Developmental phase of Hotel booking chatbot

Luxy
Chatbot

OUTLINE

Configuring Botpress

Setting up Botpress account

Creating flows

Adding knowledge base

Troubleshoot

Testing using emulator

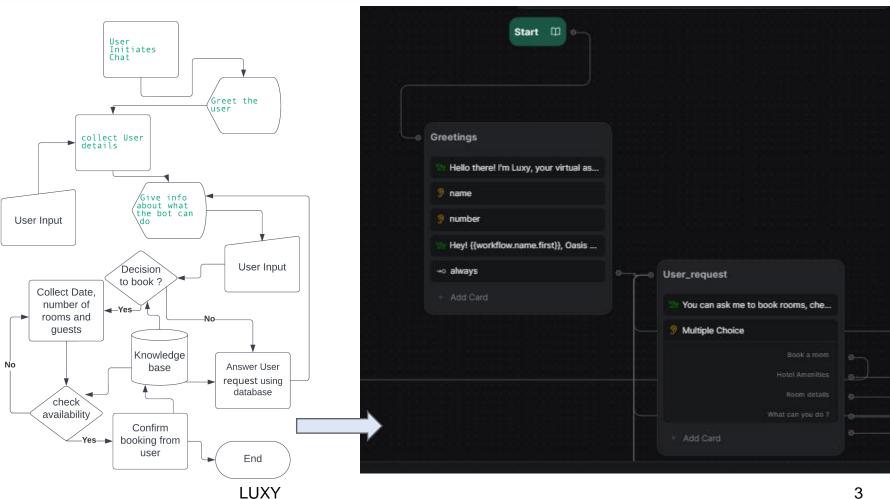Checking logics

Refining code

Testing and production

Testing

Tackling issues
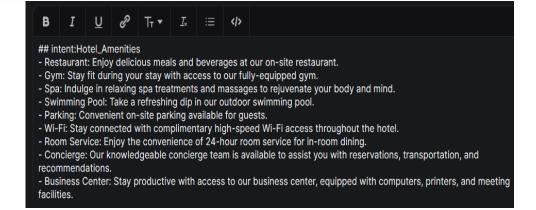
Publishing test version

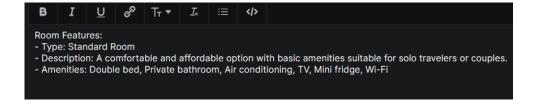Working on feedback

CONFIGURING BOTPRESS

- Configured Botpress for new chatbot.

- Creation of basic flows in Botpress.

- From concept to Botpress.

LUXY

CONFIGURING BOTPRESS

- Gathering / creating data (OpenAI, 2024).
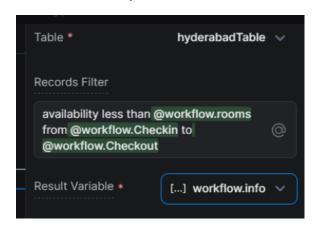
- Adding data to knowledge base.

intent:Hotel_Amenities
- Restaurant: Enjoy delicious meals and beverages at our on-site restaurant.
- Gym: Stay fit during your stay with access to our fully-equipped gym.
- Spa: Indulge in relaxing spa treatments and massages to rejuvenate your body and mind.
- Swimming Pool: Take a refreshing dip in our outdoor swimming pool.
- Parking: Convenient on-site parking available for guests.
- Wi-Fi: Stay connected with complimentary high-speed Wi-Fi access throughout the hotel.
- Room Service: Enjoy the convenience of 24-hour room service for in-room dining.
- Concierge: Our knowledgeable concierge team is available to assist you with reservations, transportation, and recommendations.
- Business Center: Stay productive with access to our business center, equipped with computers, printers, and meeting facilities.

Room Features:
- Type: Standard Room
- Description: A comfortable and affordable option with basic amenities suitable for solo travelers or couples.
- Amenities: Double bed, Private bathroom, Air conditioning, TV, Mini fridge, Wi-Fi

This chatbot can assist you with the following:
- Booking: You can book a room at Oasis Beach Resort in Singapore. Provide check-in and checkout dates, room preferences, and other details.
- Information: Get information about Oasis Beach Resort in Singapore, including facilities, amenities, room features, and dining options.
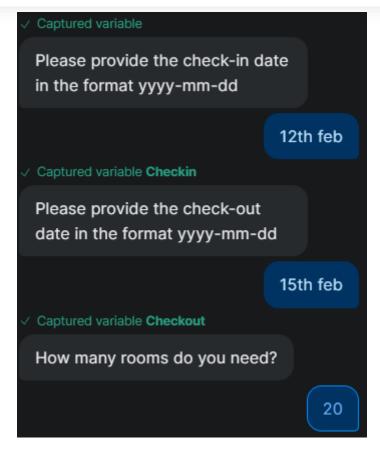
CONFIGURING BOTPRESS

- Manually added random availability data in table format.

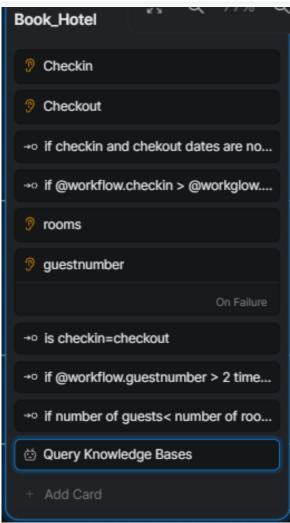```
1 #,Created at,Updated at,Date,Availability
2 1,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-01T12:00:00.000Z,5
3 2,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-02T12:00:00.000Z,3
4 3,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-03T12:00:00.000Z,4
5 4,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-04T12:00:00.000Z,9
6 5,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-05T12:00:00.000Z,17
7 6,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-06T12:00:00.000Z,4
8 7,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-07T12:00:00.000Z,12
9 8,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-08T12:00:00.000Z,20
10 9,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-09T12:00:00.000Z,25
11 10,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-10T12:00:00.000Z,24
12 11,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-11T12:00:00.000Z,5
13 12,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-12T12:00:00.000Z,18
14 13,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-13T12:00:00.000Z,6
15 14,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-14T12:00:00.000Z,5
16 15,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-15T12:00:00.000Z,19
17 16,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-16T12:00:00.000Z,17
18 17,2024-03-03T20:20:39.822Z,2024-03-03T20:20:40.218Z,2024-02-17T12:00:00.000Z,22
```

# TROUBLESHOOT

- Errors while working with dates.
- As availability data is limited, tried to make sure user enters date from 1$^{st}$ Feb 2024 to 15$^{th}$ Feb 2024.
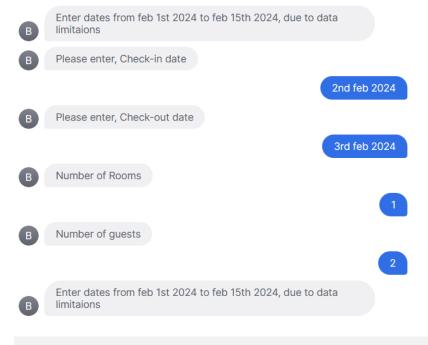- "Query knowledge base" did not work as expected.







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# TROUBLESHOOT

- Added code manually to check availability from table.

- Solved issues with dates.

```javascript
const checkin = new Date(workflow.Checkin);
const checkout = new Date(workflow.Checkout);

console.log("Check-in date:", checkin);
console.log("Checkout date:", checkout);

const records = await hyderabadTable.findRecords({
  filter: {
    Date: {
      $gte: checkin,
      $lte: checkout
    },
    Availability: {
      $lt: workflow.rooms
    }
  }
});

console.log("Records found:", records);

if (records.length > 0) {
  // If there are records that meet the condition, set workflow.notavail to
  workflow.notavail = 1;
  console.log("Workflow.notavail set to 1.");
```

TESTING AND PRODUCTION

- Asked some of my friends to test the chatbot.
- Discovered additional issues concerning the date range.
- Solved issues by separating code for check-in and check-out.
- Found some linguistic errors that were sorted out later.

B Enter dates from feb 1st 2024 to feb 15th 2024, due to data limitaions

B Please enter, Check-in date

2nd feb 2024

B Please enter, Check-out date

3rd feb 2024

B Number of Rooms

1

B Number of guests

2

B Enter dates from feb 1st 2024 to feb 15th 2024, due to data limitaions

```
!(workflow.Checkin >= new
Date('2024-02-01') &&
workflow.Checkin <= new
Date('2024-02-15'))
```

