

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:

The screenshot shows the AWS Cloud Object Storage console for a bucket named 'flask-application'. The left sidebar shows the navigation menu with 'Buckets' selected. The main area displays the 'Objects' tab, which lists the following objects:

Object name	Archived	Size	Last modified
Building.jpg		7.6 KB	2022-10-17 12:11 AM
Consultation.jpg		16.0 KB	2022-10-17 12:12 AM
Doctors.jpg		100.4 KB	2022-10-17 12:12 AM
Hospital Management.png		9.7 KB	2022-10-17 12:12 AM
Hospital.jpg		7.1 KB	2022-10-17 12:16 AM
Styles.css		403 bytes	2022-10-11 9:52 AM

A warning message at the top states: 'Warning: All objects in this bucket have public view access.' Below the warning, there is a link to 'Learn more'.

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;
}

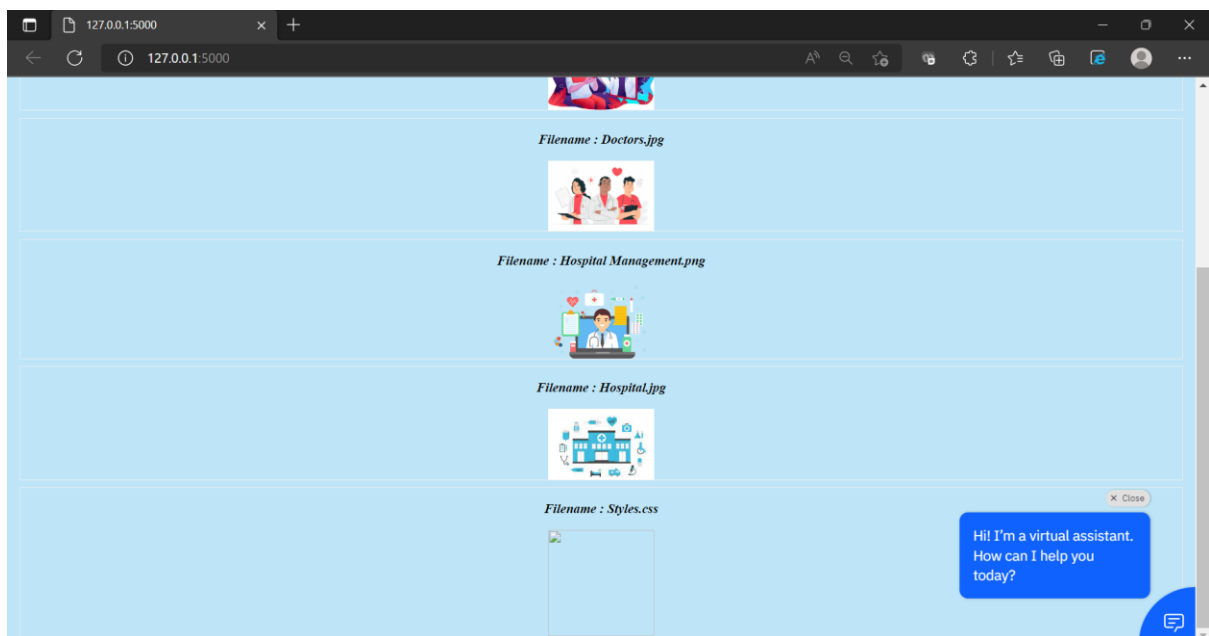
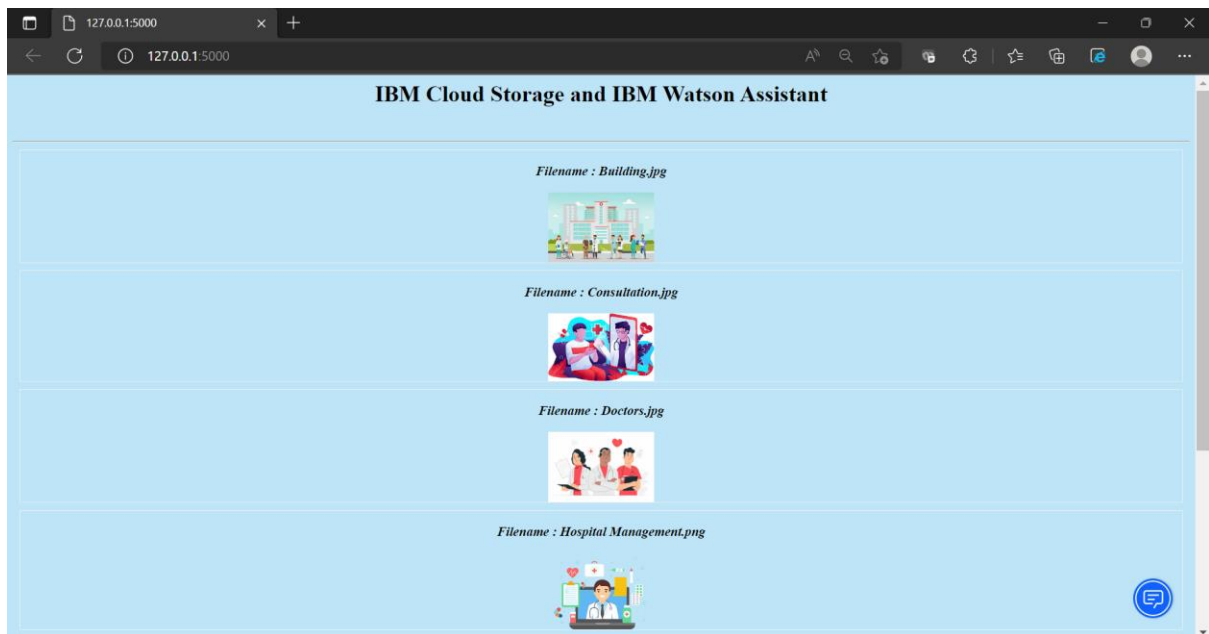
.othercont {
    display: flex;
}
```

Output:

The screenshot displays the Google Cloud Object Storage console for a bucket named 'flask-application'. The left sidebar shows the navigation menu with 'Buckets' selected. The main content area has tabs for 'Objects', 'Configuration', and 'Permissions'. A warning message states: 'Warning: All objects in this bucket have public view access.' Below this, a message indicates that versions count towards usage and incomplete uploads may occur, with a link to 'Learn more'. A table lists the objects in the bucket:

Object name	Archived	Size	Last modified
Building.jpg		7.6 KB	2022-10-17 12:11 AM
Consultation.jpg		16.0 KB	2022-10-17 12:12 AM
Doctors.jpg		100.4 KB	2022-10-17 12:12 AM
Hospital Management.png		9.7 KB	2022-10-17 12:12 AM
Hospital.jpg		7.1 KB	2022-10-17 12:16 AM
Styles.css		403 bytes	2022-10-11 9:52 AM

Web Page:



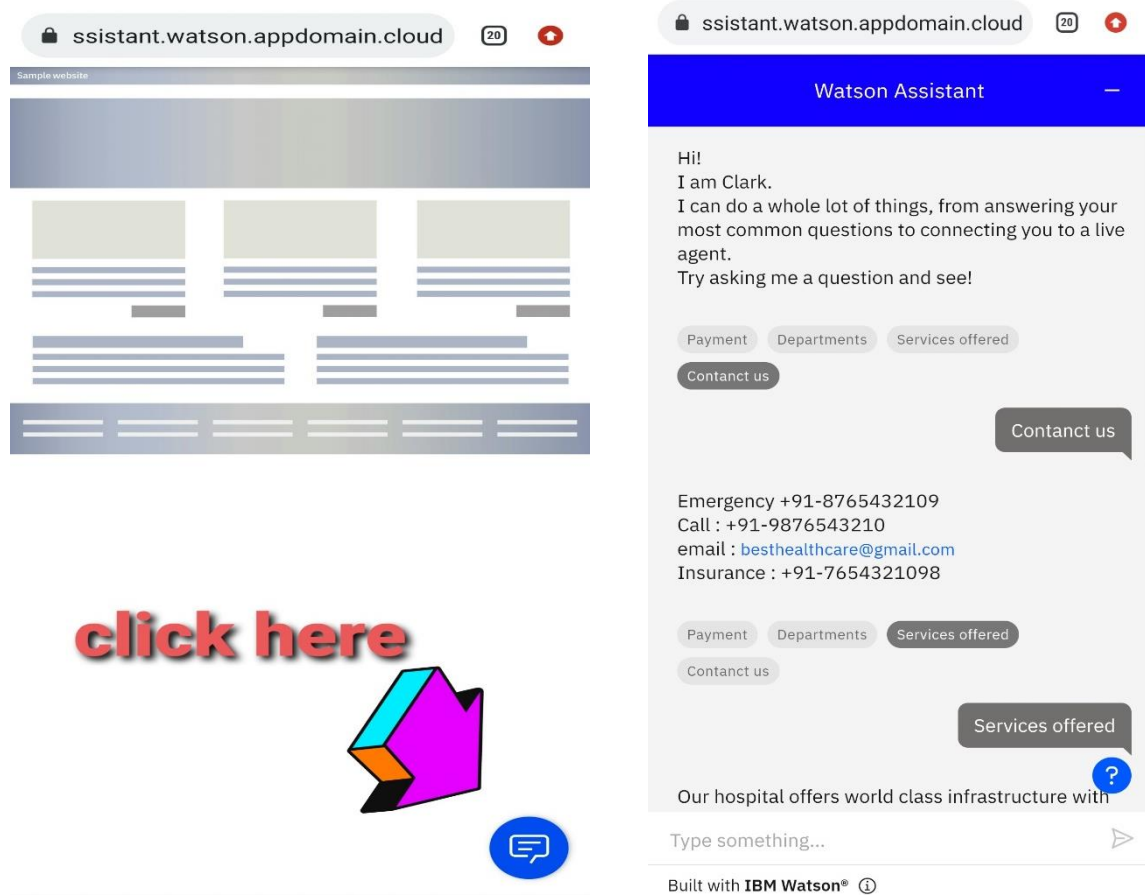
Question-4:

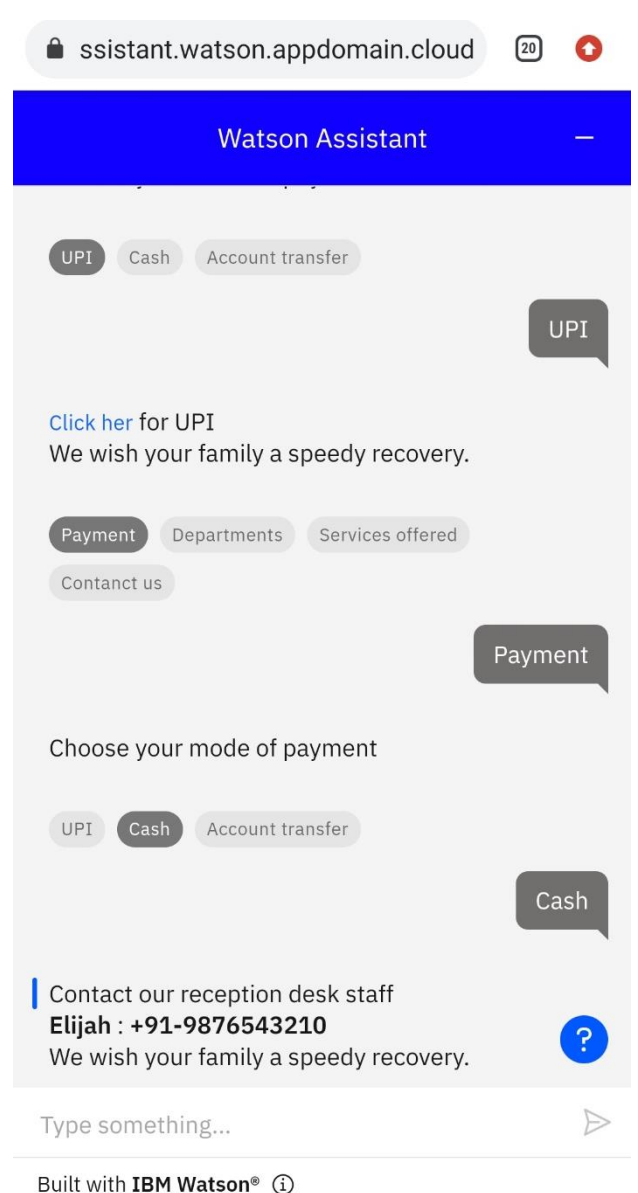
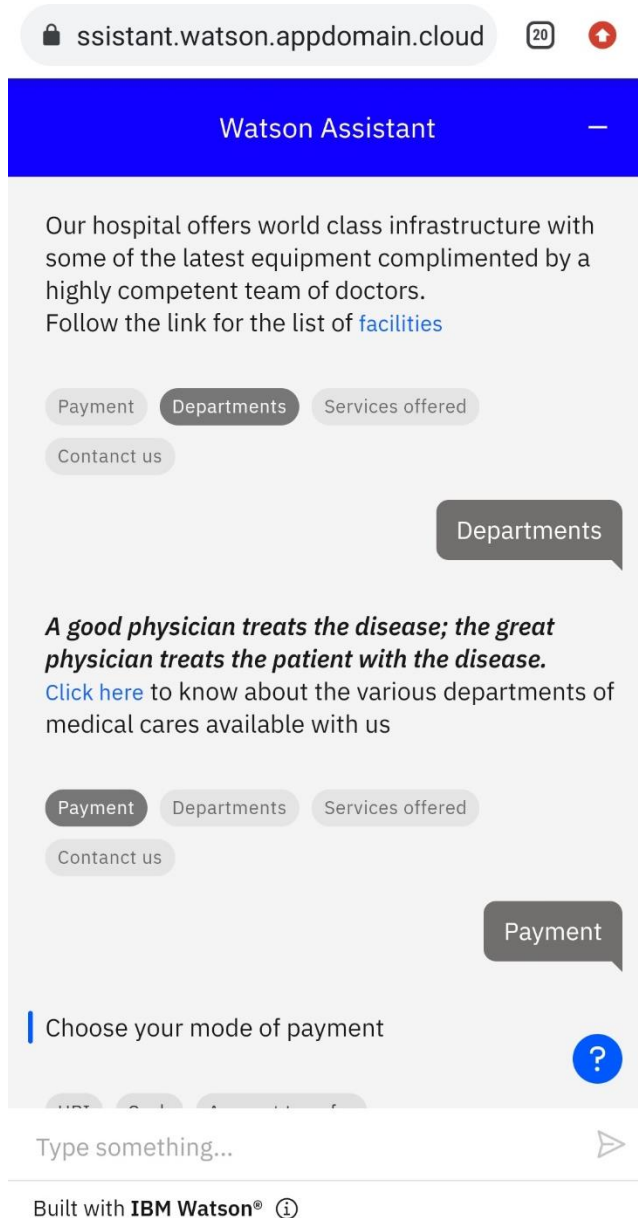
Design a chatbot using IBM Watson assistant for hospital. Ex: User comes with query to know the branches for that hospital in your city. Submit the web URL of that chat bot as a assignment.

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®ion=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 conversation flow. The current step is titled "Step 2 is taken" and has a condition "with conditions". The condition is "If All of this is true: 1. Choose your mode of payment is UPI". The "Add condition" dropdown menu 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.

Conditions in What can you do

- Departments
- Payment
- Services offered
- Contact us

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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)

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

defined

Departments

Payment

Services offered

Contact us

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:

