

第 50 屆全國技能競賽暨第 46 屆 國際技能競賽國手第一階段選拔賽



資訊技術（軟體設計）職類 競賽試題及評分彙總表

競賽及評分項目

<input type="checkbox"/> 商業資料建置 EngTyping	<input type="checkbox"/> 資料處理分析與簡報設計 DA&PPT Design	<input type="checkbox"/> 系統分析與資料庫設計 SA&DB Design
<input type="checkbox"/> 商用軟體設計一 Software Design 1	<input checked="" type="checkbox"/> 商用軟體設計二 Software Design 2	<input type="checkbox"/> 行動 App 設計 App Design

選 手 編 號：_____

抽籤崗位號碼：_____

選 手 姓 名：_____

總 分：_____

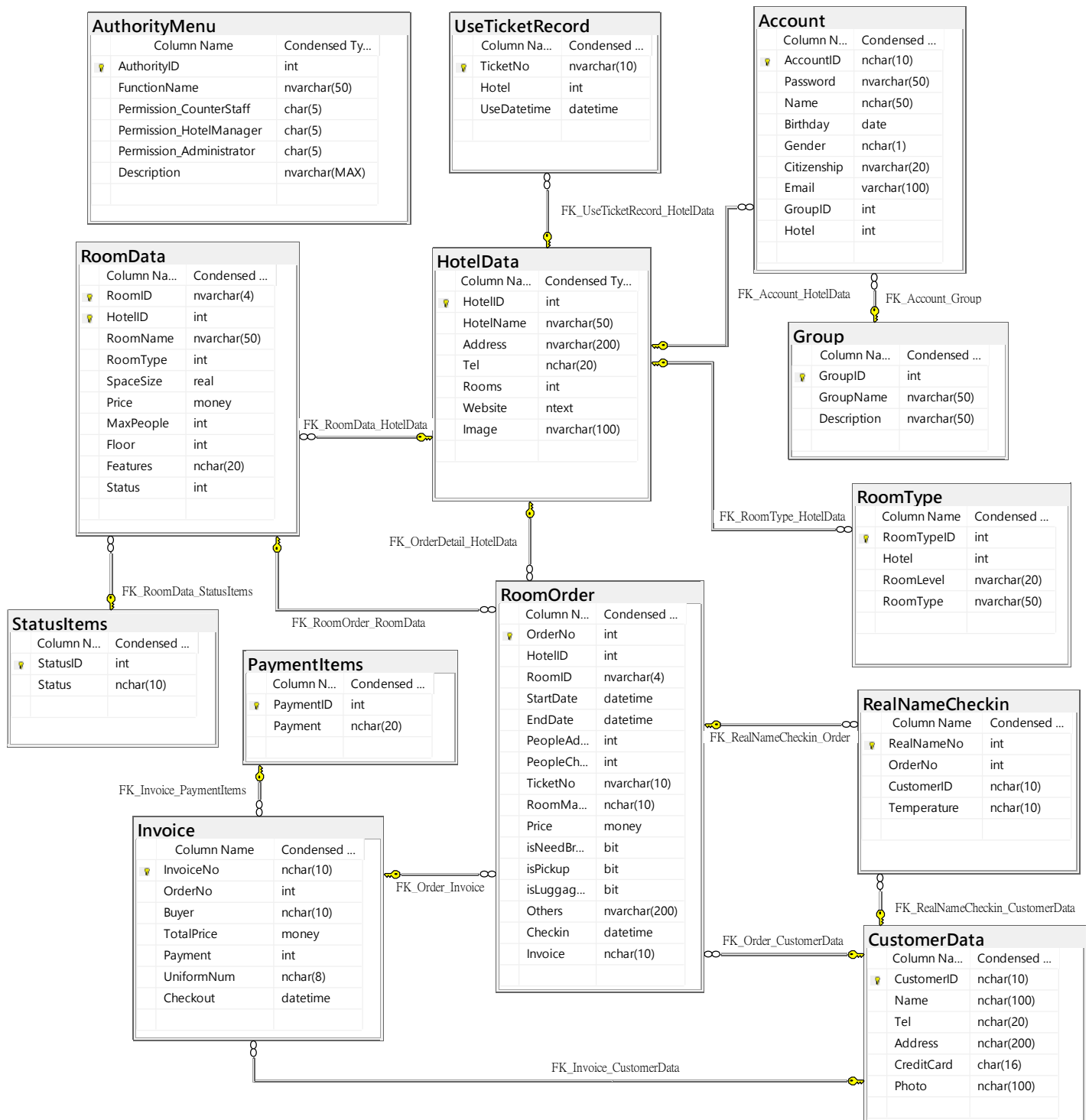
評 分 老 師：_____

Session 5 Extend DisneySH_DIB_System into “Shanghai Disneyland Resort Management System” (DisneySH_Mgnt_System)

Scenario and Database Schema

Half a year ago, your company’s system analysts and database engineers also started interviewing relevant employees of **Shanghai Disney Hotel** and **Toy Story Hotel** inside Shanghai Disneyland Resort.

According to the systems analysis and database design results, they designed a MS SQL database “**HotelBookingANS.bak**” and provided on Session 5. Following diagram is the Database relationship diagram.



This system will be deployed to **Shanghai Disneyland Resort**, **Shanghai Disney Hotel** and **Toy Story Hotel** to provide visitors enquiries and self-service. Please design the easy-to-operate main screen and the user interface of each function module, and connect to the SQL database. Visitors could operate the following functions and the App system that will be provided in the future.

For consistency in the use of the system, the **Disney Shanghai Resort** and the **two Hotels** decided to **integrate** the hotel database “*HotelBookingANS.bak*” into the **previous resort database**, and then continue to develop the hotel system expansion function.

Please use Visual Studio 2019 C # design tools with **integrated** MS SQL 2019 database “*DisneySH_ANM.Bak*”(NM: Your Workstation Number), according to task descriptions to design a Client-Server desktop application, including system processes, user interface and detail functions.

This extend system “**Shanghai Disneyland Resort Management System**” design plan or execution file named as “*DisneySH_Mgnt_System*”.

Shanghai Disneyland Resort Management System

Function Menu

Back-end Management Functions

● Main Function Menu

- Employee Login
- Dynamic Information Board System
 - ✧ Configure Resort Information
 - ✧ Configure Linking Data Source
 - ✧ Configure Dynamic Information Board
 - ✧ Statistics and Reports
 - ✧ Resort Member Management
- Hotel Reservation System
 - ✧ Make Reservation
 - ✧ Check In
 - ✧ Check Out
 - ✧ Hotel Service
 - Resort Ticket Ordering
 - Housekeeping
 - Facilities Booking
 - Food Service
 - Transportation Service
 - Pay and Bill
 - ✧ Hotel Management
 - Room Management
 - Customer Management
 - Statistical Reports
- System Management

● Details for System Management

- User Account Management
- User Authority Management
- Department Management
- System functions for various User Group, including:
 - ✧ Administrator
 - ✧ Resort Manager
 - ✧ Resort Guest
 - ✧ Resort Member
 - ✧ Hotel FrontDesk
 - ✧ Hotel Manager

Front-end Functions

● Main Function Menu

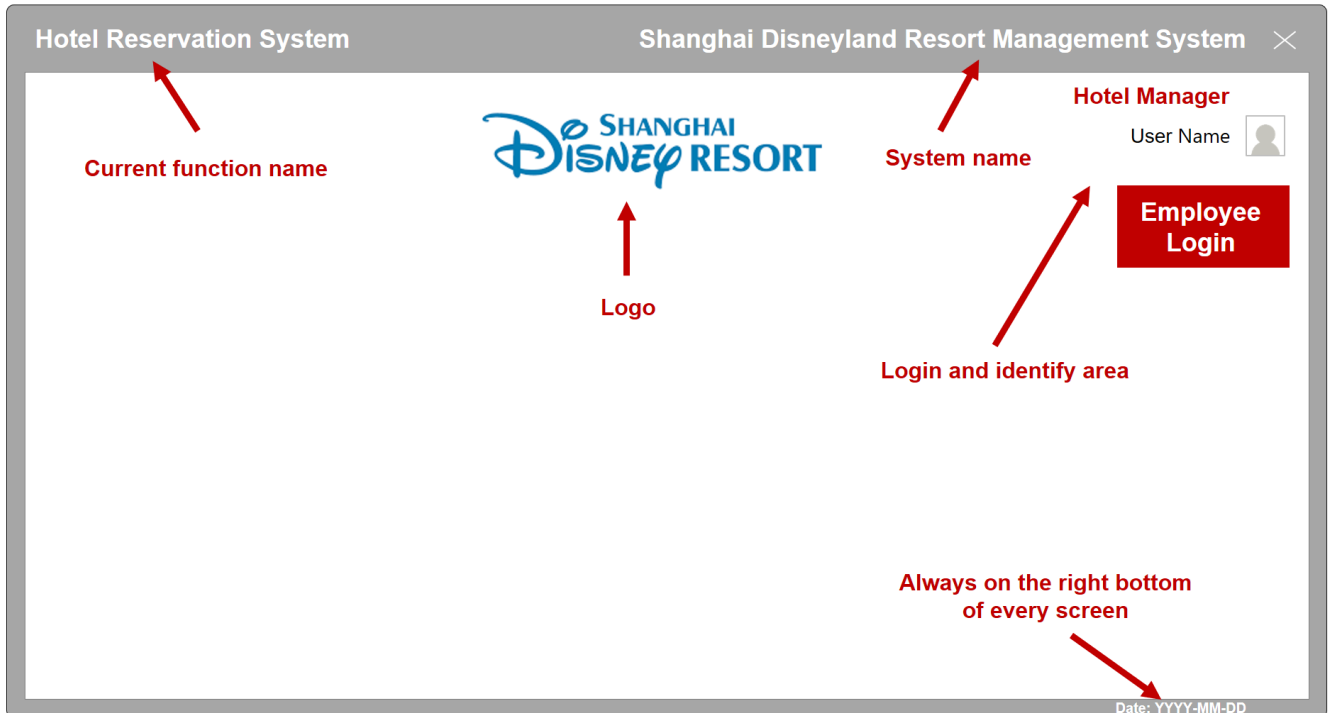
- Member Login/Registration
 - ✧ My Resort Ticket
 - ✧ My Hotel Reservation
 - ✧ Contact Message
- Dynamic Information Board
 - ✧ Self-Operation Mode, information including:
 - Introduction
 - Instant Information
 - Member Benefits
 - Member Login/Registration
 - ✧ Dynamic Rotation Mode, information including:
 - Shanghai Disney Resort Broadcast
 - Instant News
 - Theme Park Rank by Visitors
 - Today's Date and Time
 - Today's Drama
 - Today's Visitors
 - Weather Forecast

Sample of User Interface

Back-end Management User Interfaces

According to the requirements of the **Back-end management Functions**, please obey following diagram instruction (marked by red arrow) to design **Back-end Management User Interfaces**.

In blank area, show your creativity to design easy-to-operate system user interfaces.



Unless there are special instructions in user interfaces of the front-end functions, the instruction was marked by red arrow in above diagram must also be obeyed in user interfaces of the front-end system function.

Front-end User Interfaces

According to the requirements of the **Front-end functions**, please refer to following diagram to design easy-to-operate **Front-end User Interfaces**.


Member Login/Registration


Member Login/Registration

Shanghai Disneyland Resort Management System

DI Board
Self-Operation

DI Board
Dynamic Rotation



Member
User Name 

Member
Login/Registration

My Resort Ticket

My Hotel Reservation

Contact Message

"Here" show the related content of the selected function. If the task to be followed is complicated, you can also create pop-up/extended Windows forms.

button


button


Date: YYYY-MM-DD

Dynamic Information Board (Self-Operation Mode)

Dynamic Information Board (Self-Operation Mode)

DisneySH_DIB_System



Member
User Name 

Member
Benefits

Member
Login/Registration

Introduction

Instant Information

About
Shanghai
Disneyland
Resort

Travel
Information

Tickets and
Passes

Introduction
to Attractions

Daily Drama
Schedule

Daily
Amusement
Facilities
Schedule

Shanghai Disney
Resort Broadcast

Instant
News

Weather
Forecast

Number
of
Visitors

Newest
Schedule

"Here" show the related content of the selected function. If the task to be followed is complicated, you can also create pop-up/extended Windows forms.

Date: YYYY-MM-DD

Note: Use darker button to indicate current selected Main Function.

Dynamic Information Board (Dynamic Rotation Mode)

Dynamic Information Board (Dynamic Rotation Mode)
Shanghai Disneyland Resort Management System

Shanghai Disney Resort Broadcast

Broadcast instant message
(text, photo, video)

Instant News

Carousel one news subject
and related news content
in specific seconds

**Theme Park Rank
by Visitors**

1. Fantasyland
2. Mickey Avenue
3. Tomorrowland
4. Disney Pixar Toy Story Park
5. Adventure Island
6. Animal Party City
7. Treasure Cove
8. Gardens of Imagination

Today's Drama

Marquee from bottom to top
(list today's drama schedule
after current time)

2020-0919
Sat. 15:30

Today's Visitors

Now: 85,000
Total: 125,000

Weather Forecast

Sat. 0919 Sun. 0920

25% 20%
65% 50%

32° 24° 31° 23°

Date: YYYY-MM-DD

Note: Click to back to “**Member Login/Registration**”.

User interface must contain at least the following requirement lists:


Precautions:






1. You are request to refer provided MS SQL database to design your user interface, including Tables, Fields, and data records.
2. Shanghai Disneyland Resort provide "*DisneySH_UI_Style Guide.docx*" and some image files inside the folder “\Software Design 2\Data” for your design work. Using Shanghai Disneyland Resort Logo, UI color and style need to match with them.
3. Different user permissions can use the same user interface, but for data browsing, searching (querying), setting, deleting and other permissions, there will be the difference.
4. To facilitate the management of all user interface, it is recommended to each user interface is numbered on caption.
5. In order to manage and maintain those user interfaces, naming of objects on forms and user interfaces must be easy to interpret.
6. While you design detail processes and functions of user interface, you need to consider about usability for mouse and keyboard operation, anti-mistake, navigation hints, and so on.
7. You could modify or create new database Table accompanied with your system designing task.
8. You will get more score if all the user interfaces design is completely and friendly.
9. Save your Visual Studio 2019 C # designed project name as “*DisneySH_Mgmt_System*”.
10. Please write a “*Readme.txt*” to indicate the path and file name of your newest executive file (*.exe).

Note: Deduct 2 if file name is mistake.


Session 5 Marking Sheet

Software Design 2 Task Descriptions		Max Score	Actual Score
Please integrate the hotel database “ <i>HotelBookingANS.bak</i> ” into the previous resort database, and then continue to develop the hotel system expansion function.			
(1)	<p>Integrate SQL Database for Coming Requirement</p> <p>For consistency in the use of the system, the Disney Shanghai Resort and the two Hotels decided to integrate the hotel database into the previous resort database, and then continue to develop the hotel system expansion function.</p> <p>Please integrate the SQL database Tables and associated Fields of “<i>HotelBookingANS.bak</i>” into “<i>DisneySH_ANM.Bak</i>” (NM: Your Workstation Number):</p> <ul style="list-style-type: none"> ● Import or create Table “HotelData”, “RoomType”, “RoomData”, “StatusItems”, “UseTicketRecord”, and all of their associated Fields are correct. (2.5) ● Import or create Table “RoomOrder”, “RealNameCheckin”, “Invoice”, “PaymentItems”, “AuthorityMenu”, and all of their associated Fields are correct.. (2.5) <p>Note: The given hotel database will be deleted/detached during system verification, in order to confirm that designed system and linking database has been successfully integrated into the previous database.</p> <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	5.0	
(2)	<p>Create a newest ER Diagram and Database Dictionary for Shanghai Disneyland Resort Management System, and indicate what you add or modify accompanied with your designing task.</p> <p>Save your newest ER Diagram as filename “<i>DisneySH_Mgnt_ERD.vsd</i>”. (2.0)</p> <p>Save your newest Database Dictionary as filename “<i>DisneySH_Mgnt_DD.docx</i>”. (3.0)</p> <p>Deduct 0.5 on each mismatch or mistake.</p>	5.0	
(3)	<p>“Shanghai Disneyland Resort Management System” design plan or execution file name “<i>DisneySH_Mgnt_System</i>” is correct (deduct 2.0 if mistake), the link and backup SQL database file name is correct (deduct 2.0 if mistake)</p> <p>“<i>DisneySH_ANM.Bak</i>” (NM: Your Workstation Number)</p> <p>A “<i>Readme.txt</i>” to indicate the path and file name of your newest executive file (*.exe) (deduct 2.0 if mistake)</p>	0	
Please refer to the description to generate PDF and QR Code for Resort Tickets.			
(4)	<p>Generate QR Code for Resort Tickets</p> <ul style="list-style-type: none"> ● If the Order No exists and Available date (or Valid date) is valid in the system, please design function to generate the Shanghai Disney Resort bracelet, including identification information and QR Code. (1.0) 	7.0	

Software Design 2 Task Descriptions		Max Score	Actual Score
	<ul style="list-style-type: none"> The generation rules for the QR Code information content of the Shanghai Disney Resort bracelet are as follows: (3.0) A:20200424:20200425:A:A84AFD0E20BD47DCA847D7CEE92A8B31:Tiger Wu <ul style="list-style-type: none"> Code 1: <ul style="list-style-type: none"> One Day Pass: A=Regular Date, B=Peak Date, C=Holiday Peak Date Annual Pass: S=Silver, G=Gold, D=Diamond Code 2: Colon symbol Code 3~10: Start date of entering resort Code 11: Colon symbol Code 12~19: End date of entering resort it is same with Start date of entering resort if One day pass Code 20: Colon symbol Code 21: A=Adult, C=Child, E=Elder, D=Disabled Code 22: Colon symbol Code 23~54: GUID, mixed with uppercase and number, it couldn't include symbol "-" Code 55: Colon symbol After Code 56: Given name and source name The QR Code example of Shanghai Disney Resort bracelet is shown on the right diagram. (2.0)  <ul style="list-style-type: none"> Both width and height are 100 pixels (including blank frame) QR Code generation component and API description, please refer to file "<i>API description for QRCode.docx</i>" and components in folder "<i>QRCodeService</i>". You need to extend "Fields" or create "Table" of SQL database, and create test data to make sure your design is correct. (1.0) <p>Deduct 1 on each mismatch or mistake for every above-mentioned function.</p>		
(5)	<p>Generate PDF for Resort Tickets</p> <p>The Shanghai Disney Resort bracelet is a physical ticket, and visitors can buy it at the front desk of Shanghai Disneyland Resort, Shanghai Disney Hotel or Toy Story Hotel.</p> <ul style="list-style-type: none"> Physical ticket "One Day Pass" format is as follows: (4.0) <ul style="list-style-type: none"> Logo file: <i>Shanghai_Disney_Resort_logo.jpg</i> The text in the upper right corner is light blue. It is 15 cm wide and 3 cm high, and printed in A4 format. Up to five tickets can be printed on each page, with an interval of 1 cm between each. Show "Available date" by content of End date if Start date is same with End date. Show "Available date" by format "2020-4029 to 2020-0430" if Start date is not same with End date. 	8.0	

Software Design 2 Task Descriptions		Max Score	Actual Score
	<p>- Example for QR Code string and bracelet. A:20200430:20200430:A:A84AFD0E20BD47DCA847D7CEE92A8B31:Tiger Wu</p> <div data-bbox="268 288 1235 488"> <div> <p>Available Date: 2020-0430 Ticket type: Regular-Adult Price: RMB 399</p> <p>Tiger Wu</p> </div> <div>  Ticket No-0000000129 </div> <div> <p>One Day Pass</p>  </div> </div> <p>● Physical ticket "Annual Pass" format is as follows: (3.0)</p> <ul style="list-style-type: none"> - Logo file: <i>Shanghai_Disney_Resort_logo.jpg</i> - The text in the upper right corner is dark red. - It is 15 cm wide and 3 cm high, and printed in A4 format. Up to five tickets can be printed on each page, with an interval of 1 cm between each. - Valid date is the End date. - Example for QR Code string and bracelet. <p>S:20200401:20210331:C:6DCC38EFAECA410895F68695FEF79591:Maggie Lin</p> <div data-bbox="268 898 1235 1095"> <div> <p>Valid Date: 2021-0331 Ticket type: Silver Annual-Child Price: RMB 974</p> <p>Maggie Lin</p> </div> <div>  Ticket No-0000000130 </div> <div> <p>Annual Pass</p>  </div> </div> <p>● You need to extend “Fields” or create “Table” of SQL database, and create test data to make sure your design is correct. (1.0)</p> <p>Deduct 1 on each mismatch or mistake for every above-mentioned function.</p>		
Please design the browsing interface and build the information required for the Back-end management functions (for Group “Guest”) of Shanghai Disneyland Resort Management System.			
(6)	<p>Guest: UI and Function design</p> <p>Design on user interfaces, object detail functions and event driven connection for Guest is completely and friendly.</p> <p>Guest only could use following functions of “Dynamic Information Board System” without login.</p> <ul style="list-style-type: none"> ● [X] should be disable for Group “Guest”. (0.5) ● UI and object linking to “Self-Operation Mode” is correct. (0.5) ● UI and object linking to “Dynamic Rotation Mode” is correct. (0.5) ● While stay on “Dynamic Rotation Mode”. , click  to back to “Self-Operation Mode”. (0.5) <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	2.0	

Software Design 2 Task Descriptions		Max Score	Actual Score
Please design the browsing interface and build the information required for the Back-end management functions (for Group “ Member ”) of Shanghai Disneyland Resort Management System.			
(7)	<p>Member: UI and Function design</p> <p>Design on user interfaces, object detail functions and event driven connection for Member is completely and friendly.</p> <p>While Member click “Member Login/Registration” and login to system successfully, they could use following functions of “Member Login/Registration”:</p> <ul style="list-style-type: none"> ● Design UI and detail object functions linking to “My Resort Ticket”. <ul style="list-style-type: none"> - Inquiry and show all historical tickets, including Order No, Available date (or Valid date), Ticket type, Total quantity, Total amount, Payment method. (2.0) - Inquiry and show only my available tickets, including Order No, Ordering date, Available date (or Valid date), Ticket type, QR code. (3.0) ● Design UI and detail object functions linking to “My Hotel Reservation”. <ul style="list-style-type: none"> - Inquiry and show all historical hotel reservation, including Order No, Ordering date, Hotel name, Start date, End date, Room type, Room quantity, Total price, Payment method. (2.0) - Sorting all historical hotel reservation information by Start date. (0.5) - Inquiry and show only my available hotel reservation, including Order No, Ordering date, Hotel name, Start date, End date, Room type, Room quantity, Total price, Numbers of adult, Numbers of child, Breakfast option, Pickup option, Others notification. (3.5) - Click one of my available hotel reservation to print a PDF file with related Hotel logo, and save file name as “Hotel Reservation.pdf” (1.0) ● Design UI and detail object functions linking to “Contact Message”. <ul style="list-style-type: none"> - Member could key in text message “Title” and “Content” and send to selected Hotel. (1.0) - Hotel FrontDesk or Hotel Manager could key in text message to reply to member. (1.0) - Member could see all detail contact message with “Title”. (1.0) ● UI and object linking to “Member Login/Registration” and “Benefits” on the right-top side are correct. (0.5) <p>Hint: It is different from Back-end management functions.</p> <ul style="list-style-type: none"> ● Show correct “Group”, “User Name”, and “User Photo” on the right-top side while login successfully. (0.5) ● You need to extend “Fields” or create “Table” of SQL database, and create test data to make sure your design is correct. (1.0) <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	17.0	

Software Design 2 Task Descriptions		Max Score	Actual Score
(8)	<p>Member: UI and Function design</p> <p>Design on user interfaces, object detail functions and event driven connection for Member is completely and friendly.</p> <p>While Member click “Member Login/Registration” and login to system successfully, they could use following functions of “Dynamic Information Board System”:</p> <ul style="list-style-type: none"> ● System name, current function name, and Logo, information of current date. (0.25) ● [X] should be disable for Group “Member”. (0.25) ● UI and object linking to “Self-Operation Mode”. (0.25) ● UI and object linking to “Dynamic Rotation Mode”. (0.25) ● While stay on “Dynamic Rotation Mode”, click  to back to “Member Login/Registration”. (0.25) <p>Deduct 0.25 on each mismatch or mistake for every above-mentioned function.</p>	1.25	
Please design the browsing interface and build the information required for the Back-end management functions (for Group “ Administrator ”) of Shanghai Disneyland Resort Management System.			
(9)	<p>Administrator: UI and Function design</p> <p>Design on user interfaces, object detail functions and event driven connection for Administrator is completely and friendly.</p> <p>While Administrator click “Employee Login” and login to system successfully, they could use following functions:</p> <ul style="list-style-type: none"> ● Administrator could use all the functions of this system. (1.0) ● Only Administrator could use “System Management”, all sub function is available, including: <ul style="list-style-type: none"> - Manage function of User Account Management. (0.5) - Manage function of User Authority Management. (0.5) - Manage function of Department Management. (0.5) - Manage function of Management user’s activities log. (2.0) <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	4.5	
(10)	<p>Administrator: UI design of Sub Functions of “System Management”</p> <ul style="list-style-type: none"> ● Design on “User Account Management” interface and detail function is completely and friendly. (0.5) ● Design on “User Authority Management” interface and detail function is completely and friendly. (0.5) ● Design on “Department Management” interface and detail function is completely and friendly. (0.5) 	1.5	

Software Design 2 Task Descriptions		Max Score	Actual Score
	Deduct 0.5 on each mismatch or mistake.		
(11)	<p>Administrator: UI and Function design of “User Account Management” of “System Management”</p> <p>UI design and object detail functions and event driven connection of “User Account Management” are completely and friendly, including:</p> <ul style="list-style-type: none"> ● Personal information management function for different users. (could be more than one). (1) ● Administrator could assign users access authority/permission. (2) ● Administrator could use all the functions of this system. (1) <p>Deduct 1 on each mismatch or mistake for every above-mentioned function.</p>	4.0	
(12)	<p>Administrator: Function design of “User Authority Management” of “System Management”</p> <p>Design on object detail functions and event driven connection of “User Authority Management” are completely and friendly, including:</p> <ul style="list-style-type: none"> ● At least 6 kinds of user groups: Guest, Member, Resort Manager, Hotel FrontDesk, Hotel Manager, Administrator. (0.5) <p>Notice: Change name of user groups that you has named in Section 4. (0.5)</p> <ul style="list-style-type: none"> ● At least 3 kinds of data permissions: Read, Edit, Delete. (1.0) ● Permissions management table to assign. (3.0) ● Users group management list to assign. (1.0) ● Only Administrator could assign users access authority/permission. (2.0) ● Only Administrator could use all the functions of this system. (1.0) <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	9.0	
(13)	<p>Administrator: UI and Function design of “Department Management” of “System Management”</p> <p>UI design and object detail functions and event driven connection of “Department Management” are completely and friendly, including:</p> <ul style="list-style-type: none"> ● Only Administrator could manage Department information for different Department. (2) ● Only Administrator could assign users to one specific Department. (2) <p>Deduct 1 on each mismatch or mistake for every above-mentioned function.</p>	4.0	
Please design the browsing interface and build the information required for the Back-end management functions (for Group “ Resort Manager ”) of Shanghai Disneyland Resort Management System.			

Software Design 2 Task Descriptions		Max Score	Actual Score
(14)	<p>Resort Manager: UI and Function design</p> <p>Design on user interfaces, object detail functions and event driven connection for Resort Manager is completely and friendly.</p> <p>While Resort Manager click “Employee Login” and login to system successfully, they could use following functions of “Dynamic Information Board System”:</p> <ul style="list-style-type: none"> ● System name, current function name, and Logo, information of current date. (0.25) ● UI and object linking to “Configure Resort Information”. (0.25) ● UI and object linking to “Configure Linking Data Source”. (0.25) ● UI and object linking to “Configure Dynamic Information Board”. (0.25) ● UI and object linking to “Statistics and Reports”. (0.25) ● UI and object linking to “Member Management”. (0.25) ● Function button “Employer Login” on the right-top side. (0.25) <p>Hint: It is different from Front-end functions.</p> <p>Deduct 0.25 on each mismatch or mistake for every above-mentioned function.</p>	1.75	
Please design the browsing interface and build the information required for the Back-end management functions (for Group “ Hotel FrontDesk ”) of Shanghai Disneyland Resort Management System.			
(15)	<p>Hotel FrontDesk: UI and Function design</p> <p>In Shanghai Disneyland Resort, there are two hotels Shanghai Disney Hotel and Toy Story Hotel.</p> <p>Currently, members are not allowed to use computer or smart phone to book rooms online. Only the following booking way is available: telephone, fax, email, and on-site reservations.</p> <p>Please design completely and friendly user interfaces, object detail functions and event driven connection for Hotel FrontDesk of two hotels.</p> <p>While Hotel FrontDesk click “Employee Login” and login to system successfully, they could use following functions of “Hotel Reservation System”:</p> <p>Functions of “Hotel Reservation System”:</p> <ul style="list-style-type: none"> ● Design UI and detail object functions linking to “Make Reservation”. <ul style="list-style-type: none"> - Registration (Create) new or edit customer/member “Personal Information Management (PIM)”, with Name, Birthday, Gender, Citizenship, Email. Every input field including format checking. (0.5) - Select Hotel and use designed navigate board (designed by table and cells) to show following information of all rooms. (3.0) <ul style="list-style-type: none"> ✧ Room No ✧ Room Level: Deluxe Level, Club Level, Standard ✧ Room Type: Lake View, Park View ... 	18.5	

Software Design 2 Task Descriptions		Max Score	Actual Score
	<ul style="list-style-type: none"> ✧ Room Status: Available for reservation, Reserved, Booked but not checked in, Checked in, Checked out, Cleaning in progress. ✧ Room Features ✧ Room Price - Design a multi-conditions inquiry functions to search available rooms. (3.0) ✧ Condition 1: Hotel Name ✧ Condition 1: Check in date ✧ Condition 2: Check out date ✧ Condition 3: Numbers of adult ✧ Condition 4: Numbers of child (Less than age 6, No bed, no meals) ✧ Condition 5: Breakfast option ✧ Condition 6: Budget limit - Show the inquiry results, including: Hotel Name, Room name, Room type, Room quantity, Price, Max people. (1.0) - Hotel FrontDesk could search customer/member ID by Name or telephone number. (0.5) - Hotel FrontDesk select one of available result, and input customer/member ID to make reservation. (1.0) - Hotel FrontDesk also could input following contents for this reservation, including: Room feature, Pickup option, key in others notification. (1.5) ● Design UI and detail object functions linking to “Check In”. <ul style="list-style-type: none"> - Hotel FrontDesk could input or change following contents for this stay period for each room, including: Check License of customer/member, Numbers of adult, Numbers of child, Breakfast option, Booking children's playroom, booking Pickup service, Booking luggage storage , key in others notification. (1.5) - Because of COVID-19 prevention policy, real-name accommodation are all used. At least one representative must be provided for each room (and the representative must not be the same for each room). Hotel FrontDesk need input every customer's personal information and their measured temperature and photography. (1.5) - Those who order accommodation and check-in do not necessarily need a Shanghai Disney Resort ticket, but those who have a ticket (ticket number is required) will enjoy a 20% discount on the room rate. Final price and ticket used date and time is required to be saved. (2.0) ● Design UI and detail object functions linking to “Check Out”. <ul style="list-style-type: none"> - Design Check out function and related user interface to change Room status. (1.0) ● UI and object linking to “Hotel Service”. (0.25) ● UI and object linking to “Hotel Management”. (0.25) ● System name, current function name, and Logo, information of current date. (0.25) ● Function button “Employer Login” on the right-top side. (0.25) Hint: It is different from Front-end functions. ● You need to extend “Fields” or create “Table” of SQL database, and create test data to make sure your design is correct. (1.0) <p>Deduct 0.25 or 0.5 on each mismatch or mistake for every above-mentioned function.</p>		

Software Design 2 Task Descriptions		Max Score	Actual Score
(16)	<p>Hotel FrontDesk: UI and Function design</p> <p>Design on user interfaces, object detail functions and event driven connection for Hotel FrontDesk is completely and friendly.</p> <p>Sub functions of “Hotel Service” of “Hotel Reservation System”:</p> <ul style="list-style-type: none"> ● Design UI and detail object functions linking to “Resort Ticket Ordering”. <ul style="list-style-type: none"> - Hotel FrontDesk could order physical ticket "One Day Pass" or different type of "Annual Pass" for customers, pay with listed Special Price. (2.0) - Hotel FrontDesk could print customer’s ordered physical ticket "One Day Pass" or different type of "Annual Pass" by PDF file. (1.0) ● Design UI and detail object functions linking to “Housekeeping”. <ul style="list-style-type: none"> - Hotel FrontDesk could input customer’s Housekeeping requirement, including “Something is not working”, “Supplying Room Item”, “Room Cleaning”, “Laundry Service” and their associated text memo. (1.0) - Housekeeping service must be identified into two types: free or pay with its price. (1.0) ● Design UI and detail object functions linking to “Facilities Booking”. <ul style="list-style-type: none"> - Hotel FrontDesk could input customer’s Facilities Booking requirement, including “Children's playroom”, “Gym”, “SPA”, “Swim pool” and their associated text memo. (1.0) - Facilities booking service must be identified into two types: free or pay with its price. (1.0) ● Design UI and detail object functions linking to “Food Service”. <ul style="list-style-type: none"> - Hotel FrontDesk could input customer’s Food Service requirement, including “Meal in hotel restaurant”, “Meal in room” and their associated text memo. (1.0) - Food Service also need to input booking “numbers of people”, “Meal items” with their price. (1.0) ● Design UI and detail object functions linking to “Transportation Service”. <ul style="list-style-type: none"> - Hotel FrontDesk could input customer’s Transportation Service requirement, including “Free Parking”, “Shuttle Bus”, “Call Taxi”, “Rent Car” and their associated text memo. (1.0) - Transportation Service must be identified into two types: free or pay with its price. (1.0) ● Design UI and detail object functions linking to “Pay and Bill”. <ul style="list-style-type: none"> - Design Paying and Billing function and related user interface, billing report including Ordering details, Total amount, and Payment way. (2.0) - Room fee and all ordered and used details items and their price (show 0 if free charge) of Hotel Service must collect to billing report. (2.0) ● You need to extend “Fields” or create “Table” of SQL database, and create test data to make sure your design is correct. (1.0) <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	16.0	

Software Design 2 Task Descriptions		Max Score	Actual Score
Please design the browsing interface and build the information required for the Back-end management functions (for Group “ Hotel Manager ”) of Shanghai Disneyland Resort Management System.			
(17)	<p>Hotel Manager: UI and Function design</p> <p>Design on user interfaces, object detail functions and event driven connection for Hotel Manager is completely and friendly.</p> <p>Hotel Manager could use all functions of “Hotel Reservation System”</p> <ul style="list-style-type: none"> ● Following functions are same permission of Group “Hotel FrontDesk” <ul style="list-style-type: none"> - Functions of “Make Reservation”. (0.5) - Functions of “Check In”. (0.5) - Functions of “Check Out”. (0.5) - Functions of “Hotel Service”. (0.5) <p>Hotel Manager could also use more following functions of “Hotel Management System”</p> <ul style="list-style-type: none"> ● Design UI and detail object functions linking to “Room Management”. <ul style="list-style-type: none"> - Hotel Manager could inquire all room information. (1.0) - Hotel Manager could manage room data, including Room name, Room Type. (1.0) ● Design UI and detail object functions linking to “Customer Management”. <ul style="list-style-type: none"> - Hotel Manager could upgrade customer into VIP customer. (1.0) - Hotel Manager could manage VIP customer and input their hobbies. (1.0) ● Design UI and detail object functions linking to “Statistical Reports”. <ul style="list-style-type: none"> - Hotel Manager could generate statistical reports by day, week, month, quarter, year, specified period, etc. (2.0) ● You need to extend “Fields” or create “Table” of SQL database, and create test data to make sure your design is correct. (1.0) <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	9.0	
General common design descriptions			
(18)	<p>System Security Mechanism</p> <ul style="list-style-type: none"> ● If the user enters the wrong username or password for more than three times, they need to wait five seconds before they can login to the system again. While waiting for the next chance to login, a countdown timer will indicate the time remaining for the next attempt. (2.0) ● Show password by "●●●●●●●●" while input. (0.5) ● According to system security policy, system will notice user to change new password in every three months. (0.5) ● Please design an interface and mechanism for resetting the password, and send the eight-code verification code via original email address. After the 	8.5	

Software Design 2 Task Descriptions		Max Score	Actual Score
	<p>user receives the email, enter the correct verification code in the system, then to change the password. (2.0)</p> <ul style="list-style-type: none"> ● The new password must obey strong password rule also, and the new password to be replaced cannot be the same as the all password used before in this system. (2.0) ● After the validation is successful, user must enter new password again to make sure it's correct. (0.5) ● In case management disables the user and they enter the correct credentials, an appropriate message will let them know the reason why they cannot log on. (1.0) <p>Deduct 1 on each mismatch or mistake for every above-mentioned function.</p>		
(19)	<p>Import, export function</p> <p>Your creative design on user interface needed for other jobs, such as: data importing and exporting process, data exporting files format selection.</p> <ul style="list-style-type: none"> ● Data import: operation process, file format selection, file field define and check, sample introduce. (0.5) ● Data export: operation process, file format selection, file field define and check, sample introduce. (0.5) <p>Deduct 0.5 on each mismatch or mistake for every above-mentioned function.</p>	1.0	
(20)	<p>Each user interface is numbered on caption.</p> <p>Deducted 0.1 on each mismatch or mistake.</p>	0.5	
(21)	<p>Using Shanghai Disneyland Resort Logo, UI color and style are matched with organizer needs.</p> <p>Deduct 0.2 on each mismatch or mistake.</p>	0.5	
(22)	<p>Naming of objects on forms and user interfaces all are easy to interpret.</p> <p>Deduct 0.1 on each mismatch or mistake.</p>	0.5	
(23)	<p>The usability for mouse and keyboard operation, function and navigation button, anti-mistake, navigation hints is good.</p> <p>Deduct 0.1 on each mismatch or mistake.</p>	0.5	
	Total	125	