users to plan their schedule and be able to plan their time and journey themselves for their free period. Users will also get notified with the latest events and promotions from Mercan Tourism.