Readme

This microservice receives a request from the sender and returns a JSON object that contains a random bird species along with a description of the sighting with the latitude and longitude. To receive the JSON object with the bird sighting information, you must send a request using RabbitMQ. An example request is shown below in Python.

# Connect to RabbitMQ

connection = pika.BlockingConnection(pika.ConnectionParameters('localhost'))

channel = connection.channel()

# Declare a queue for the response

result = channel.queue\_declare(queue='', exclusive=True)

callback\_queue = result.method.queue

# Define the function to handle the response

def on\_response(ch, method, props, body):

if props.correlation\_id == corr\_id:

data = json.loads(body)

print(f"Received response: {data}")

channel.stop\_consuming()

# Generate a correlation ID for the request

corr\_id = str(uuid.uuid4())

# Define the request message

message = "Request for bird sighting"

# Send the request message and wait for the response

channel.basic\_publish(exchange='',

routing\_key='request\_queue',

properties=pika.BasicProperties(

reply\_to=callback\_queue,

correlation\_id=corr\_id,

),

body=message)

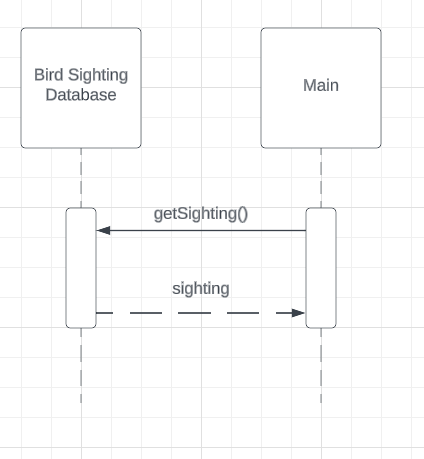
# Start consuming responses

channel.basic\_consume(queue=callback\_queue, on\_message\_callback=on\_response)

channel.start\_consuming()

# End Script

The received JSON object will be contained in the “data” variable for you to use.



Sequence Diagram to Receive Sighting Information