+

```
!(workflow.Checkout >= new
Date('2024-02-01') &&
workflow.Checkout <= new
Date('2024-02-15'))
```
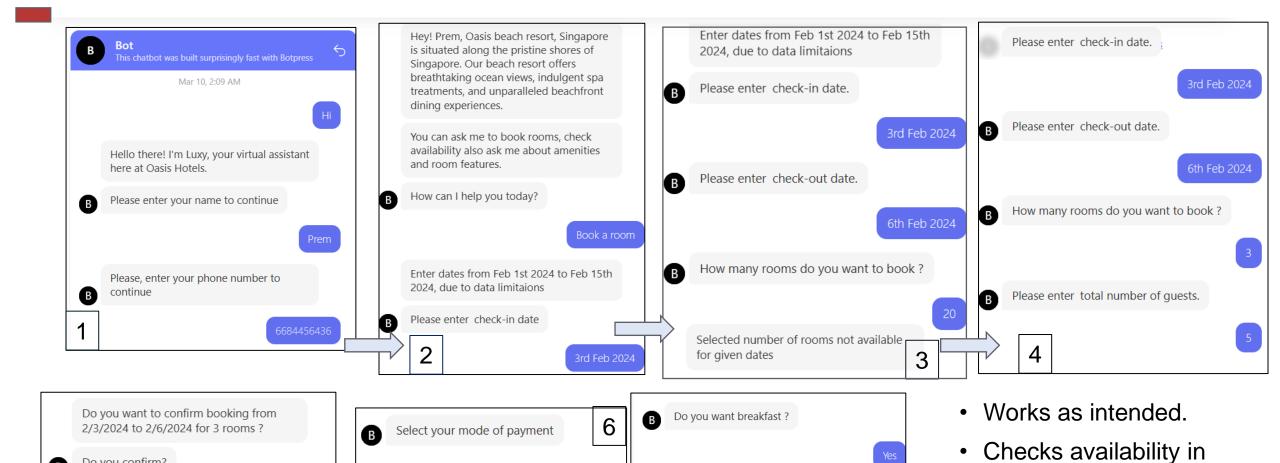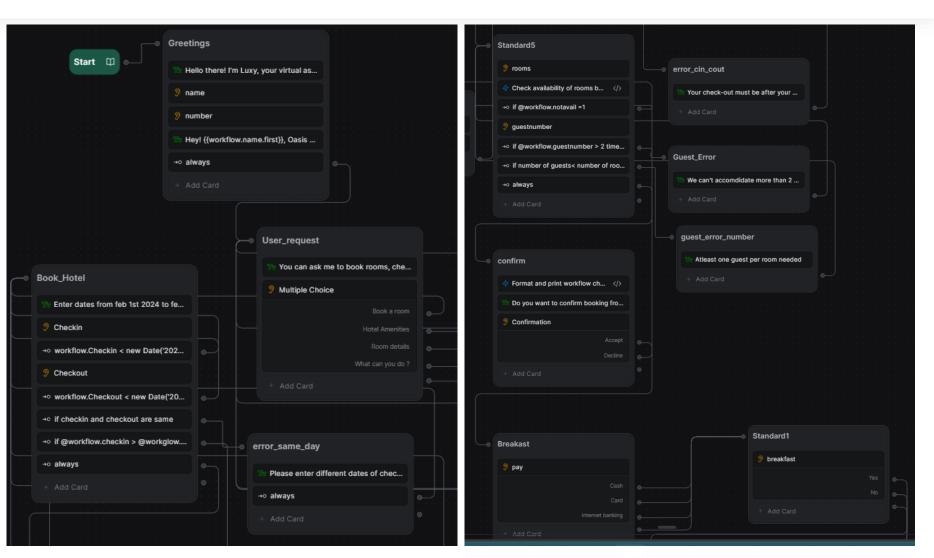
```
!(workflow.Checkin >= new Date('2024-02-01') && workflow.Checkin
<= new Date('2024-02-15')) || !(workflow.Checkout >= new
Date('2024-02-01') && workflow.Checkout <= new Date('2024-02-15'))
```

CONVERSATIONAL FLOW

- Works as intended.
- Checks availability in screenshot 3 as intended.

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CONVERSATIONAL FLOW

- Part of workflow from Botpress studio.

PUBLISHED CHATBOT LINK

- Chatbot (botpress.cloud)
- Feel free to test the chatbot from the given link.
- Any further feedback is appreciated.

REFERENCES

- Botpress. (2024, Feb 25). https://botpress.com/

- OpenAI. (2024, Feb 28). Response to "generate training data for hotel." ChatGPT. https://chat.openai.com/

- Botpress. (2024, Feb 25). Botpress Cloud Documentation. Botpress Documentation. Retrieved March 8, 2024, from https://botpress.com/docs/cloud/

- Discord. (2024, Mar 1)