

Hotel Registration System: Dialogue Diagram

Analyzing User Tasks and System Flow

Alexander Ricciardi

Colorado State University Global

MIS350: Information Systems Analysis And Design

Dr. Kara Coston

May 25, 2025

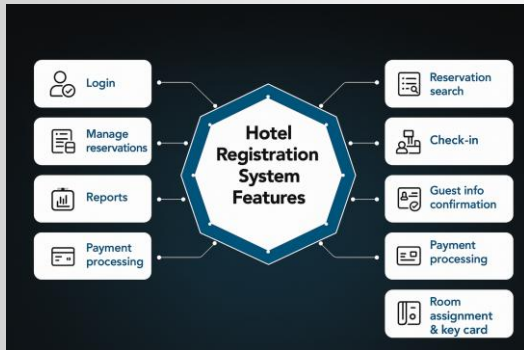
Welcome! Thanks to the audience for attending.

The presentation is about: the dialogue diagram for a hotel registration system and analysis

Project Overview

Dialogue Diagram Hotel Registration System (HRS)

Figure 1
Hotel Registration System Features (1)



Note: The figure illustrates a diagram representing the features of the Hotel Registration System. Modified figure from "How to Develop a Custom Hotel Booking System for Your Own Hotel Business" by Tymoshchenko (2023).

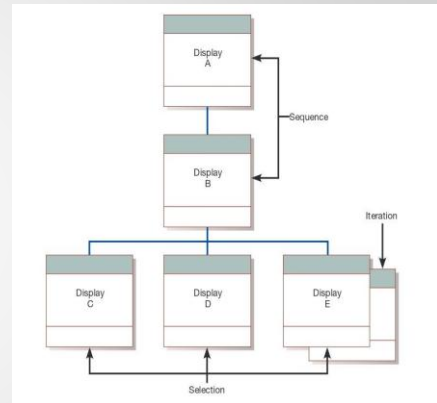
- Introduction to Dialogue Design
- Dialogue Diagram Overview
- User Tasks & System Flow
- Hotel Registration System (HRS) Dialogue Diagram Overview and Analysis
- Key Takeaways

Describe the structure of the presentation. Introduce the Hotel Registration System Features.

Understanding the Conversation? Dialogue Diagrams

- Dialogue Design is the process of sequencing user-system interactions (Valacich & George, 2020)
- A dialogue diagram illustrates the sequential flow of a dialogue in a system (Arya College, 2024)
- Defines the conversation, how guests/employees and the Hotel Registration System (HRS) exchange information
- Gest-focused tasks and context.
- Goal: to help create an intuitive and effective HRS

Figure 2
Dialogue Diagram Overview



Note: The figure provides an overview of a dialogue. Figure 11-18, from "Chapter 11: Designing Interfaces and Dialogues. Modern systems analysis and design (9th ed.)" by Valacich and George (2020).

Before diving into the specifics of the hotel system, provide an overview of dialogue design and its component dialogue diagram.

- Explain their purpose (how humans and computers exchange information)
- Provide a dialogue diagram analogy, for example, it is a conversation
- Explain that the system is user-focused, it is founded on users' (guests/ hotel employees) tasks and context.
- Explain that the ultimate goal of the dialogue design process is to help design an intuitive and effective HRS

Who Uses HRS And Why? Users & Their Goals



Primary Users:

- **Guests use HRS:** to search availability, make/manage reservations, self-service check-in
- **The receptionists use HRS:** to check/make guest reservations, check-in guests, accept payments, and assign rooms.

Secondary Users:

- **Management uses HRS:** to oversee, create reports, and for analysis purposes

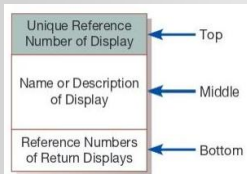
Identify the users: Guests, Hotel Receptionists, and Management.

Explain how each user interacts with HRS and what their goals are.

- Guests interact with the system to accomplish tasks like registering for a room, searching for rooms, making new bookings, or managing existing ones. They can also use the self-service kiosk process for check-in.
- Hotel receptionists use the system daily for tasks such as creating, finding, and modifying guest reservations and check-ins; processing payments; and assigning rooms.
- Hotel Management uses the system daily for tasks such as overseeing guest registrations, Check-ins, and payments; viewing/printing reports; and for analysis purposes.

Dialogue Diagram Overview

Figure 3
Diagram Dialogue Box



Note: The figure illustrates a dialogue diagram box different sections. From "Chapter 11: Designing Interfaces and Dialogues. *Modern systems analysis and design (9th ed.)*" by Valacich and George (2020).

Boxes: Screens/displays.

Top: Reference number (0, 1, 2.1)

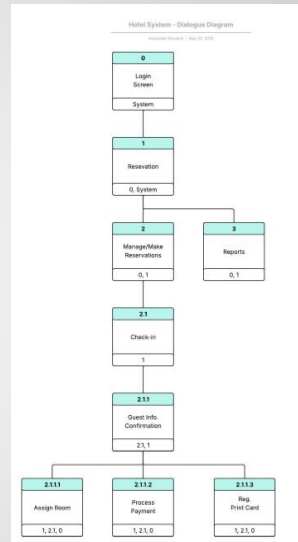
Middle: Screen Name, Ex: "Main Menu"

Bottom: Return screens reference navigation ('0', '0, 1', '1', '2.1', '2.1, 1', etc)

Lines: Transitions between screens

Hierarchy: Using reference numbers, for example, 2, 2.1, 2.1.1, to show the module depth

Figure 4
HRS Dialogue Diagram (1)

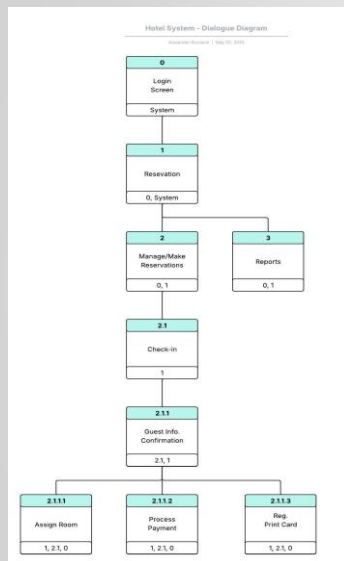


Note: The figure illustrates the HRS dialogue diagram. Made with Lucidchart.

Explain the components of a dialogue diagram and how they relate to each other.

- The boxes represent a screen, window, or display.
 - The top section contains the reference number for that screen, used to track the dialogue sequence and screen hierarchy.
 - The middle section provides a description of what that screen is for, like "Main Menu"
 - The bottom section provides the reference numbers of all the other screens that can be directly accessed from the current screen, it is the navigation paths.
- The lines connect the boxes, showing the path the dialogue takes.

Figure 5
HRS Dialogue Diagram (2)



Note: The figure illustrates the HRS dialogue diagram. Made with Lucidchart.

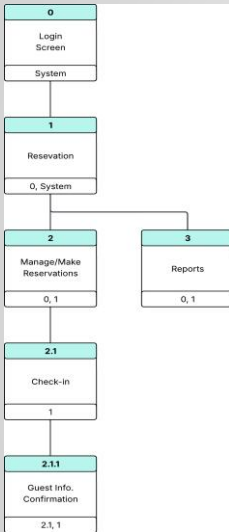
Hotel Registration System (HRS) Dialogue Diagram - Paths

Paths

- 0 Login → 1 Reservation
- 1 splits into
 - 2 Manage/Make Reservations
 - 3 Reports
- 2 → 2.1 Check-in → 2.1.1 Guest Info Confirmation
- 2.1.1 split into
 - 2.1.1.1 Assign Room
 - 2.1.1.2 Process Payment
 - 2.1.1.3 Register & Print Card

Walking through the diagram; provide a quick overview of the entire diagram, paths, and each section name.

Figure 6
HRS Dialogue Diagram – 0 to 2.1.1



Note: The figure illustrates the HRS dialogue diagram. Made with Lucidchart.

Hotel Registration System (HRS) Dialogue Diagram – 0 to 2.1.1

Paths

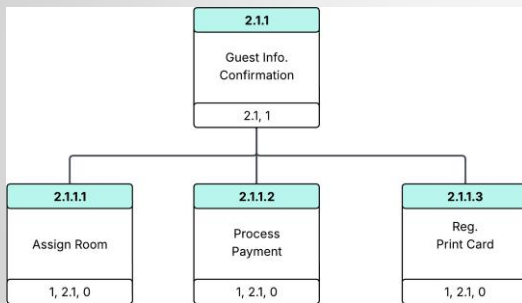
- 0 Login → 1 Reservation
- 1 splits into
 - 2 Manage/Make Reservations
 - 3 Reports
- 2 → 2.1 Check-in → 2.1.1 Guest Info Confirmation

Walk through the diagram sections 0 through 2.1.1:

- Login (0), first step, gatekeeper. This is also where the new guests provide sign-in information. It is also where hotel employees can login.
- Reservation (1), this is the reservation system. Note, not shown in the diagram, after the login (0), guests/employees can use the browsing system to look at room prices and availability. Not shown in the diagram, after the login (0) is the check-out system where employees can check-out guests. Reservation (1) split into Manage/Make Reservation (2) and Reports (3)
- Reports (3), here the hotel management can print/create reservations/check-in reports for analysis purposes.
- Manage/Make Reservation (2), here guests/receptionists can make the actual room reservation and capture guest information. In this section, existing reservations can be modified (canceled, date change, or type of room change).
- Check-in (2.1), here the guests check in, section used by receptionists
- Guest Info, Confirmation (2.1.1), confirms guest information and reservation information.

