

MY TRAVEL – SYSTEM DESIGN REPORT

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FIT9130 System Analysis & Design

# EXECUTIVE SUMMARY

Tourism is an industry which has flourished over the years due to the growing need for individuals to travel the world and explore new places to unlock and unwind one’s mind and soul, or as millennials call it wanderlust!

Belonging to the same industry is My Travel, your travel buddy. An easy to navigate website solution for all your travel needs.

With the increasing use of computers and mobile devices and also the emergence of information technology, customers expect hassle free services and products. Combining IT with My Travel, this report would like to put forwards a solution to take My Travel to the next level. With the steady increase in business enjoyed by My Travel, manual approach to the business process cant suffice. An integrated platform in the form of a website where customers and listed hotels can view real time information and with other added functionalities as discussed in the report.

With the simplified approach of information sharing and slight automations for instance setting of triggers, the website activates the factor perceived ease of use. This can transform My Travel and help them step up their game and take the industry by storm.

My Travel is based out of Melbourne, Victoria and aims to the only firm people think of when they think Holiday. With the summers round the corner and Melbourne on the run, this transformation is just what My Travel needed.

My Travel will primarily target all genders aged 16 to 60 with custom designed travel packages and exotic destinations, all within your price limits.

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# NARRATIVE OVERVIEW

## 1.1 INTRODUCTION

My Travel has seen steady profits and increase in their business in the recent times. Since the increase in no. of clients, legacy systems are not working out efficiently for My travel and have been suggested to use a web platform to integrate all business processes and provide better and faster service to its customer with a beautiful interface. The website will show search results based on inputs from the customer which helps build a package which is tailor made and suited for that particular customer.

## 1.2 BACKGROUND ABOUT THE CLIENT

My Travel is a company providing holiday packages to its customers and helping them fulfil their travel booking needs. Their booking types range from individual, family all the way to corporate bookings.

Currently My Travel has 4 staff members who work tirelessly to provide a never forgetful experience to their customers. Presently My Travel averages 250 bookings in a month, which is impressive for the small overhead it has.

My Travel has a strong and influential customer network and includes couples, government (Retreat Partners), children and elderly alike.

**Hierarchy at My Travel** (Horizontal)

\*NOTE: Each department has 1 employee

## 1.3 BUSINESS SCENARIO

**Scenario as it stands today:**

MT gets a call or a walk-in from the customer where the customer shows the desire to book a holiday. MT notes down the necessary details like the dates, location, interests etc manually and based on those inputs provides a package suitable for the customer encompassing all the requirements. When the customer chooses the from the given packages MT calls the Hotel to check for acceptance of service. Based on the Hotel’s reply it informs the customer, again on call or text.

**Problems with this Scenario and plausible opportunities for improvement in process efficiency:**

* Staff Limit: Once the business grows and the no. of customers increase it will be difficult to process all customer requests with just 4 people.
* Unorganised Data: Storing of customer data in an unorganised manner leads to loss and inconsistency. Editing, deleted or adding new customers will always be a task. When the customers increase, keeping data in one excel sheet will make Excel slow/crash.
* No Data Capability: The data cannot be used to draw out useful information or conclusions or to help build a better package for the customer.
* Customer Reach: Since MT handles clients face to face or on call, there are a boundary barrier for the reach MT can have.

## 1.4 SCOPE

**The product proposed by the report:**

* **A Website**

A website application, with functionalities and slight automations to make life easier for the customers and MT staff alike. The website will have functionalities accessible to customers, Hotel and MT staff. Below will be discussed what exactly each actor can do with the system and how the anticipated response is like.

**CUSTOMER:**

On typing the URL of the website, the customer will be directed to the home page of the website where its briefed about the destinations and the activities you can do at that particular destination.

Moreover, customer can input certain search criteria’s (*Destination, Places of interests, Interesting events, Duration, Price*) which will show them related results and what My Travel has to offer in and around that destination. This will be done in terms of comprehensive packages.

On clicking on any of the displayed packages customer will be able to see the ratings of the hotel listed in the package, the room size, no. of maximum occupants allowed, amenities provided by the hotel (WIFI, 24\*7 room service, etc), Smoking/Non-Smoking room, pictures of the rooms and the hotel lobby, pictures and information about must visit places and popular restaurants to eat at, etc

Once the customer has heart set on a destination they can send a booking request to MT through the website which encompasses information like

* Name
* Travel Date
* Hotel
* Activities of interest

On sending the request, the website will prompt a reference number on the screen coupled with two messages, one stating MT would contact the customer within a week with the additional details and confirmation and the other stating that customer query will be addressed with reference number and the name of the customer in any future conversation.

Once the booking is confirmed, an email will be received by the customer acknowledging the confirmation. In another mail, the customer will get the login credentials to his/her profile on My Travel website. The customer can go on the profile and reset the password whenever he/she would like. While accessing the profile in the My trips tab, the customer will be able to see the total cost ( Fixed + Variable (for additional packages)) and other details about the active trip.

On accepting the package suggested by My Travel, the customer will be redirected to the payment page. Before customer makes the payment, he/she will have to check off on the terms of the package. Information in the consent form include:

1. Cancellation policy
2. Change of date Policy

While making the payment, customer will be prompted to input any discount coupon if he/she posses any. Discount coupons are given to regular customers only.

On moving ahead, the system will deduct the price further if any promotional rebait is applicable to the customer based on the total cost or type of booking.

At the end of the journey the customer can do 2 more things

1. Feedback to MT: This is regarding any process change on MT’s end which can improve customer experience or the travel package.
2. Review to the Hotel: This is regarding the service and hospitality received at the Hotel. This will purely entail Hotel review.

**MY TRAVEL STAFF:**

My Travel is at the centre of every process aligned to confirm a booking. MT bridges any communication between the Hotel and the customer. Once a booking request is made by the customer, MT starts the process loop of contacting the hotel and following up on the request. On acceptance of service by the Hotel, MT notifies the customer and sends any additional package requested by the customer (which is charged extra). MT also maintains and updates a database with information on the listed hotels at MT. When any new hotel wants to come on board, MT request a hotel registration form from the Hotel. It also conducts investigation on the hotel which includes finding any red flags, checking the rating on various platforms, or any other information on the hotel. MT staff being the face of the organisation deals with all enquiries from the customer as well as the hotel.

**HOTEL:**

Hotels wanting to join the My Travel community have to fill a Hotel Registration form. On the filling the form, MT will send an acknowledgement. Once MT receives the form and perform all necessary steps to check eligibility of the Hotel to be on the MT platform, an appropriate reply will be sent to the hotel.

If the response states that MT is happy and excited to have the Hotel on board, then it will also be coupled with the essentials for login and to perform other updates. Essentially what MT would do is create a profile for the Hotel on their website where customers will be able to access the rating and time stamped reviews which customers have bestowed on the hotel.

On receiving the booking request from the system (System only forwards it to the hotel, originally from the customer) the Hotel responds depending on its ability to service the customer. Hotels also receive follow up calls from the MT on the requests which are unanswered.

If the Hotel accepts service, a confirmation is recorded on the system. Hotels can access the details of the package and can notify MT of any changes.

After the customer stay ends, Hotel pays commission to MT;

* 75 $AUD 🡪 Individual Booking
* 200 $AUD 🡪 Group Booking
* Additional commission 🡪 Additional Package

# 2. KEY BUSINESS REQUIREMENTS

Business requirements of MT is to successfully confirm and regulate service from the Hotel. This is done with the integrated web-platform approach.

## Business Requirements:

* Every action taken (generation of booking request, Confirmation of booking request) should be time stamped. This is done to gather information about the time elapsed between booking and confirmation. My Travel will to minimize that time.
* Marketing is to be done through SEO & SEM optimization. Ads to be placed on the web if budget permits. Mobile marketing through SMS can also be done. Social media marketing is a new and exciting space to be looked at.

## Customer End Requirements:

* Customer should be given Secure payment methods
* User data integrity and privacy

## System configuration and design Requirements:

* + A secure payment gateway should be presented to the customer at checkout. This instils security into the system. It also enhances trust with the user.
  + SSL secured Website with Trust certificate(Depicted by lock sign).
  + Servers strength according to the estimated reach of the website and its processing power. Room for adding server space.
  + Website compatibility with mobile and desktop browsers
  + Consistency with colour scheme and fonts used.

## Functional Requirements:

### Searching Holiday Package:

* 2.4.1.1 System should have the ability to display all holiday packages
* 2.4.1.2 System should have the ability to allow customer to enter search criteria
* 2.4.1.3 System should have the ability to display search result
* 2.4.1.4 System should have the ability to allow the customer to choose a package
* 2.4.1.5 System should have the ability to display information about chosen package
* 2.4.1.6 System should have the ability to display reviews about the package

### Book a Package:

* + - 1. System should have the ability to allow customer to send a booking request on a particular package
      2. System should have the ability to allow customer to include information with the booking request
      3. System should have the ability to take customer email id to confirm booking
      4. System should have the ability to display reference number
      5. System should have the ability to display message to customer informing them MT will follow up with them in a week’s time
      6. System should have the ability to allow customer to follow up using reference number and name
      7. System should have the ability to locate customer request based on reference number and name

### Confirm a package

* + - 1. System should have the ability to notify MT staff about booking request
      2. System should have the ability to notify Hotel about booking request
      3. System should have the ability to set reminder for MT staff if hotel doesn’t respond
      4. System should have the ability to get notified about acceptance of service from the hotel.
      5. System should have the ability to send confirmation mail to customer if notified by the Hotel
      6. System should have the ability to calculate commission
      7. System should have the ability to confirm booking and record it

### Hotel management

* + - 1. System should have the ability to allow hotel to download hotel registration form
      2. System should have the ability to record Hotel Information
      3. System should have the ability to save hotel information in database
      4. System should have the ability to access database and retrieve information
      5. System should have the ability to approve hotel if prompted by MT staff
      6. System should have the ability to send standard acceptance email to hotel with login credentials
      7. System should have the ability to create profile for the hotel on MT website
      8. System should have the ability to show hotel information

