

Requirement Documentation

This document details the requirement specification of the domain, as well as analysis via diagrams, schema and discussion, to provide system analysis, system design, physical design, and applications design, which could lead to the creation of an automated registration system for banquet management.

Group 11:
Su Li-13104448d
Tao Peng-13104616d
Yuanjing Shi -13104584d
Yunkun Chen-13103214d

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Introduction

There will be a conference called Global Conference in 2016 in Hotel ICON. With the aim to make this event a success, one registration and attendance management system is indicated and designed to meet the expectation of host hotel and organization.

The purpose of the registration and attendance management system is to allow attendees register, acquire useful banquet information and make choices of seating arrangement and participation of activities and events with a user-friendly interface. Also administrators is able to search for relative information, check up their event schedule, receive the schedule reminder, update information and write feedback information after the event.

This documentation is separated into three parts, including functional and data requirement, use-cases and entity-relationship diagram, schema as well. The first part specifies the functions could be achieved by our system and corresponding data storage with MySQL database management system. Then use-cases is introduced for necessary scenarios and corresponding I/O. Entity-Relationship diagram is followed and shows our system design principle, together with its relevant schema, which is from ERD and used for database construction.

Functional and Data Requirements

1. Banquet Information Management

- 1.1. The administrator is able to organize banquets to manage event details and information of attendees after logging into the system.
- 1.2. The administrator can create a new banquet.
- 1.3. The following information needs to be inputted by the administrator while creating a new banquet:
 - 1.3.1. Banquet Name,
 - 1.3.2. Date and time of Banquet
 - 1.3.3. Address

1.3.4. Location

1.3.5. First Name of the Contact Staff

1.3.6. Last Name of the Contact Staff

1.3.7. Capacity

1.3.8. Seating plan

1.4. A list will contain some information about banquets and attendees of them.

1.5. Administrator can view and sort the list of attendees.

1.6. Administrator can edit attendee information and import it from record files. The information includes:

1.6.1. Banquet identification number

1.6.2. First name

1.6.3. Last name

1.6.4. Address

1.6.5. Attendee type

1.6.6. Affiliated organization

1.6.7. Drink choice

1.6.8. E-mail address

1.6.9. Meal choice

1.6.10. Remarks (For other delegates only)

1.6.11. Special meal and drink request and remarks (For VIP and sponsors only)

1.6.12. Payment

- 1.7. Reminders will be shown to both the administrator and all attendees about the approaching of the banquet when necessary. Administrator can edit the reminder information settings in system setting part.

2. Attendee Registration Management

- 2.1. There are three kinds of attendees:

- 2.1.1. Sponsors
- 2.1.2. VIP
- 2.1.3. Others

- 2.2. Attendee can log in this system using their given account and password through the login page.

After logging in, attendee can view their settled information, including:

- 2.2.1. First name
- 2.2.2. Last name
- 2.2.3. Address
- 2.2.4. Attendee type
- 2.2.5. Company
- 2.2.6. Affiliated organization
- 2.2.7. E-mail address

- 2.3. After logging in, if attendee wants to register a banquet, it's necessary to select a certain banquet together with meal choice, drink choice and seat choice.

3. Search Module

- 3.1. Banquet Search: The administrators can search for a list of related banquet or a particular banquet.

3.2. Attendee Search: The administrators can look up for a particular or group of attendees with a certain banquet or all available banquets. The search criteria are :

- 3.2.1. First name
- 3.2.2. Last name
- 3.2.3. Attendee type
- 3.2.4. Attending banquet
- 3.2.5. Affiliated organization
- 3.2.6. Drink choice
- 3.2.7. Meal choice

The result will contain all the information of selected attendees.

3.3. Every 20 search results will be displayed per page for easy reading.

3.4. Administrators can gain, sort and print the result of searching, and can also save and export it as a PDF file. For attendee search, the results can be sorted by:

- 3.4.1. Attending banquet
- 3.4.2. First name
- 3.4.3. Last name (in descending order)
- 3.4.4. Meal choice
- 3.4.5. Drink choice
- 3.4.6. Seat number
- 3.4.7. Affiliated organization

4. Seating Plan Generation

- 4.1. In Default Settings, circle tables with 14 seats (usual and famous setting) per table in the seating plan including tables for the VIP and sponsors.
- 4.2. Shape and number of seats for each table can be specified before generation.
- 4.3. As the number of seats for the VIP and Sponsors table may be different from other attendees' tables, the administrator will need to pick an answer in combo lists for the following questions:
 - 4.3.1. What is the people of the banquet table? (VIP / Sponsors / Others)
 - 4.3.2. What is the shape of the banquet table? (Circle / Oval / Rectangle)
 - 4.3.3. How many seats are there for the table? (1 – 14 seats)
- 4.4. The administrator can check “Default Settings” if he/she does not want to make any special arrangement for the seating plan.
- 4.5. Seating Plan Generation: The seating plan generation module can be accessed in the Banquet Information page. After selecting a banquet, the administrator can view the banquet information with a “Seating Plan Generation” section underneath.
- 4.6. The administrator can generate JPEG picture of seating plan, which contain two pages in A4 size. The picture includes:
 - 4.6.1. First page: Seating plan indicating meal and drink preferences on each seat together with explanation of indicators and seating number marked on each seat.
 - 4.6.2. Second page: List of attendee names and their according seat numbers. The attendee names will be arranged by last name and first name in ascending order.
- 4.7. The seating plan will be automatically updated when the administrator regenerates the seating plan.

5. Report Generation

- 5.1. The report generation will help to notify the hotel side about the total meal choices for their convenience and efficiency.
- 5.2. By selecting “Report” in the menu and selecting the suitable banquet in the “Report” page, a report will be generated in PDF file and displayed in a new page. Administrator can print it out or save it.
- 5.3. The report includes
 - 5.3.1. Banquet Information, all the information preset for this specific banquet would be displayed.
 - 5.3.2. Meal Summary, the number of order for each meal choice as well as to which table these dishes should be sent.
 - 5.3.3. Drink Summary, the number of order for each drink choice as well as to which table these dishes should be sent.
 - 5.3.4. Table Summary, including table type, user group and capacity with all the register information of this specific table.\
 - 5.3.5. Attendee List, including all the information of registered attendee and total attendee number.
- 5.4. If any attendee’s information has been changed, a new report with most updated data will be generated if the administrator reloads the “Report” page and select the banquet.

6. System Management

- 6.1. Account Management: Only administrator will access the system with an administrator account.

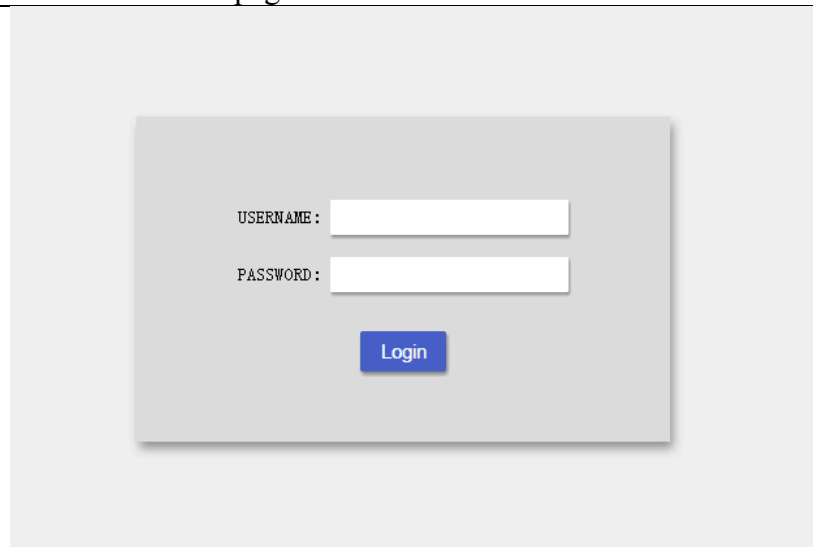
6.2. Administrator will be given an account with pre-defined username and password. With the account, the administrator will be able to use the functions provided by Banquet Information, Search, Seat Plan Generation and Report Module.

6.3. After logging on the account, the administrator can change the password by selecting “User Settings” in the menu bar.

Use Cases

1. Log in

Use Case Name	Log in
Actor	Administrator or Attendee
Purpose	Log in the system
Overview	By inputting the user name and password on different login pages (although looks similar), administrator and attendee will log in the system and enter different home pages. Note that different login name and password would lead to different homepage.



1. Create/Edit/Delete Banquet

Use Case Name	Create/Edit Banquet
Actor	Administrator
Purpose	Create a new banquet for attendees to participate in

Overview	After logging in the system, the administrator can click “create/edit banquet” on the home page. Then the administrator can create a new banquet by indicating information about banquet name, date, time, capacity, address, location, first name of the contact staff, last name of the contact staff and four different meals of this new banquet, seating plan as well. The system will save the information and set an identification number on the banquet.
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Create new banquet

[Create Banquet](#)
[Search Banquet](#)

Banquet information:

Banquet Name:

Date:

Time:

Address:

Location:

Banquet contact:

First Name:

Last Name:

Banquet contact:

First Name:

Last Name:

Meals:

Meal 1:

Meal 2:

Meal 3:

Meal 4:

Table setting:

Table 1: Shape: For: Seat:

[Add table](#)

[Create](#)

2. Search banquet

Use Case Name	Search banquet
Actor	Administrator
Purpose	Search for a specific banquet to view the result.
Overview	The administrator selecting “search” in the menu, and then select banquet search and type banquet keyword or date or both in it. The banquet name and date will be shown and linked to the respective banquet information page. The administrator can also specify to arrange the search result in date order. The administrator selects “Print” on the page, the search result will be exported to a PDF file. The administrators may save the file or print it out directly.

Search banquet

[Create Banquet](#)
[Search Banquet](#)
Name: [Search](#)From:

年 / 月 / 日

to:

年 / 月 / 日

[Search](#)

Banquet A

Time: 2016/01/01 19:00

[Edit](#)

Banquet B

Time: 2016/01/01 21:00

[Edit](#)

Banquet C

Time: 2016/01/04 12:00

[Edit](#)

3. Attendee registration & receiving reminder

Use Case Name	Attendee registration
Actor	Attendee
Purpose	Register for a new banquet and receiving reminder
Overview	After logging in the system, the attendee can click “Register for a Seat in a Banquet” on the home page, then attendee will be directed to a registration page. He/she shall complete the requirement of registering the banquet. When completed, the attendee will go back to the home page. 3 reminders will be shown on the home page on 10,5 and 3 days before the banquet will be held.

Register

Register for Banquet A

Information:

Type:

☐ Sponsors ☐ VIP ☐ Others

First Name:

Last Name:

Email:

Address:

Affiliated Organization:

Table and seat:

Select table:

Select seat:

Meal & Drink

Meal:

☐ Meal A ☐ Meal B ☐ Meal C ☐ Meal D

Drink:

☐ Drink A ☐ Drink B ☐ Drink C ☐ Drink D

Remarks:

Register

4. Search/Edit attendee information

Use Case Name	Search/Edit attendee information
Actor	Administrator
Purpose	Look up for a particular or group of attendees with a certain banquet or all available banquets.
Overview	In the search page, the administrator select attendee search and use at least one criterion in search criteria for searching. Then the result will be shown. By default, the results are sorted by last name then first name in ascending order. The Administrators can also re-sort the results by other criteria.

Search attendee

[Create Banquet](#)
[Search Banquet](#)

Banquet: Banquet A Show

First name Search



Name	Table	Seat	Type	Company	Meal	Drink	remark	Payment	Detail Info	Edit
Mike	2	3	VIP	ABC	Meal A	Drink C	null	Unpaid	Details	Edit
Mike	2	3	VIP	ABC	Meal A	Drink C	null	Unpaid	Details	Edit
Mike	2	3	VIP	ABC	Meal A	Drink C	null	Unpaid	Details	Edit

6. Seating plan generation

Use Case Name	Seating plan generation
Actor	Administrator
Purpose	Get a seating plan
Overview	After selecting a banquet, the administrator view the banquet information with a “Seating Plan Generation” section underneath and select “generate seating plan”. The administrator will get a JPEG file shows the information of seating plan and other related information.

Genertae Seat Plan

Home	Create Banquet	Search Banquet	Search Attendee	Generate Seat	Generate Report	Welcome, admin		logout
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Banquet:  

7. Admin system

Use Case Name	Admin system
Actor	Administrator
Purpose	Change some setting about the system
Overview	The administrator clicks “System” button in the menu, and choose the detail settings as required, including account setting, user setting and reminder information settings.

Dashboard

[Home](#)
[Create Banquet](#)
[Search Banquet](#)
[Search Attendee](#)
[Generate Seat](#)
[Generate Report](#)
[Welcome, admin](#)
[logout](#)

Name: Welcomeparty
Time: 2015-12-10 01:38:17

[Edit](#)
[Delete](#)

Name: Farewell
Time: 2016-01-31 16:00:00

[Edit](#)
[Delete](#)

Name: aaa
Time: 2015-12-19 02:01:00

[Edit](#)
[Delete](#)

8. Report Generation

Use Case Name	Report Generation
Actor	Administrator
Purpose	Get the report to notify the hotel side about the total meal choices earlier than usual for their convenience to increase efficiency and avoid food wastage.
Overview	By selecting “Report” in the menu and selecting the suitable banquet in the “Report” page, the administrator will generate a report generated in PDF file and displayed in a new page. The administrator can save this PDF file or print it. If any attendee’s information has been changed, a new report with most updated data will be generated if the administrator reloads the “Report” page and select the banquet.

Genertae Report

[Home](#)
[Create Banquet](#)
[Search Banquet](#)
[Search Attendee](#)
[Generate Seat](#)
[Generate Report](#)

Welcome, admin

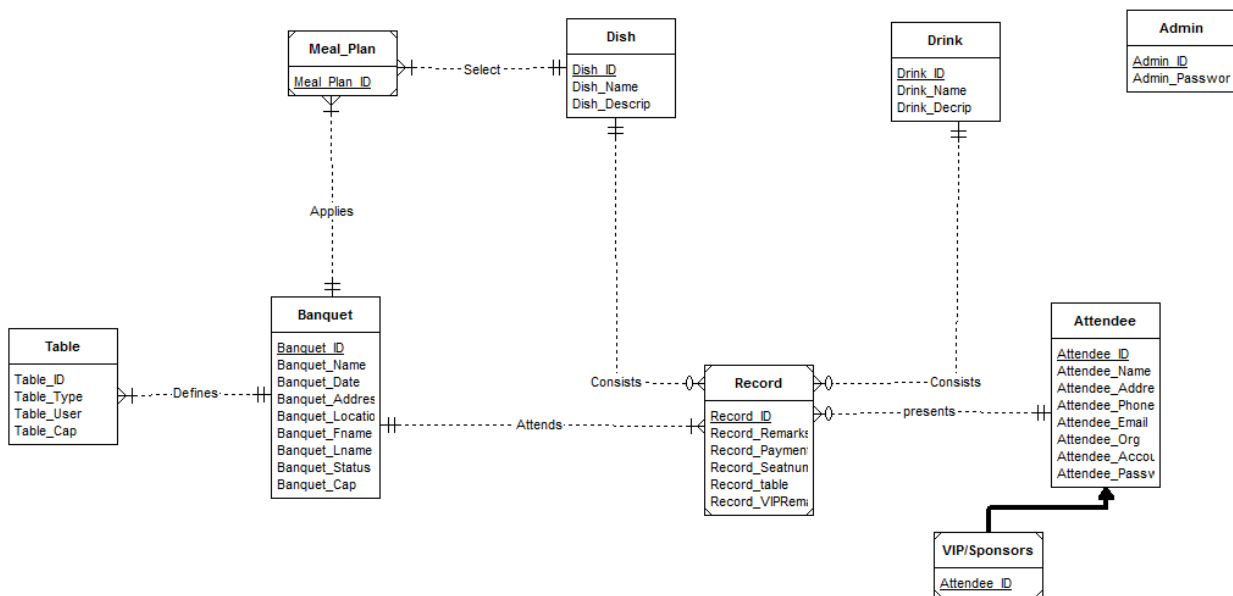
[logout](#)

Banquet: Welcomeparty

[Generate](#)

Entity-Relationship Diagram and Schema

Entity-Relationship Diagram



Schema

Tables stored in database:

1. Admin (Admin_ID int(11) NOT NULL, Admin_Password char(50) NOT NULL)

2. Record (Record_ID int(11) NOT NULL, Record_Remark varchar(255) default NULL, ,
Record_VIPRemark varchar(255) default NULL, Record_Payment char(50) NOT NULL ,
Record_Seatnum int(11) NOT NULL, Record_table int(11) NOT NULL, Record_VIPRemarks
,Banquet_ID int(11) NOT NULL, Attendee_ID int(11) NOT NULL, Dish_ID int(11) NOT
NULL, Drink_ID int(11) NOT NULL)

KEY `Banquet_ID` (`Banquet_ID`),

KEY `Attendee_ID` (`Attendee_ID`),

KEY `Dish_ID` (`Dish_ID`)

KEY `Drink_ID` (`Drink_ID`)

CONSTRAINT `Banquet_ID` FOREIGN KEY (`Banquet_ID`) REFERENCES `Banquet`
(`Banquet_ID`),

CONSTRAINT `Attendee_ID` FOREIGN KEY (`Attendee_ID`) REFERENCES `Attendee`
(`Attendee_ID`),

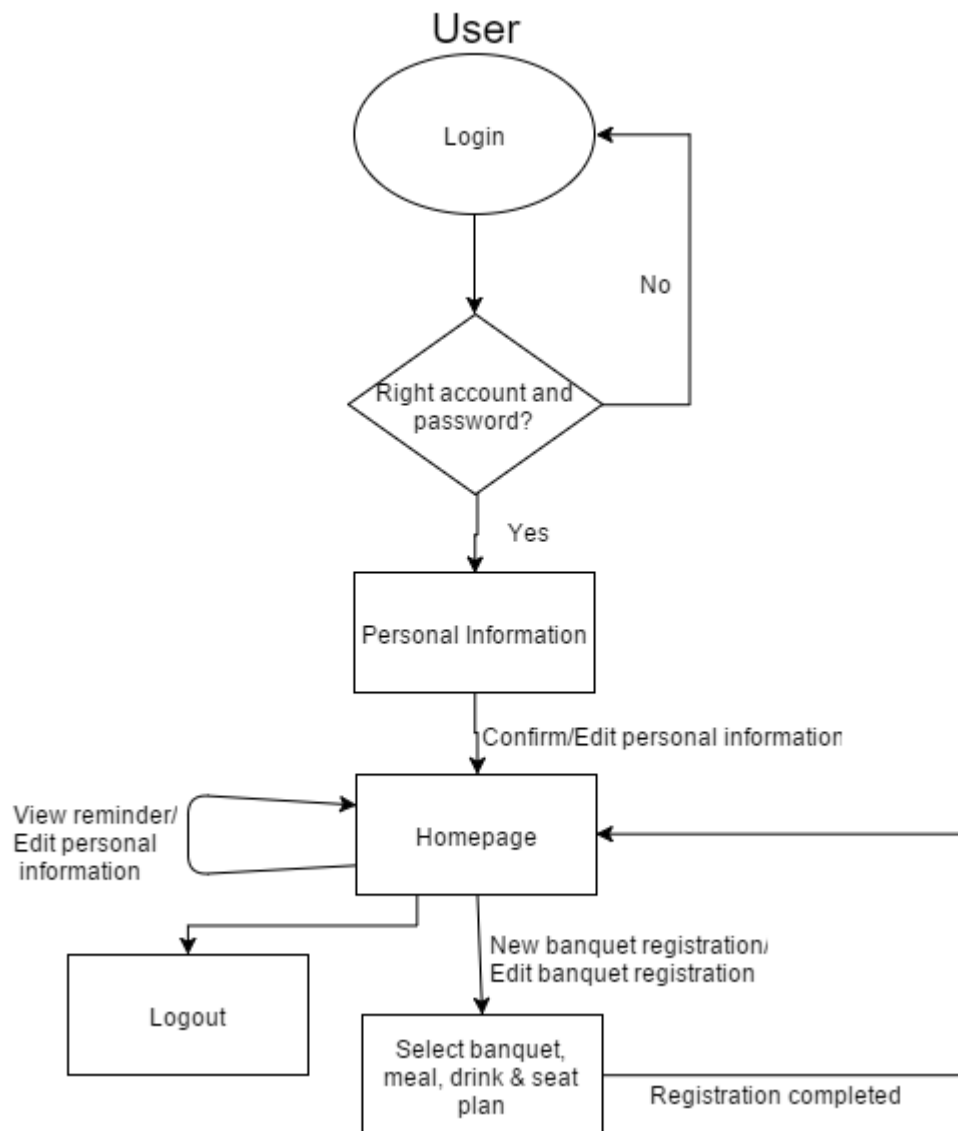
CONSTRAINT `Dish_ID` FOREIGN KEY (`Dish_ID`) REFERENCES `Dish` (`Dish_ID`)

CONSTRAINT `Drink_ID` FOREIGN KEY (`Drink_ID`) REFERENCES `Drink` (`Drink`
_ID`)
3. Banquet (Banquet_ID int(11) NOT NULL, Banquet_Name char(50) NOT NULL, Banquet_Date
timestamp NOT NULL default CURRENT_TIMESTAMP on update
CURRENT_TIMESTAMP, Banquet_Address char(50) NOT NULL, Banquet_Location char(50)
NOT NULL, Banquet_Contact_Fname char(50) NOT NULL, Banquet_Contact_Lname char(50)
NOT NULL, , Banquet_Status char(50) NOT NULL, Banquet_Cap int(11) NOT NULL)

4. Attendee (Attendee_ID int(11) NOT NULL, Attendee_Name char(50) NOT NULL, Attendee_Address char(50) NOT NULL, Attendee_PhoneNum int(8) NOT NULL, Attendee_Email varchar(50) NOT NULL, Attendee_Org varchar(50) NOT NULL, Attendee_Account char(50) NOT NULL, Attendee_Password char(50) NOT NULL) UNIQUE KEY `Attendee_Account` (`Attendee_Account`)
5. Dish (Dish_ID int(11) NOT NULL, Dish_Name varchar(50) NOT NULL, Dish_Descrip varchar(255) NOT NULL)
6. Drink (Drink_ID int(11) NOT NULL, Drink_Name varchar(50) NOT NULL, Drink_Descrip varchar(255) NOT NULL)
7. Meal_Plan (Meal_Plan_ID int(11) NOT NULL, Banquet_ID int(11) NOT NULL, Dish_ID int(11) NOT NULL) KEY `Banquet_ID` (`Banquet_ID`), KEY `Dish_ID` (`Dish_ID`), CONSTRAINT `Banquet_ID` FOREIGN KEY (`Banquet_ID`) REFERENCES `Banquet` (`Banquet_ID`), CONSTRAINT `Dish_ID` FOREIGN KEY (`Dish_ID`) REFERENCES `Dish` (`Dish_ID`)
8. Table (Table_ID int(11) NOT NULL, Table_Type char(50) NOT NULL, Table_User char(50) NOT NULL, Table_Cap int(11) NOT NULL, Banquet_ID int(11) NOT NULL) KEY `Banquet_ID` (`Banquet_ID`), CONSTRAINT `Banquet_ID` FOREIGN KEY (`Banquet_ID`) REFERENCES `Banquet` (`Banquet_ID`),

Flow design

User



Admin