HRS Dialogue Diagram – Path 2.1.1 Split

Figure 7
HRS Dialogue Diagram 2.1.1 Split



Note: The figure illustrates the HRS dialogue diagram. Made with Lucidchart.

Paths

- 2.1.1 split into
 - 2.1.1.1 Assign Room
 - 2.1.1.2 Process Payment
 - 2.1.1.3 Register & Print Card

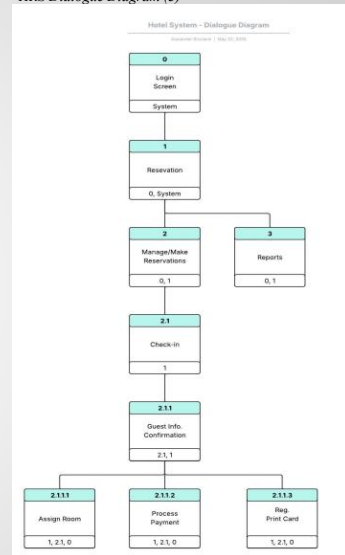
Walk through the split of the section 2.1.1 Guest Info Confirmation into 2.1.1.1 Assign Room, 2.1.1.2 Process Payment, and 2.1.1.3 Register & Print Card

- Assign Room (2.1.1.1), here the room gets officially assigned to the guest by the receptionist, who provides the guest with a room number.
- Process Payment (2.1.1.2), here the guest provides a payment method, like a credit card. The credit card information will be stored in the system and can be used at checkout.
- Register & Print Card (2.1.1.3), final registration step, here the room is officially registered to the guest (occupied) and the receptionist prints a key card allowing the guest to access the room

Key Takeaways

- Dialogue design is the process of sequencing user-system interactions
- A dialogue diagram is a visual representation of the user-system dialogue
- The primary users are the hotel guests and the hotel receptionists. The secondary user are the hotel management
- The HRS Diagram Dialogue :
 - 0 Login → 1 Reservation**
 - **1** splits into
 - **2** Manage/Make Reservations
 - **3** Reports
 - **2 → 2.1** Check-in → **2.1.1** Guest Info Confirmation
 - **2.1.1** split into
 - **2.1.1.1** Assign Room
 - **2.1.1.2** Process Payment
 - **2.1.1.3** Register & Print Card
 - Questions?

Figure 8
HRS Dialogue Diagram (3)



Note: The figure illustrates the HRS dialogue diagram. Made with Lucidchart.

End the presentation by restating/recapping/reviewing/explaining the main points and answering questions.

- Dialogue Design is defined as the process of sequencing the interactions between a user and a system
- Dialogue Diagram is a visual tool that is used to illustrate the dialogue between the user and the system
- Primary users of the HRS are identified as hotel guests and hotel receptionists
Secondary users are the Hotel management
- HRS Dialogue Diagram Flow:
 - The process starts with "0 Login," which leads to "1 Reservation".
 - "1 Reservation" then branches into "2 Manage/Make Reservations" and "3 Reports".
 - The path from "2 Manage/Make Reservations" continues to "2.1 Check-in," and then to "2.1.1 Guest Info Confirmation".
 - "2.1.1 Guest Info Confirmation" further splits into three actions: "2.1.1.1 Assign Room," "2.1.1.2 Process Payment," and "2.1.1.3 Register & Print Card"
- Ask if anyone has questions

References

- Arya College (2024, February 12). *Dialog design in Human Computer Interface(HCI)*. GeeksForGeeks. <https://www.geeksforgeeks.org/dialog-design-in-human-computer-interfacehci/>
- Tymoshchenko, D. (2023, November 16). *How to develop a custom hotel booking system for your own hotel business*. Acropolium. <https://acropolium.com/blog/how-to-develop-a-custom-hotel-booking-system-for-your-own-hotel-business/>
- Valacich, J. S., & George, J. F. (2020). Chapter 11: Designing interfaces and dialogues. *Modern systems analysis and design (9th ed.)*. Pearson Education, Inc. ISBN-13: 9780135172841 (digital) or 9780135791592 (e-text)