### Customer Login

* + - 1. System should have the ability to give login credentials to user
      2. System should have the ability to send updated package to the customer
      3. System should have the ability to allow customers to log in to the website
      4. System should have the ability to show current and past customer bookings
      5. System should have the ability to allow customer to provide feedback
      6. System should have the ability to allow customer to leave reviews on hotels
      7. System should have the ability to update personal information on the website

## Non – Functional requirements:

* + 1. Reliability
* Website servers should be designed to hold traffic and not crash
* Data should be replicated on a chosen repository to avoid loss of data
* Website should have low downtime
  + 1. Usability
* Website design should be soothing
* Easy navigation through the website
* Use of drop down menus and tabs to declutter web space
* Consistency in web design throughout all web pages
  + 1. Data Security
* Data entered by the customer should be secure at all times
* Automatically log user out after inactive period

# LIMITATIONS AND CONSTRAINTS IN THE SYSTEM

* The system has a single point of failure. For instance, if the website is down due to whatever unforeseen reason there is no way to retrieve information on the bookings.
* Due to dependence of Hotel on the confirmation of booking, delay can be caused which could turn away customers.
* Information is not entirely secure as MT Staff has access to customer information
* Changes in the request have to go through the whole loop of getting accepted by the Hotel which increases its turnaround time
* Cancellation of package is entirely burdened on the customer, which could repel customers to return next time around.

# ASSUMPTIONS

* Cancellation of confirmed package cause in loss of entire package amount
* Changes in booking dates will be charged if done after confirmation
* Promotions are for every customer based on their package
* Discounts are for selected regular customers only
* Consent form signed by employee will have cancellation and date change policy
* explicitly mentioned in it
* Reference number is unique to each holiday package selected by a customer and is recorded against it
* MT Website will run alongside the manual process for walk-ins and later on can be integrated into one
* MT staff has competency in basic computer use and handling.
* Payment flow happens as

CUSTOMER 🡪 HOTEL 🡪\*After checkout\*🡪 MT (Commission)

# Techniques used for requirement gathering

-Interview with MT Owner and MT staff: Gathered insight on their

* Business model and business process.
* Goals they want to achieve with their updated platform and business process
* Expectations from the new system

-Interview with a MT tied up hotels: Gathered insight on the

* Operational requirement at the hotel
* Expectations from the new system
* Staff competency in basic computer skills

-Research on competitors: Their business model and position in the industry

-Survey: Customer willingness to shift to the online platform

# Stakeholders

# DESIGN TECHNIQUES USED TO ARRIVE TO THE PROPOSED SOLUTION

To arrive at the proposed web based solution for My Travel UML User, activity and system sequence Diagram was used.

Use case depicts how the system and its actors exist in a system and what “goals” do they wish to achieve from the system

Activity and System Sequence diagram is depicts the flow of events which takes places when ‘Confirm Booking’ is activated.

### USE CASE DIAGRAM:

### USE CASE DESCRIPTION:

|  |  |  |
| --- | --- | --- |
| USE CASE NAME: | Confirmation of booking | |
| SCENARIO: | Booking confirmation through website | |
| TRIGGERING EVENT: | MT staff is presented with booking request | |
| BRIEF DESCRIPTION: | Booking request is received by MT & triggers system to contact the hotel, hotel agrees service and confirms booking with MT who in turn confirms booking with the customer | |
| ACTORS: | MT Staff, Hotel manager and Customer | |
| STAKEHOLDERS: | Customer, Hotel, Accounting, MT Staff | |
| RELATED USE CASE: | Will be provoked by *Generate Booking request* use case | |
| PRECONDITIONS: | MT staff gets a booking request from a customer inclusive of information on   * Name * Travel Date * Hotel * Activities of interest   MT should have generated a reference number and given it to the customer | |
| POSTCONDITIONS: | -Confirmation email sent to the customer by MT staff  -Login Credentials like User Id and password to be given to the customer | |
| FLOW OF ACTIVITIES: | ACTOR | SYSTEM |
| 1. MT staff receives generated request 2. Hotel in-charge receives notification 3. Hotel in-charge doesn’t reply to the request1 4. MT staff follows up with the Hotel in-charge 5. Hotel responds to request 6. Hotel in-charge confirms acceptance of service 7. Hotel in-charge confirms booking to MT staff 8. MT staff receives confirmation 9. MT staff confirms booking to Customer 10. Customer receives credentials | * 1. System contacts hotel   2. System sends generated request to hotel in-charge     3.1 In case of no response, system sends reminder to MT Staff  9.1 System generates User ID and password  9.2 System creates an customer instance  9.2 System sends login credentials to customer |
| EXCEPTION CONDITIONS: | 1. Customer enters invalid or incomplete data 2. Customers choose a package which wasn’t accepted by the hotel | |

### ACTIVITY DIAGRAM:

### SYSTEM SEQUENCE DIAGRAM: