Child Management System on Salesforce for CRM Charity

Software Design

By

Dolawat Wannapira 572115022

Suradis Sutampang 572115058

Department of Software Engineering

College of Arts, Media and Technology

Chiang Mai University

**Project Advisor**

Dr. Chartchai Doungsa-ard

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DO = DOLAWAT WANNAPIRA

SU = SURADIS SUTAMPANG

CC = DR. CHARTCHAI DOUNGSA-ARD

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# **CHAPTER ONE | Introduction**

## **1.1 Purpose**

The purpose of the software design document (SDD) The “Wanna Trips” is to design the detailed structure of the system according to the software requirement specification (SRS). This SDD makes the members of the project team understand the works in the same way. And the works are included with the detailed design of the system using a class diagram, sequence diagram, entity relationship diagram and user interface design.

## **1.2 Project Scope**

The “Wanna Trips” is a mobile application that focused to help the clients to find the van drivers easily. The system provides the clients to be able to create a trip for matching with the available drivers.

The features of “Wanna Trips” as shown below:

· User Management System

· Schedule Management System

· Reservation Management System

· Notification Management System

· Payment Method System

## **1.3 User Characteristics**

The “Wanna Trips” is a mobile application for helping the clients to find the van drivers easily. The system provides the clients to be able to create a trip for matching with the available drivers.

In this application, there are four actors as following:

|  |  |
| --- | --- |
| **User** | **Role** |
| User | The user is the people who does not login. so, they cannot do anything with the application until they are login already. |
| Client | The client is the people who have login as the client. so, they can do something with the application as the client, such as. Create a trip and view the van driver’s profile. |
| Van driver | The van driver is the people who have login as the van driver. so, they can do something with the application as the van driver, such as. View the details of a trip and manage the schedules. |
| Admin | The admin is the administrator of Wanna Trips who takes the responsibility to control and manage the system. |

## **1.4 Acronyms and Definition**

### **1.4.1 Acronyms**

SRS - Software Requirement Specification

URS - User Requirement Specification

UI - User Interface

SD - Sequence Diagram

UC - Use Case

### **1.4.2 Definitions**

|  |  |
| --- | --- |
| **Name** | **Description** |
| Design | - During the period in the software life cycle, which the designs for architecture, software components, interfaces, and data are created, document, and verified to satisfy requirements. |
| Sequence  Diagram | - A sequence diagram in a Unified Modeling Language (UML) is a kind of interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence Chart. A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects need to carry out the functionality of the scenario. |
| UML | - Unified Modeling Languages. Standardized notation for Modeling design descriptions, architectures or scenarios. Not depending on a specific method. Issued and maintained by the Object Management Group(OMG). |
| Class  Diagram | - In software engineering, a class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system’s classes, their attributes, operation (or methods), and the relationships among the classes. |
| User  Interface | - The portion of a computer program with which the user interacts, i.e., the interface between a user and a computer program. There is a commend-line interface, menu-driven interfaces, and graphical user interfaces (GUIs). |

# **CHAPTER TWO | System Architecture**

## **2.1 Architecture Overview**

Figure : Architecture Overview of Wanna Trips

Figure shows the system architecture. This system consists of User Management, Reservation Management, Notification Management and Payment Method.

**User management**

The user management part allows the users to manage their own profile, such as, change a profile picture, change a name and so on. The user management will be separated into two parts.

**1.** **For the client**

Can be able to edit their information, make a trip reservation, view details of the driver and select one of them.

**2.** **For the driver**

Can verify themselves before use it. They can edit their information, see the details of the trip, and select a trip that they would like to provide service.

**Reservation Management**

The reservation management part provides the client to be able to make a reservation by input the details of their trip, such as, the destination, passengers and date.

**Notification Management**

The notification management part provides the notification for both sides. When clients have made a reservation for their trip, the driver can see detail and confirm the trip. Then, the system the will alert for the client to choose one of them and confirm.

**Payment Method**

The payment method part provides UI to upload the transaction document to confirm the money transfer.

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# **CHAPTER THREE | Detailed Design**

## **3.1 Class Diagram**

## **3.2 Class Diagram Description**

**CD1-01:** Class Name: UserAuthenticationController

**Picture**

**Attribute:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Description** | **Type** |
| 1 | userDetailsService | This is an object of userDetailsService Class | UserDetailsService |
| 2 | userService | This is an object of userService Class | UserService |
| 3 | authenticationManager | This is an object of authenticationManager Class | AuthenticationManager |

**Method:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Name** | **Description** | **Parameter** | **Return Type** |
| 1 | getUser() | This method is used for getting the user that is logging into the system. | - | UserTransfer |
| 2 | createRoleMap(userDetails) | This method is used for finding the type of the user. | userDetails: UserDetails | UserDetails |
| 3 | authenticate(body) | This method is used for logging into the system. | body: String | TokenTransfer |

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# **Chapter Four | Database Design**

## **4.1 ER Diagram**

## **4.2 Table Description**

## 

# **Chapter Five | Sequence Diagram**

## **5.1 Feature#1 Authentication System**

**SD1-01:** Administrator, farmer, and farm owner can request to log in to the system

## **picture**

## **5.3 Feature#3 Environmental Monitoring System**

**SD3-11:** Farmer and Farm owner can view the environmental data at current time.

**picture**

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# **Chapter Six | User Interface**

## **6.1 User Interface Part**

### **6.1.1 UI-01 Login Page**

**picture**

**Description:** Login page is for the user to login to the system.

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# **CHAPTER FOUR | User Interface Design**

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