

**Assignment -3**  
**IBM Object Storage and IBM Watson Assistant**

Assignment Date	08 november 2022
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Maximum Marks	2 Marks

**Question 1:**

Create a Bucket in IBM object storage.

**Solution:**

**ibmCloudTest.py**

```
import ibm_boto3

from ibm_botocore.client import Config, ClientError

from ibm_s3transfer.aspera.manager import AsperaTransferManager

from ibm_s3transfer.aspera.manager import AsperaConfig

from flask import Flask, render_template, url_for, request, redirect


COS_ENDPOINT="https://s3.jp-tok.cloud-object-storage.appdomain.cloud"

COS_API_KEY_ID="wprEMAxjHj5sPI959wL_3HJczOWRbYn52XUuLrDSJON"

COS_INSTANCE_CRN="crn:v1:bluemix:public:cloud-object-
storage:global:a/602bcdcf9224f7b8c2e1aed60258292:b846251f-3216-44c8-b123-4e13e3571cda::"


cos = ibm_boto3.resource("s3",

    ibm_api_key_id=COS_API_KEY_ID,

    ibm_service_instance_id=COS_INSTANCE_CRN,

    config=Config(signature_version="oauth"),

    endpoint_url=COS_ENDPOINT

)


ms_transfer_config = AsperaConfig(multi_session=2, multi_session_threshold_mb=100)

transfer_manager = AsperaTransferManager(client=client, transfer_config=ms_transfer_config)


app=Flask(__name__)
```

```
bucket_name = "flask-application"
```

```
download_filename = "E:\IMS\static\css\Styles.css"
```

```
object_name = "Styles.css"
```

```
with AsperaTransferManager(client) as transfer_manager:
```

```
    future = transfer_manager.download(bucket_name, object_name, download_filename)
```

```
    future.result()
```

```
def get_item(bucket_name, item_name):
```

```
    print("Retrieving item from bucket: {0}, key: {1}".format(bucket_name, item_name))
```

```
    try:
```

```
        file = cos.Object(bucket_name, item_name).get()
```

```
        print("File Contents: {0}".format(file["Body"].read()))
```

```
    except ClientError as be:
```

```
        print("CLIENT ERROR: {0}\n".format(be))
```

```
    except Exception as e:
```

```
        print("Unable to retrieve file contents: {0}".format(e))
```

```
def get_bucket_contents(bucket_name):
```

```
    print("Retrieving bucket contents from: {0}".format(bucket_name))
```

```
    try:
```

```
        files = cos.Bucket(bucket_name).objects.all()
```

```
        files_names = []
```

```
        print(files)
```

```
        for file in files:
```

```
            files_names.append(file.key)
```

```
            print("Item: {0} ({1} bytes)".format(file.key, file.size))
```

```
        return files_names
```

```
    except ClientError as be:
```

```
        print("CLIENT ERROR: {0}\n".format(be))
```

```
    except Exception as e:
```

```
print("Unable to retrieve bucket contents: {0}".format(e))
```

```
@app.route('/')
```

```
def index():
```

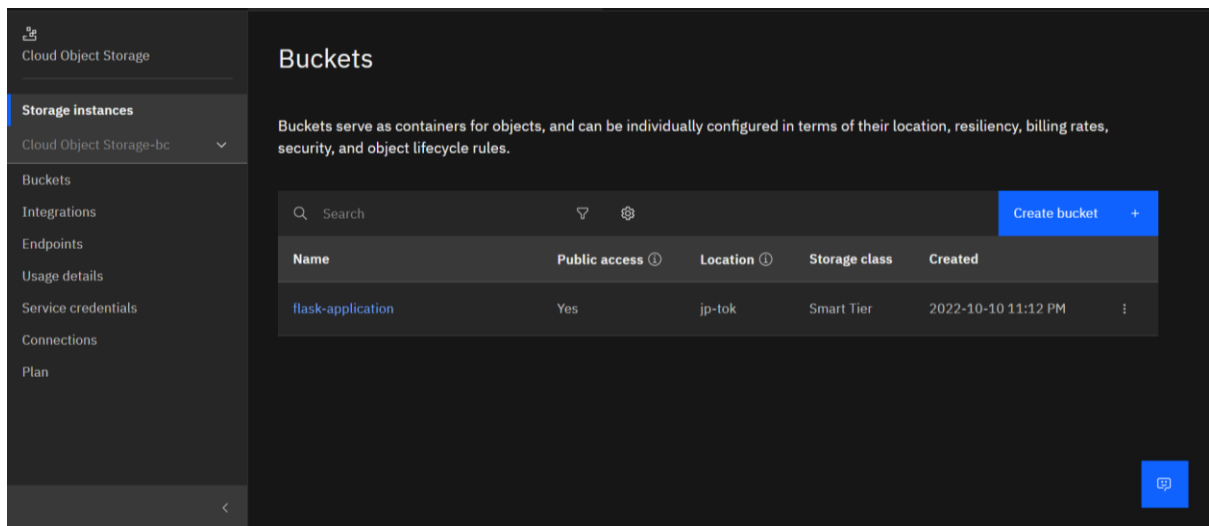
```
    files = get_bucket_contents('flask-application')
```

```
    return render_template('index.html', files = files)
```

```
if __name__ == '__main__':
```

```
    app.run(debug=True)
```

## Output:



**Cloud Object Storage**

**Storage instances**

Cloud Object Storage-bc

**Buckets**

Integrations

Endpoints

Usage details

Service credentials

Connections

Plan

## Buckets

Buckets serve as containers for objects, and can be individually configured in terms of their location, resiliency, billing rates, security, and object lifecycle rules.

Search

Create bucket +

Name	Public access ⓘ	Location ⓘ	Storage class	Created
flask-application	Yes	jp-tok	Smart Tier	2022-10-10 11:12 PM

## Question 2:

Upload 5 images to ibm object storage and make it public. write html code to displaying all the 5 images.

### Solution:

#### index.html

```
<h1>IBM Cloud Storage and IBM Watson Assistant</h1>
```

```
<br><hr>
```

```
{% block head %}
```

```
<!-- CSS -->
```

```
<link rel="stylesheet" href="{{ url_for('static',filename='css/Styles.css') }}" />
```

```
{% endblock %}
```

```
<script>
```

```
    window.watsonAssistantChatOptions = {
```

```
        integrationID: "8abe6aef-f2bb-4376-be93-7fda1857ec36", // The ID of this integration.
```

```
        region: "jp-tok", // The region your integration is hosted in.
```

```
        serviceInstanceID: "440aeee1-fbb4-4c2b-8604-cb5d605fa157", // The ID of your service instance.
```

```
        onLoad: function(instance) { instance.render(); }
```

```
    };
```

```
    setTimeout(function(){
```

```
        const t=document.createElement('script');
```

```
        t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +  
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
```

```
        document.head.appendChild(t);
```

```
    });
```

```
</script>
```

```
<!doctype html>
```

```
<html>
```

```
    <body>
```

```
        {% for row in files %}
```

```

<div style="border: 1px solid #E0E0E0;margin:10px;">

    <h3>Filename : {{row}} </h3>

    </td>

</div>

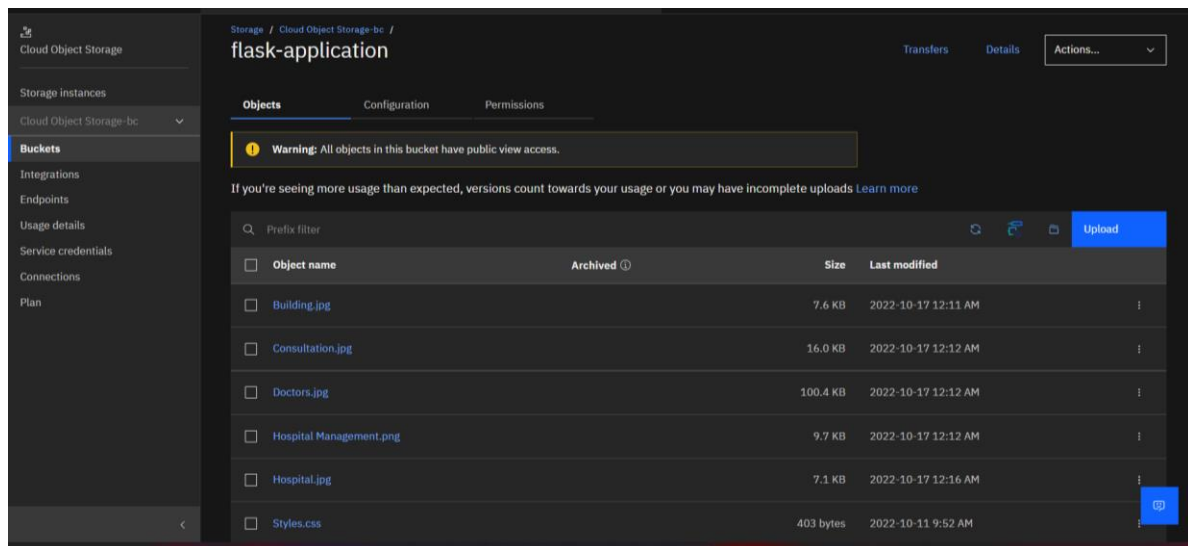
{% endfor %}

</body>

</html>

```

## Output:



**Question 3:**

Upload a css page to the object storage and use the same page in your HTML code.

**Solution:****Styles.css**

```
body {  
    background-color: rgb(190, 229, 247);  
    text-align: center;  
    font-style: italic ;  
}  
.outercont  
{  
    height: 100vh;  
    width: 100vw;  
    display: flex;  
    flex-direction: column;  
    justify-content: space-around;  
    align-items: center;  
}  
p {  
    font-size: 20px;  
}  
h1 {  
    text-align: center;  
    font-style: normal;  
}  
h2 {  
    text-align: center;  
}  
.cont {  
    width: 700px;  
}
```

```

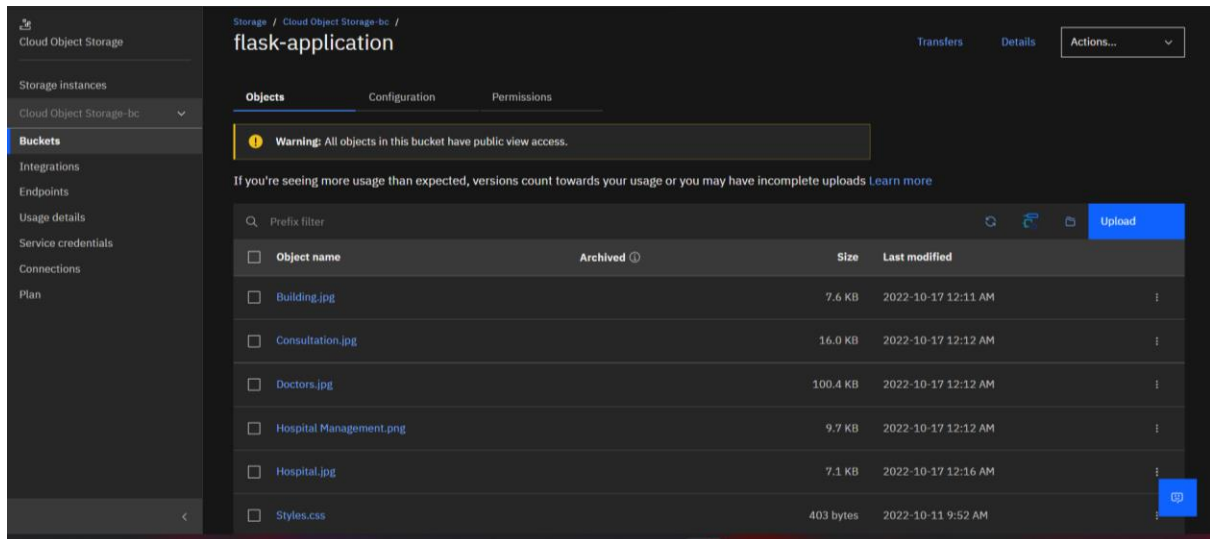
.leftcont {
    font-size: 17px;
}

.rightcont {
    font-size: 17px;
}

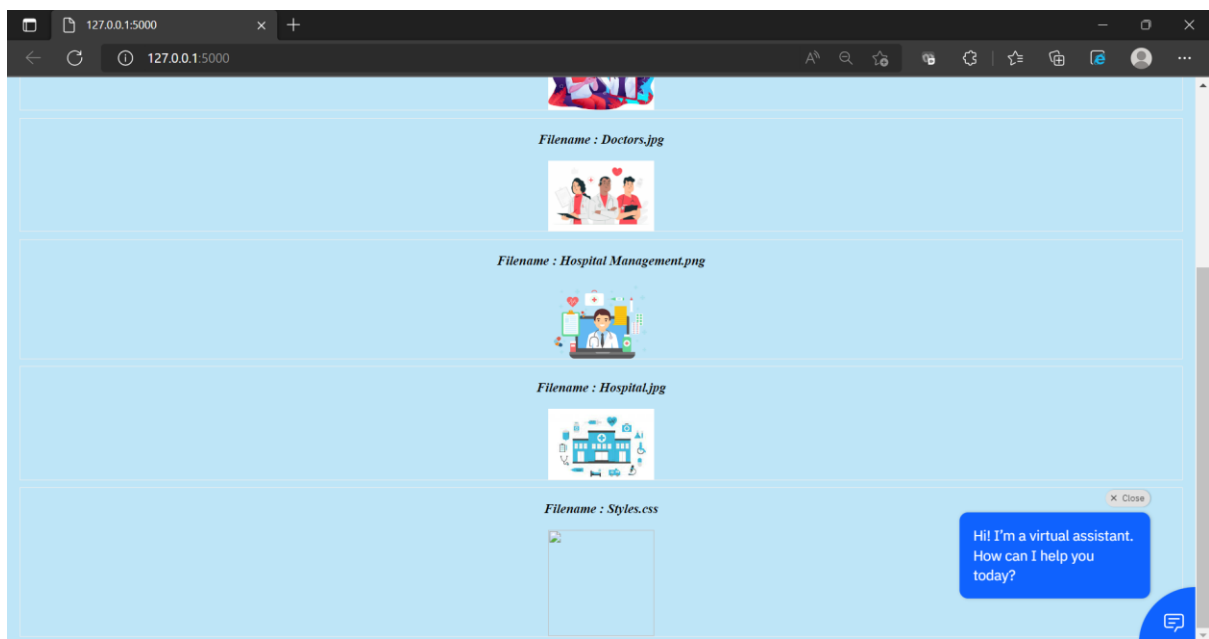
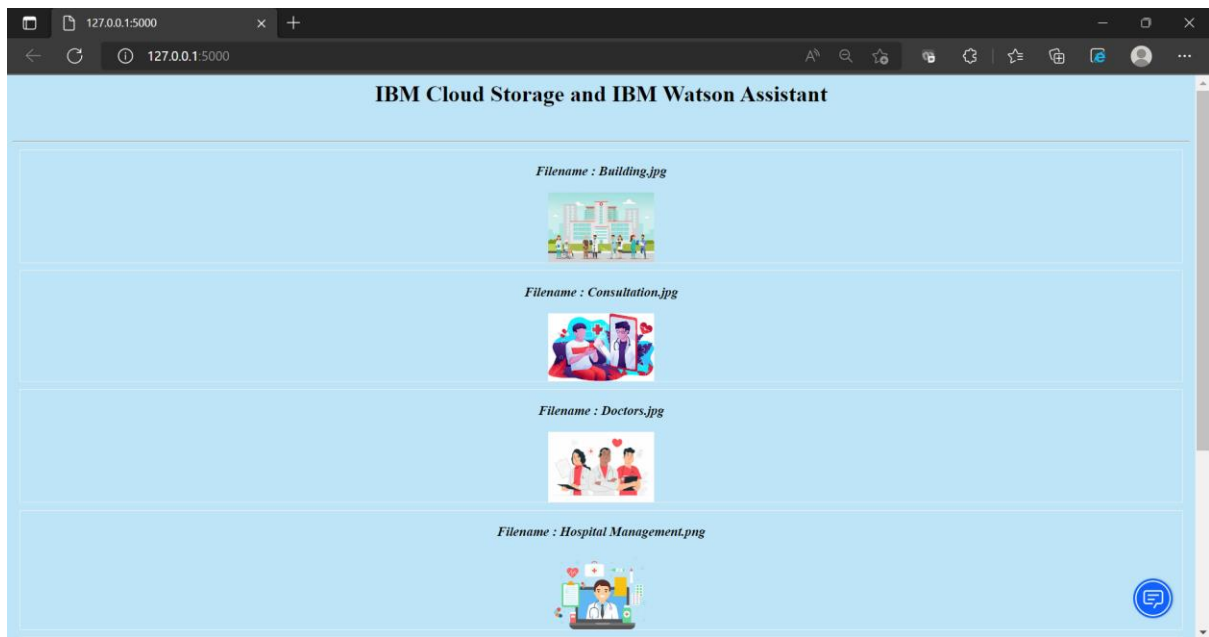
.othercont {
    display: flex;
}

```

## Output:



## Web Page:





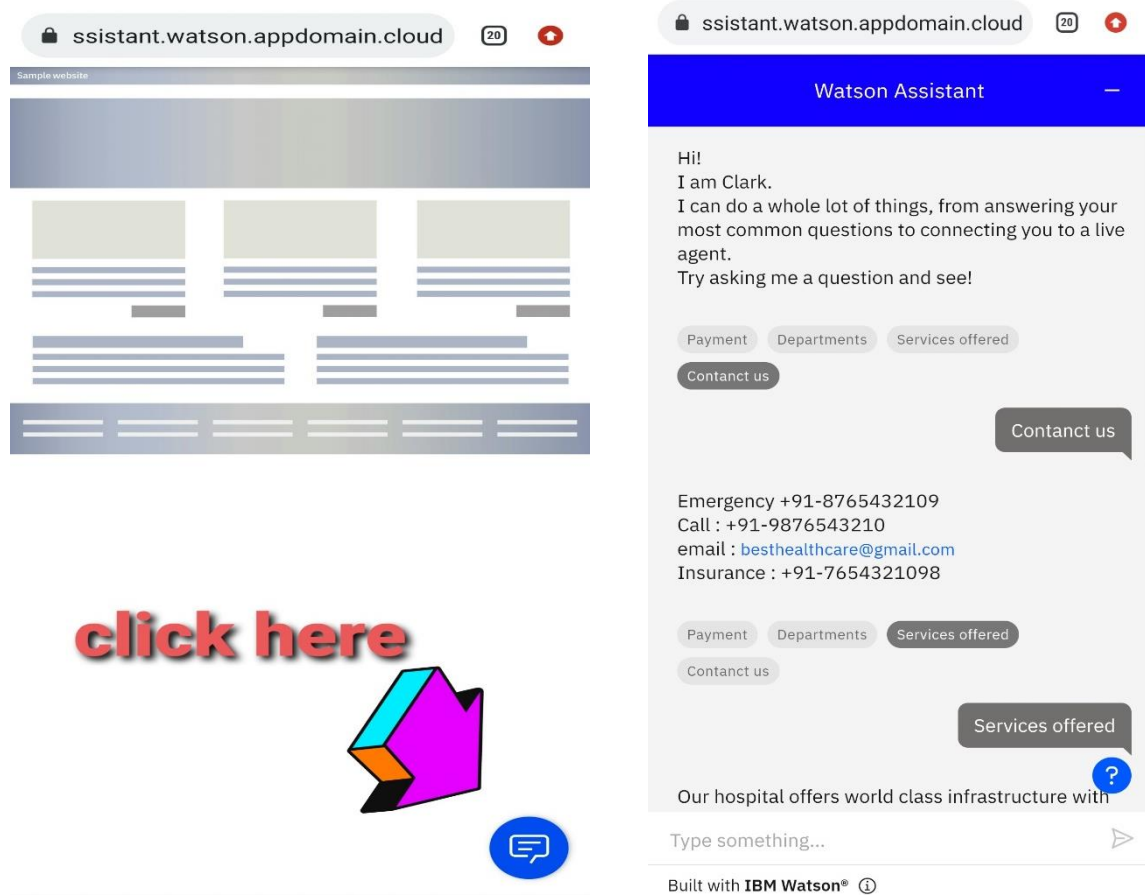
#### Question-4:

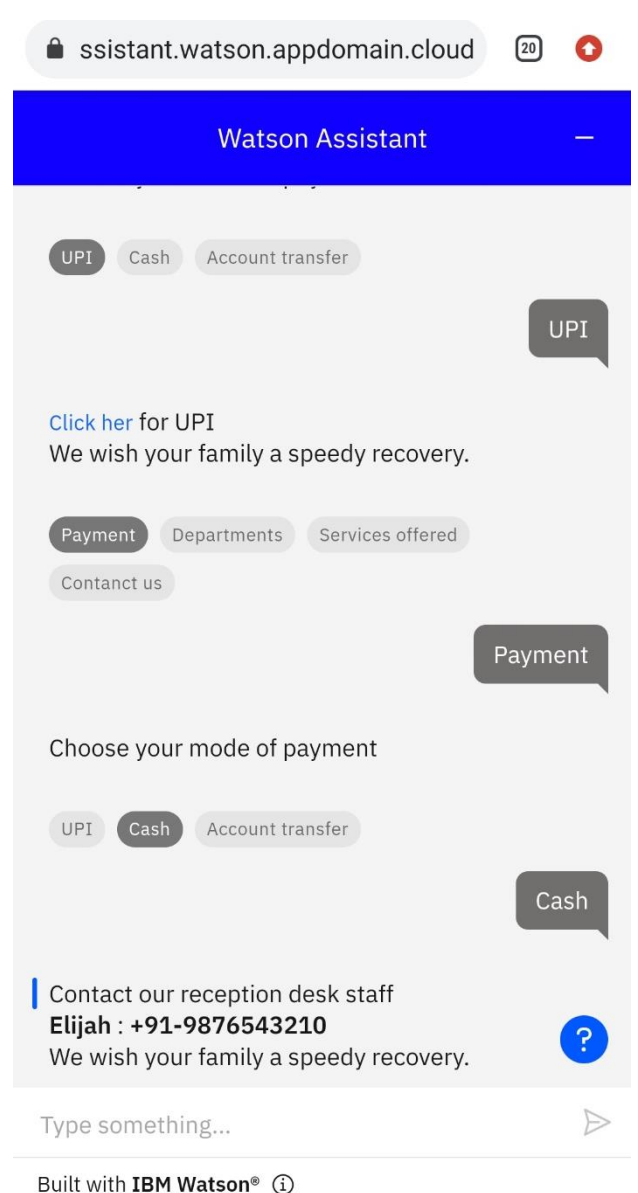
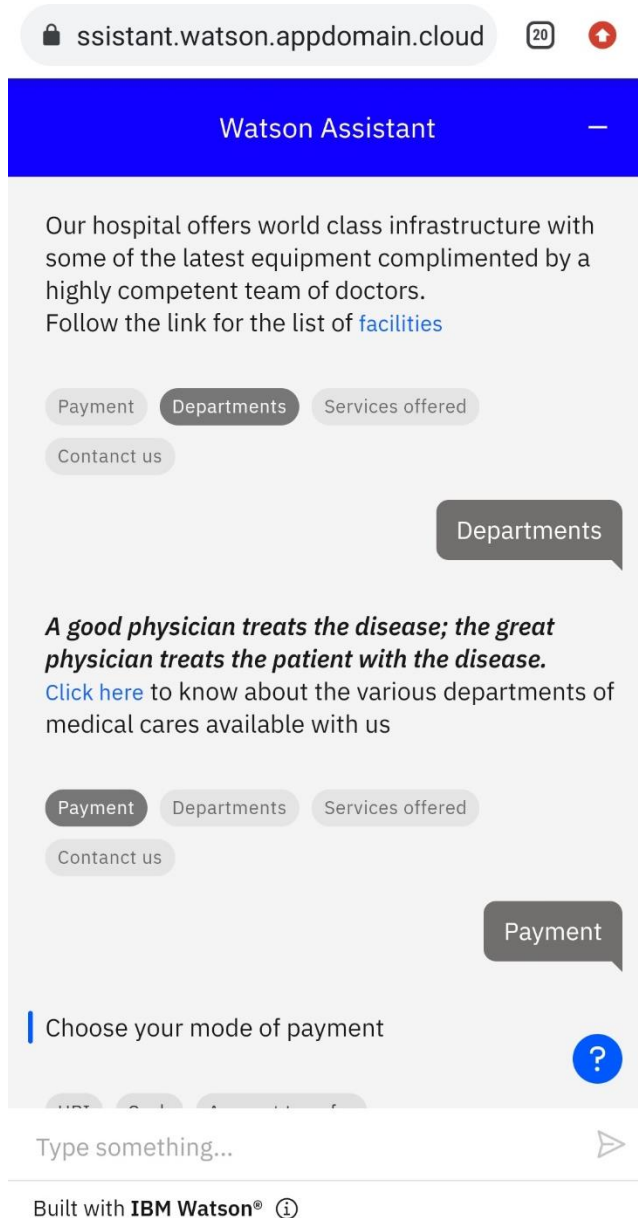
Design a chatbot using IBM Watson assistant for hospital. Ex: User comes with query to know the branches for that hospital in your city. Submit the web URL of that chat bot as a assignment.

#### Solution:

<https://web-chat.global.assistant.watson.appdomain.cloud/preview.html?backgroundImageURL=https%3A%2F%2Fjp-tok.assistant.watson.cloud.ibm.com%2Fpublic%2Fimages%2Fupx-440aaee1-fbb4-4c2b-8604-cb5d605fa157%3A%3Affa26b03-3295-42fd-a098-6723615c4e58&integrationID=a3e3b932-8ee4-43ee-9ccb-f3cfa9687188&region=jp-tok&serviceInstanceID=440aaee1-fbb4-4c2b-8604-cb5d605fa157>

#### Output:





**Question-5:**

5.Create Watson assistant service with 10 steps and use 3 conditions in it. Load that script in HTML page.

**Solution:**

```
<script>
window.watsonAssistantChatOptions = {
  integrationID: "8abe6aef-f2bb-4376-be93-7fda1857ec36", // The ID of this integration.
  region: "jp-tok", // The region your integration is hosted in.
  serviceInstanceID: "440aeee1-fbb4-4c2b-8604-cb5d605fa157", // The ID of your service instance.
  onLoad: function(instance) { instance.render(); }
};
setTimeout(function(){
  const t=document.createElement('script');
  t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
  document.head.appendChild(t);
});
</script>
```

## Steps:

### Steps in payment

Make a payment

Customer starts with:  
Complete payment

Conversation steps

1

Choose your mode of payment

UPI Account tran... + 1

Continue to next step

1 == UPI

[Click her](https://pay.google.com/intl/en\_in/about/)

2 for Step 1 We wish your family a speedy recovery.

Go to action: What can you do?

1 == Account transfer

3 RTGS Account Number: 1234567890 IFSC code of the Branch :SBIN0981

Go to action: What can you do?

1 == Cash

4 Contact our reception desk staff Elijah : +91-9876543210 We wish your family a speedy recovery.

New step +

### Steps in location

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Location

Customer starts with:  
Can you please give me a list of the types of things you can he...

Conversation steps

1

We have our branch all around the world [Click here]  
(https://www.google.com/maps/search/best+health+...)

Go to action: What can you do?

New step +

steps in What can you do

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What can you do?

Conversation steps

1

This step has no content

DepartmentsPayment+ 2

↓ Continue to next step

1 == Payment

2

This step has no content

Go to action: **Make a payment**

1 == Services offered

3

Our hospital offers world class infrastructure with some of the latest equipment complimented by a...

Re-ask previous step(s)

1 == Departments

4

A good physician treats the disease; the great physician treats the patient with the disease. [Click...

Re-ask previous step(s)

1 == Contact us

5

Emergency +91-8765432109 Call : +91-9876543210 email : besthealthcare@gmail.com...

Re-ask previous step(s)

New step +

**Conditions:**

### Conditions in payment

- UPI
- Account transfer
- Cash

The screenshot displays the Microsoft Bot Framework Designer interface for a bot named 'My Bot'. The current step is 'Step 2 is taken', which is a 'with conditions' step. The condition is defined as 'If All of this is true: 1. Choose your mode of payment is UPI'. The 'Add condition' dropdown is open, showing options: 'defined', 'UPI', 'Account transfer', and 'Cash'. The 'Assistant says' section shows the bot's response: 'Click her for 1. Choose your mode of payment. We wish your family a speedy recovery.' The 'And then' section is empty.

**Step 2 is taken** with conditions 1 condition

Conditions 1 condition

If All of this is true:

1. Choose your mode of payment is UPI

and Add condition +

New condition group +

defined

UPI

Account transfer

Cash

**Assistant says**

Click her for 1. Choose your mode of payment.

We wish your family a speedy recovery.

**And then**

Define customer response

Preview

## Conditions in What can you do

- Departments
- Payment
- Services offered
- Contact us

IBM Watson Assistant Lite Upgrade Clark

What can you do?

Customer starts with:  
Can you please give me a list of the types of things you can ...

Conversation steps

1 This step has no content  
Departments Payment +2  
Continue to next step

2 This step has no content  
Go to action: Make a payment

3 1 == Services offered  
Our hospital offers world class infrastructure with some of the latest equipment complimented by a...  
Re-ask previous step(s)

4 1 == Departments  
A good physician treats the disease; the great physician treats the patient with the disease. [Click...  
Re-ask previous step(s)

5 1 == Contact us  
Emergency +91-8765432109 Call : +91-9876543210 email : besthealthcare@email.com

New step +

Step 2 is taken with conditions

Conditions 1 condition

If All of this is true:

1. No response is Payment

and Add condition +

New condition group +

Assistant says

For example: What type of transfer would you like to make?

Define customer response

And then

Go to another action

Goes to action Make a payment

Preview

## Output:

