Industry Challenge

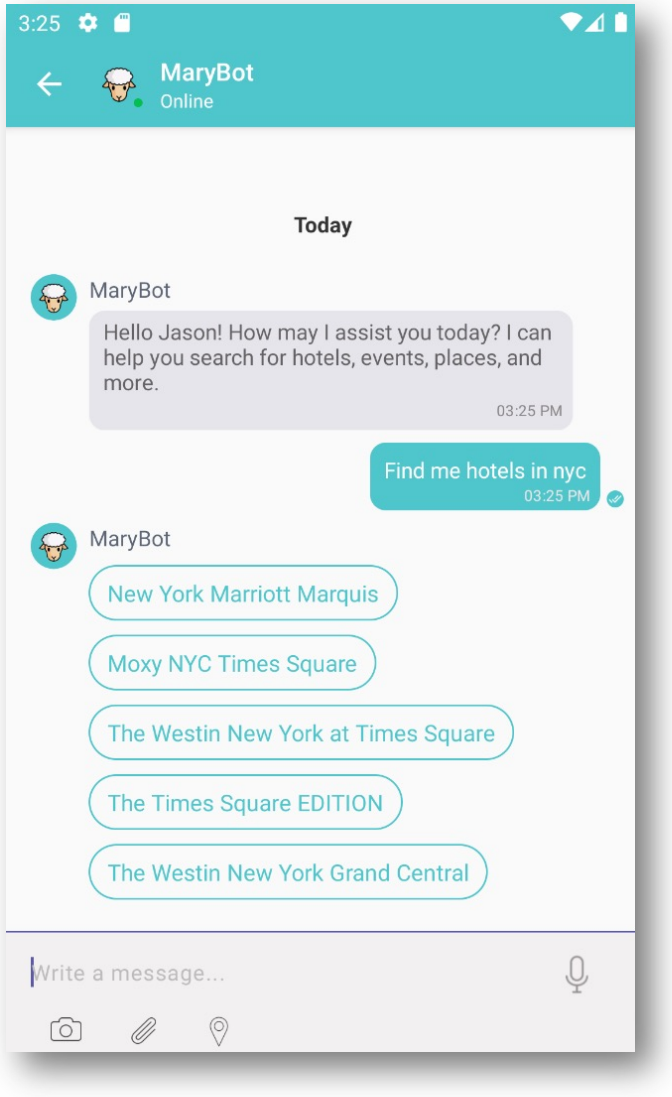
Chatbots

- 1.4 billion users
- The Future of Engagement
- Capture attention
- Initiate conversations
- Personalize experience
- Voice enabled for accessibility

Our Solution

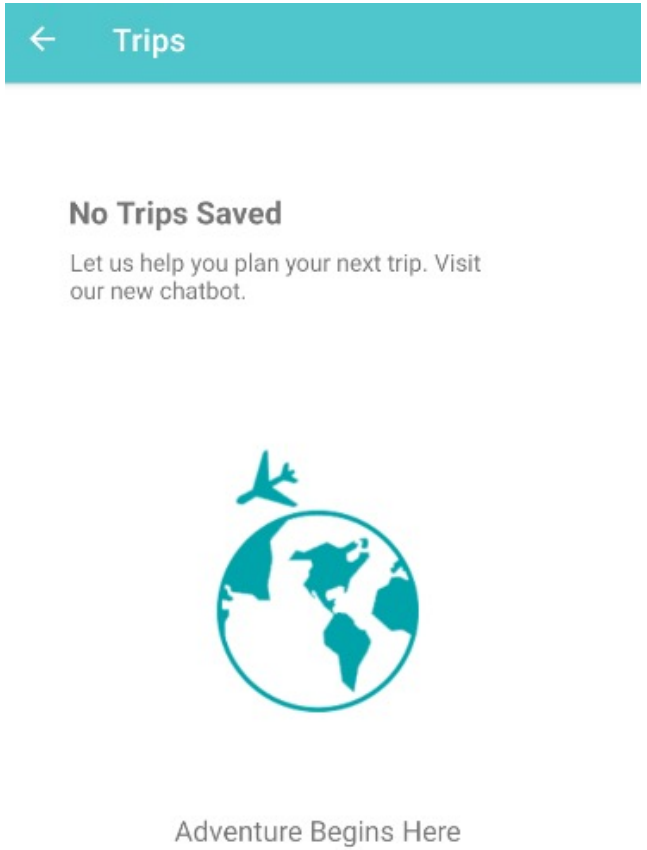
Introducing MaryBot

- Mobile chatbot app “MaryBot”
- Text and voice chat
- Greater accessibility of Marriott’s services
- Vacation planning made easier
- Possible integration into Marriott’s existing mobile app

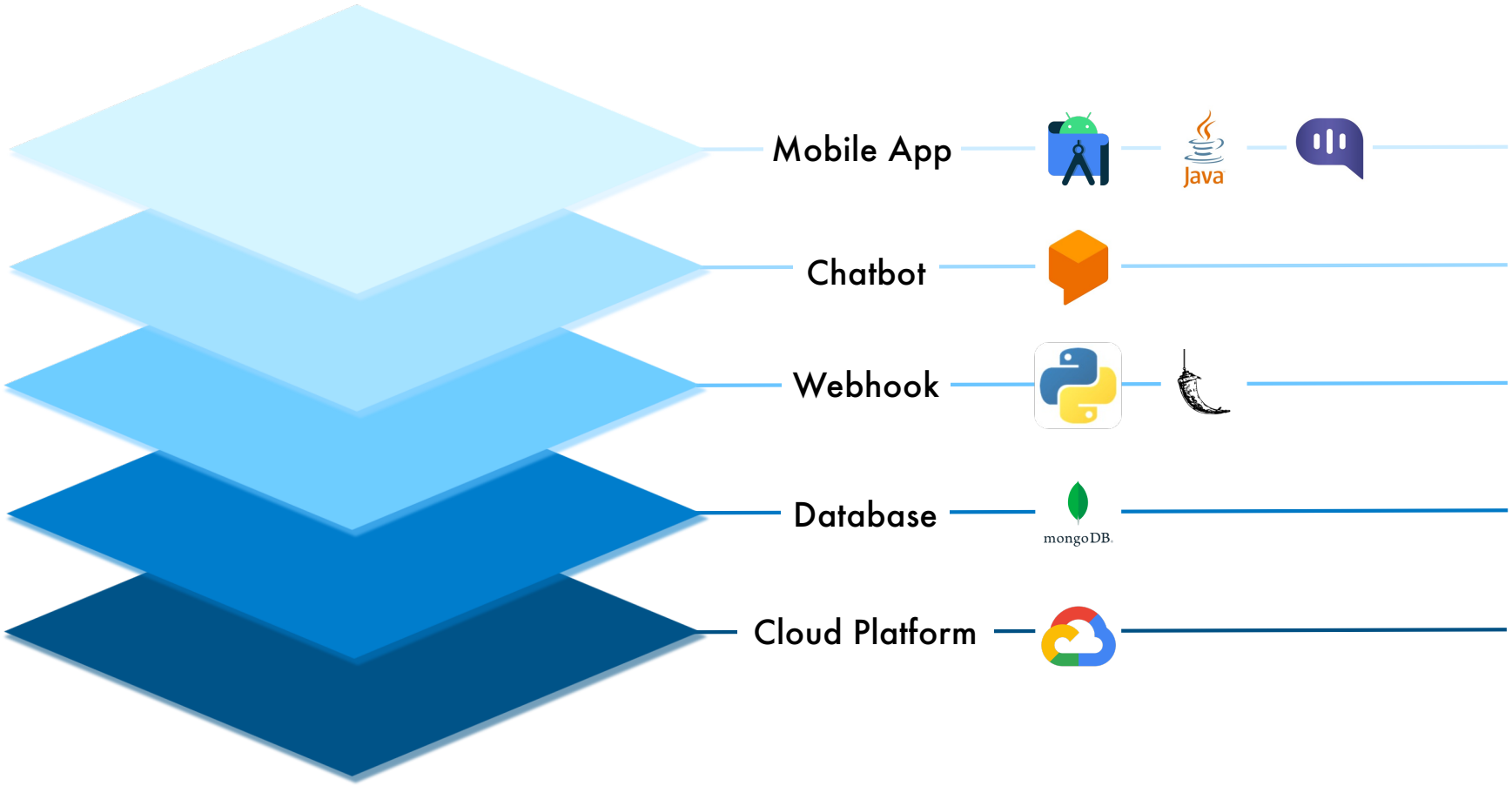


SAMSUNG
Marybot
MAKE TRAVEL EASIER
JOIN
SIGN IN
CONTINUE AS GUEST

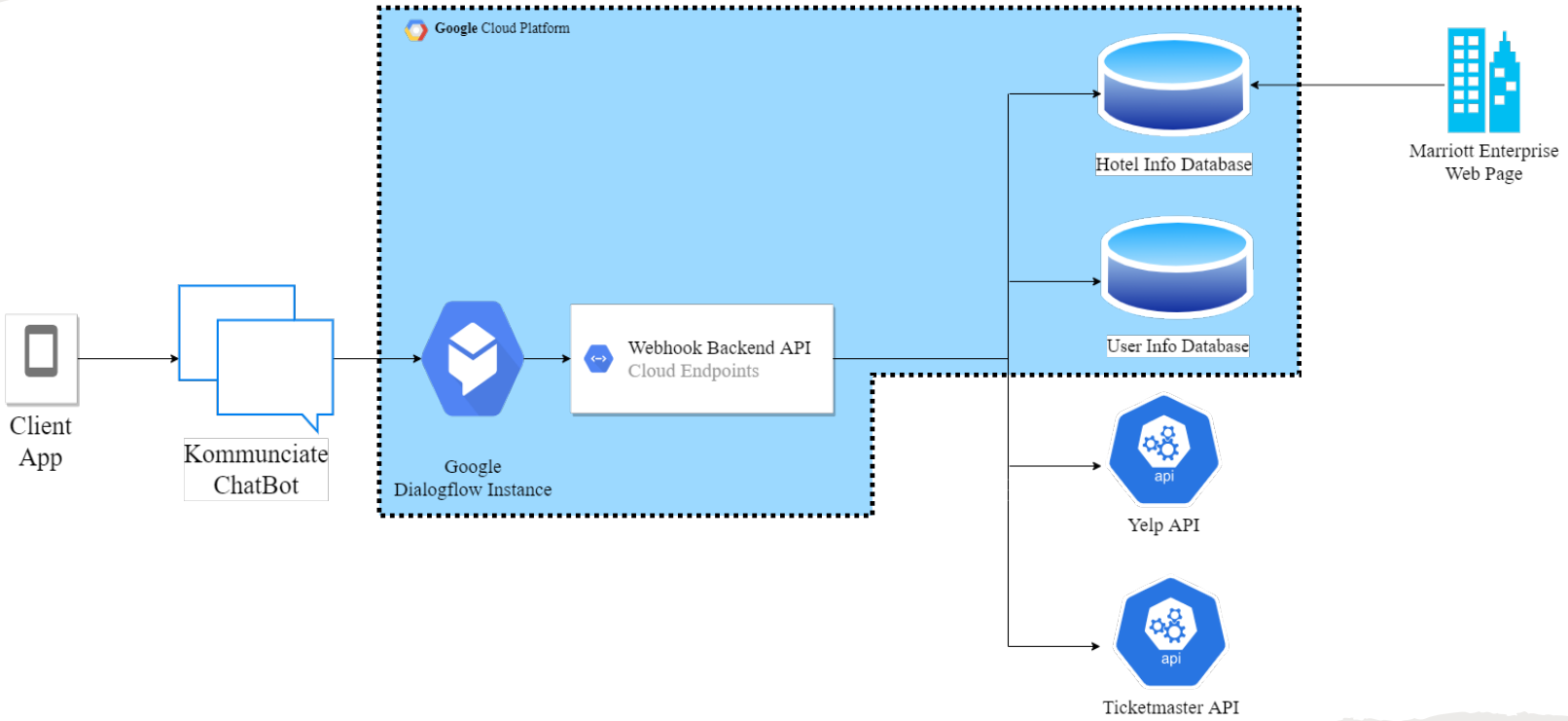
Live as if
The Paradise
is on earth.
Plan a trip >
The Royal at Atlantis, Paradise Island


Trips
No Trips Saved
Let us help you plan your next trip. Visit our new chatbot.
Adventure Begins Here

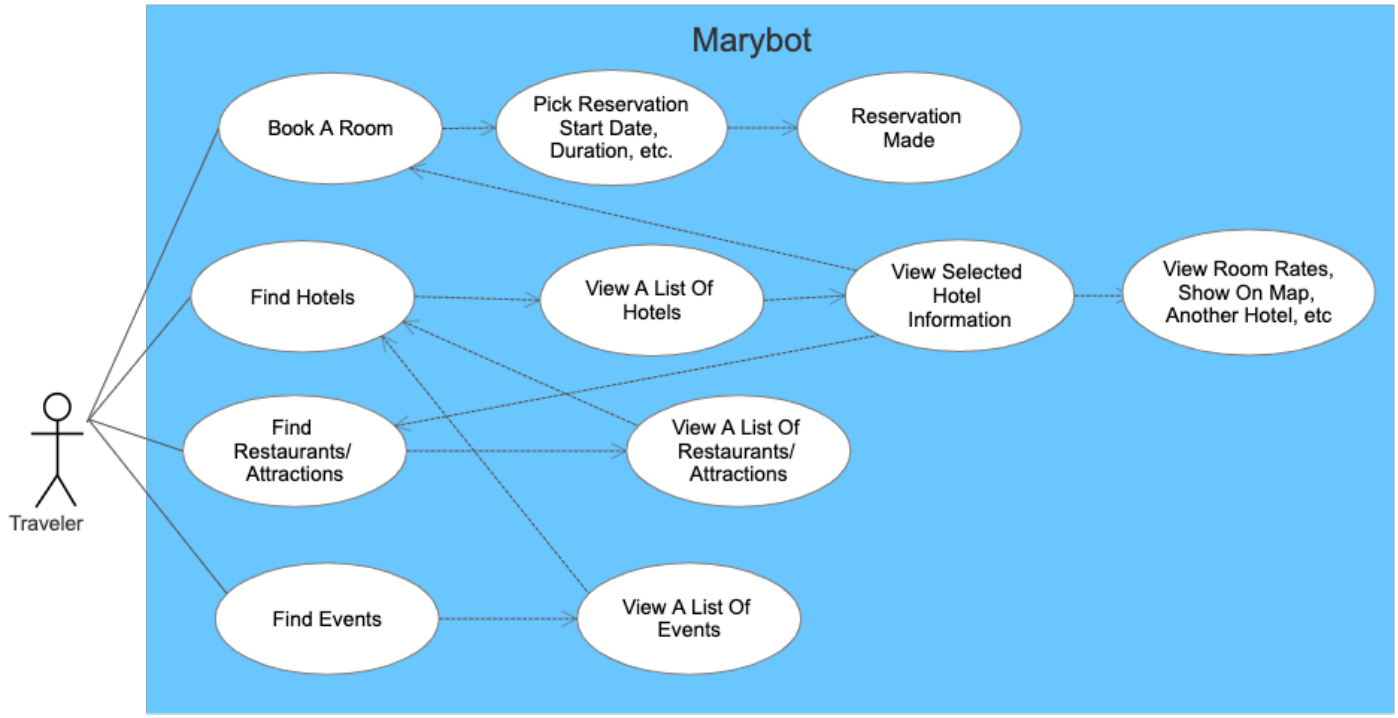
Tech Stack


Mobile App
Java
Chatbot
Webhook
Database
mongoDB.
Cloud Platform

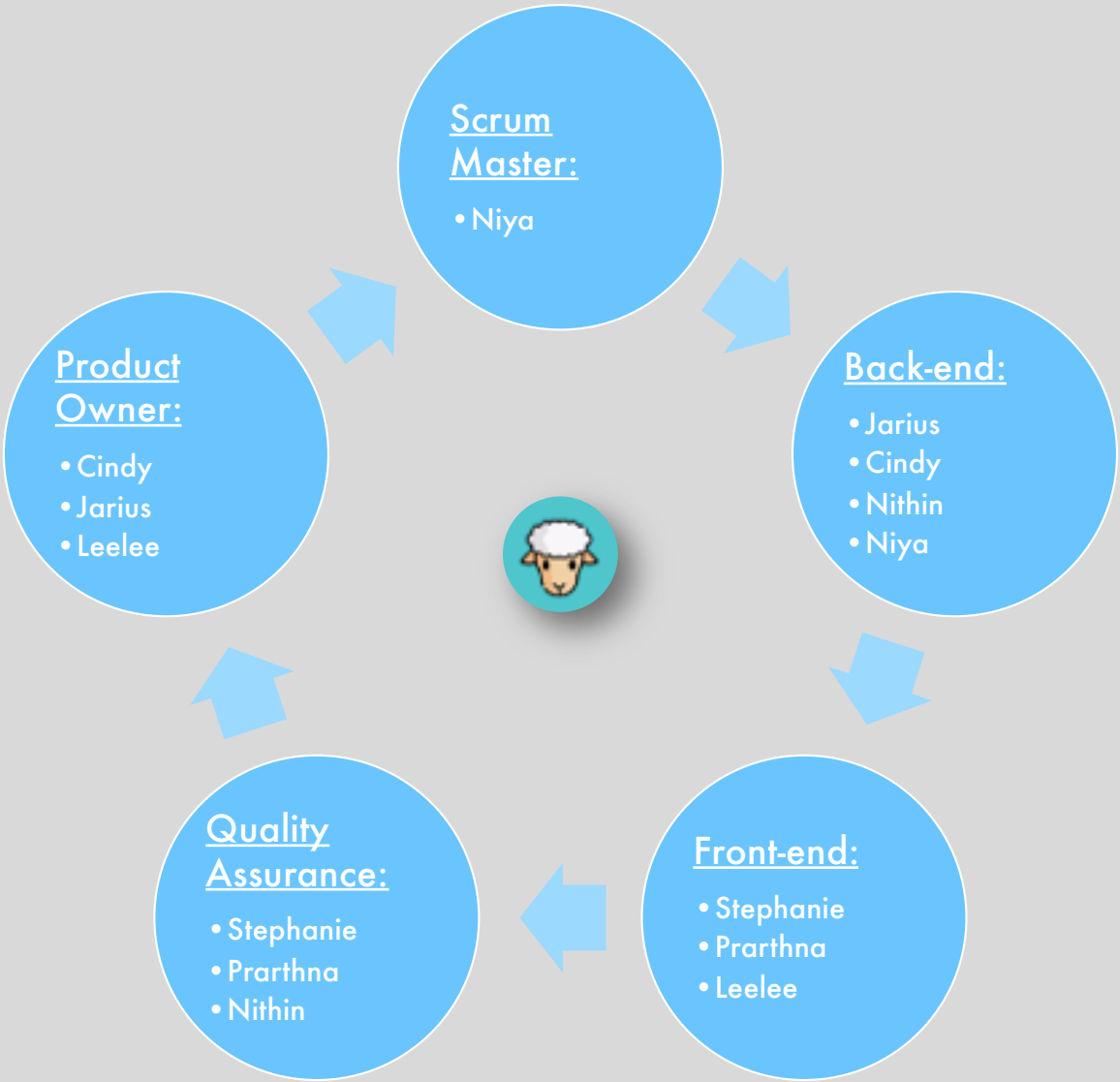
Our Architecture

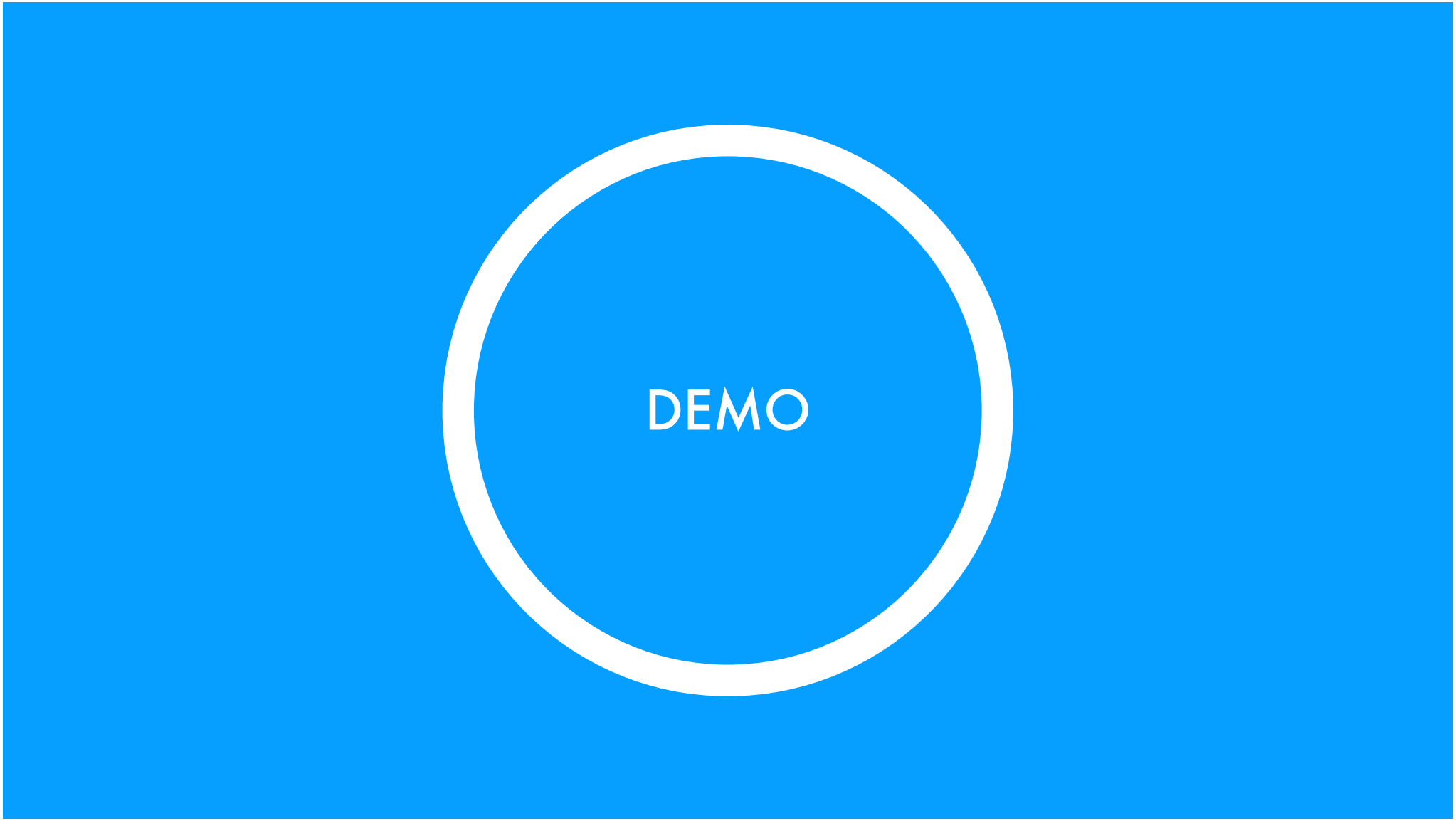


App Use Cases



How We Divided The Work




DEMO

Persona #1

Jason G.

- 22 years old
- College Graduate
- Planning a graduation trip to Miami
- No MaryBot account
  - Friend recommended using MaryBot
- Unemployed and needs to save money

Marybot
MAKE TRAVEL EASIER
JOIN
SIGN IN
CONTINUE AS GUEST

Persona #2

Andrea M.

- 34 years old
- Frequently travels for work
- Planning a trip to Los Angeles to meet with a client
- MaryBot account already created
- Previously made a reservation, but she needs to cancel

Marybot
MAKE TRAVEL EASIER
JOIN
SIGN IN
CONTINUE AS GUEST

LIVE
DEMO

Technical Details

Marriott Hotel Database

Hotel Facts Sheet

Marriott Vacation Club Pulse at Custom House, Boston

3 McKinley Square Boston, MA 02109 USA

Direct Toll Free	1-800-845-5279	Sales Fax	+1-407-903-5997
Main Fax	+1-617-310-6301	Sales Phone	+1-800-465-4213
Main Phone	+1-617-310-6300		

EXPAND ALL

Essentials (Alt + E)

Marriott Vacation Club Pulse at Custom House, Boston welcomes guests to stay in the nation's original customs building that first welcomed new Americans to the United States. This unique vacation ownership property with vacation rental accommodations offers a coveted location in downtown Boston near popular landmarks including Quincy Market, Faneuil Hall, the Boston Opera House and the historic Freedom Trail. After a day full of activities, return to relax in your spacious suite accommodations, with separate living and sleeping areas and a kitchenette. Many suites have unmatched views of Boston Harbor or the Boston skyline. Dine anytime with local restaurant delivery, reinvigorate with a visit to our fitness center or admire the view from our 26th-floor open-air Observation Deck. Kids and adults alike will love features like an on-site movie theater and game room. However you spend your time, we're confident you'll love calling this your home away from home in Boston.

Concierge Email Address:		Staff Languages Spoken:	English, Spanish
Great Room:		Year Built:	Hotel was built in 1985
New Lobby:		Year of Last Guest Room Renovation:	Rooms were renovated in 2009
Property Email Address:	nancy.ghattas@vacationclub.com	Year of Last Public Area Renovation:	
Resort:			

Check-in and Check-out

Check-in Kiosk:	No	Mobile Check-in:	
Check-in Time:	16:00	Mobile Check-out Offered:	
Check-out Time:	11:00	Mobile Guest Services Request:	
Contactless payment available during check in/out:		Video Billing Review:	No

_id: ObjectId("60ef238f0540d9227d119b43")
Hotel Name:: "Marriott Vacation Club Pulse at Custom House, Boston"
Hotel Code:: "bosch"
Hotel Address:: "3 McKinley Square Boston, MA 02109 USA"
Latitude: "42.3590801"
Longitude: "-71.0536495"
› Essentials: Object
› Accessibility: Object
› Alerts: Object
› Business Services: Object
› Dining & Entertainment: Object
› Direct Billing: Object
› Guest Room Amenities: Object
› Meeting Facilities: Object
› Parking: Object
› Recreation: Object
› Services & Amenities: Object
› Staff: Object
› Transportation: Object
› Rates:: Object

⌄ Transportation: Object
Airport Name:: "Boston Logan International Airport"
Airport code:: "BOS"
Distance to Hotel:: "3 mi E"
Driving Directions:: "Boston Logan International AirportHead southeast23 ftKeep left, follow..."
Airport Shuttle:: "N/A"
Airport Shuttle Phone:: "N/A"
Subway Fee:: "Subway service, fee: 2.75 USD (one way)"
Taxi Fare (Estimated):: "Estimated taxi fare: 30 USD (one way)"

User Profiles & User Reviews Database


```
_id: ObjectId("6101aa120af9d8babcfc2e45")
user-id-field: "6101aa11a0c894c5436a1c52"
email: "andream@gmail.com"
firstName: "Andrea"
lastName: "M"
birthDate: 16
birthMonth: 4
birthYear: 1987
bookings: Array
  0: Object
    hotelCode: "boslw"
    hotelName: "Boston Marriott Long Wharf"
    startDate: "2021-09-05T12:00:00-04:00"
    numberOfNights: 4
    price: 2076
  1: Object
    hotelCode: "laxbw"
    hotelName: "The Westin Bonaventure Hotel & Suites, Los Angeles"
    startDate: "2021-08-21T12:00:00-04:00"
    numberOfNights: 3
    price: 1137
  2: Object
    hotelCode: "nycsw"
    hotelName: "The Westin New York at Times Square"
    startDate: "2021-08-15T12:00:00-04:00"
    numberOfNights: 5
    price: 4415
```

```
_id: ObjectId("6101bd741d6921559d934004")
user-id-field: "6101aa11a0c894c5436a1c52"
rating: 5
comments: "helpful"
date: "07/28/21"
```

```
_id: ObjectId("6102cb87f6c67cdd785fc203")
user-id-field: "6102c5543a0a9918ba695013"
rating: 5
comments: "Pretty good"
date: "07/29/21"
```

```
_id: ObjectId("6102f2503075d7c65317cbc6")
user-id-field: "6102f0923a0a9918ba8e8b6a"
rating: 5
comments: "Pretty good"
date: "07/29/21"
```

How We Used the Yelp API

findPlaces

SAVE

Action and parameters

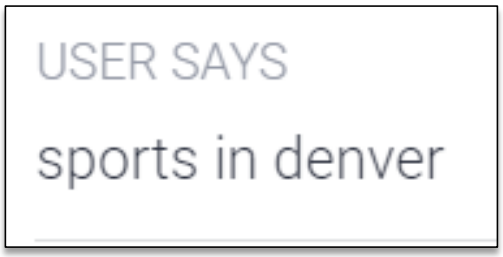
findPlaces

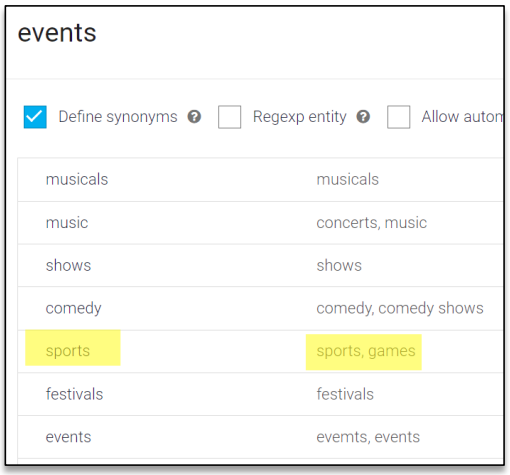
REQUIRED	PARAMETER NAME	ENTITY	VALUE	IS LIST	PROMPTS
☑	geo-city	@sys.geo-city	$geo-city	☐	What is your l o...
☑	term	@places	$term	☐	What are you l o...
☐	placesPrices	@placesPrices	$placesPrices	☐	–
☑	page	@sys.number-ir	0	☐	Define prompt s...
☐	currentCity	Enter entity	$geo-city	☐	–
☐	placesDict	Enter entity	Enter value	☐	–
☐	Enter name	Enter entity	Enter value	☐	–


```
{
  "businesses": [
    {
      "id": "EbUZhM4fLpsWQ8fpBhhgEQ",
      "alias": "mike-and-pattys-boston-boston",
      "name": "Mike & Patty's - Boston",
      "image_url": "https://s3-media1.fl.yelpcdn.com/bphoto/j_Ut4i4j2Q
      "is_closed": false,
      "url": "https://www.yelp.com/biz/mike-and-pattys-boston-boston?a
pi_v3&utm_medium=api_v3_business_search&utm_source=dQQJls7Vv8k49ykG8En
      "review_count": 1806,
      "categories": [
        {
          "alias": "sandwiches",
          "title": "Sandwiches"
        },
        {
          "alias": "breakfast_brunch",
          "title": "Breakfast & Brunch"
        }
      ],
      "rating": 4.5,
      "coordinates": {
        "latitude": 42.348561,
        "longitude": -71.067928
      },
      "transactions": [
        "pickup",
        "delivery"
      ],
      "price": "$",
      "location": {
        "address1": "12 Church St",
        "address2": "",
        "address3": "",
        "city": "Boston",
        "zip_code": "02116",
        "country": "US",
        "state": "MA",
        "display_address": [
          "12 Church St",
          "Boston, MA 02116"
        ]
      },
      "phone": "+16174233447",
      "display_phone": "(617) 423-3447",
      "distance": 283.9483626062025
    },
```

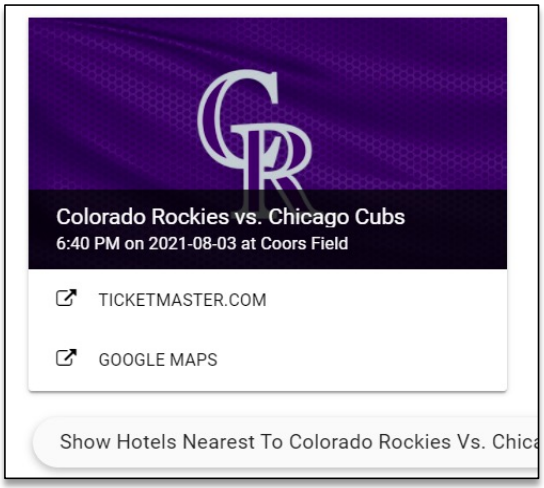
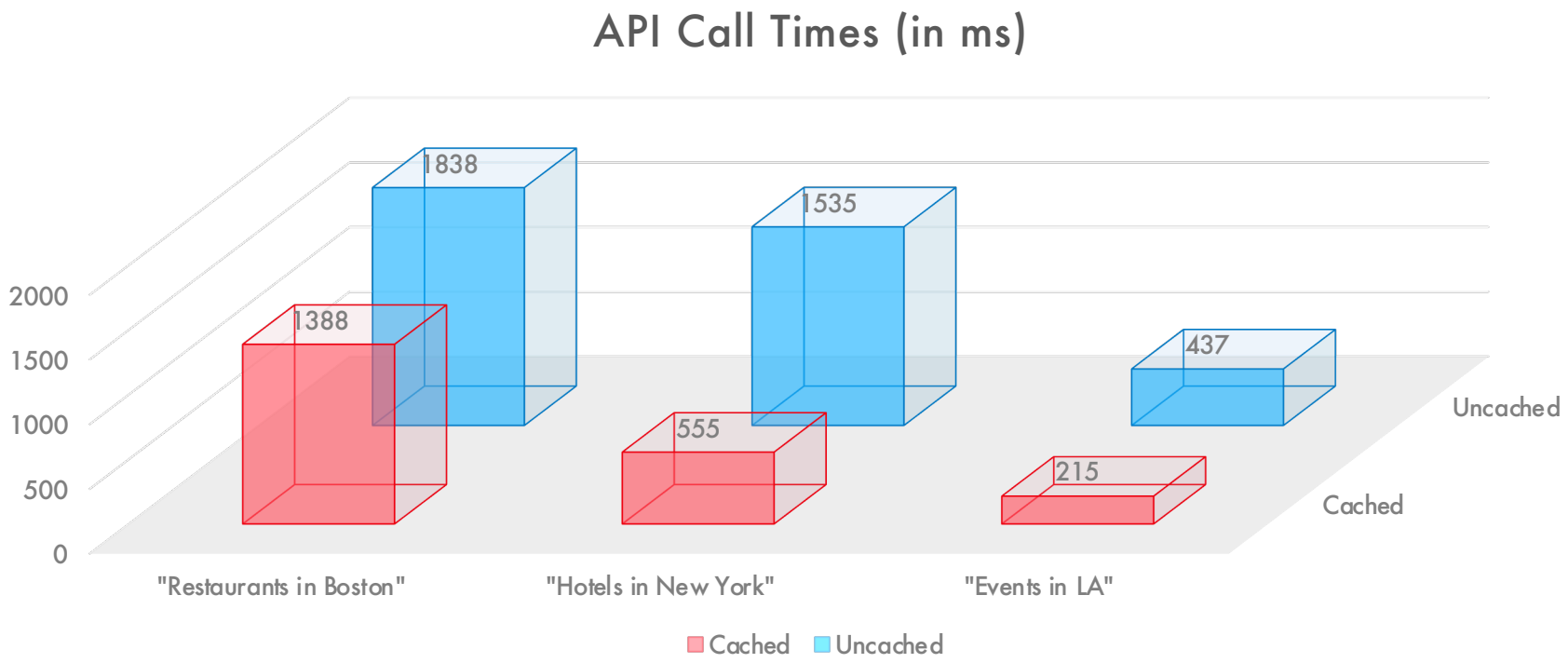

```
currentCard = {
        "card": {
        "title": bus["name"]+"  \n"+str(thisRating)+price+is_open,
        "subtitle": bus["location"]["address1"] + ", " + bus["location"]["city"] + ", " + bus["location"]["state"],
        "imageUri": bus["image_url"],
        "buttons": [
            {
            "text": "yelp.com",
            "postback": bus["url"]
            }, {
            "text": "google maps",
            "postback": maps_url
            }
        ]
        }
    }
```

How We Used the Ticketmaster API






```
{
  "_embedded": {
    "events": [
      {
        "name": "Colorado Rockies vs. Chicago Cubs",
        "type": "event",
        "id": "G5vzZpEkpM8D4",
        "test": false,
        "url": "https://www.ticketmaster.com/colorado-
nver-colorado-08-03-2021/event/1E005A7196DD0ED5",
        "locale": "en-us",
        "images": [ ···
        ],
        "sales": { ···
        },
        "dates": {
          "start": {
            "localDate": "2021-08-03",
            "localTime": "18:40:00",
            "dateTime": "2021-08-04T00:40:00Z",
```




Performance Improvements via Caching