Assignment -3
IBM Object Storage and IBM Watson Assistant

Assignment Date	28 October 2022
Student Name	P.Ance Defrin
Student Roll Number	961819104012
Maximum Marks	2 Marks

Question 1:

Create a Bucket in IBM object storage.

Solution:

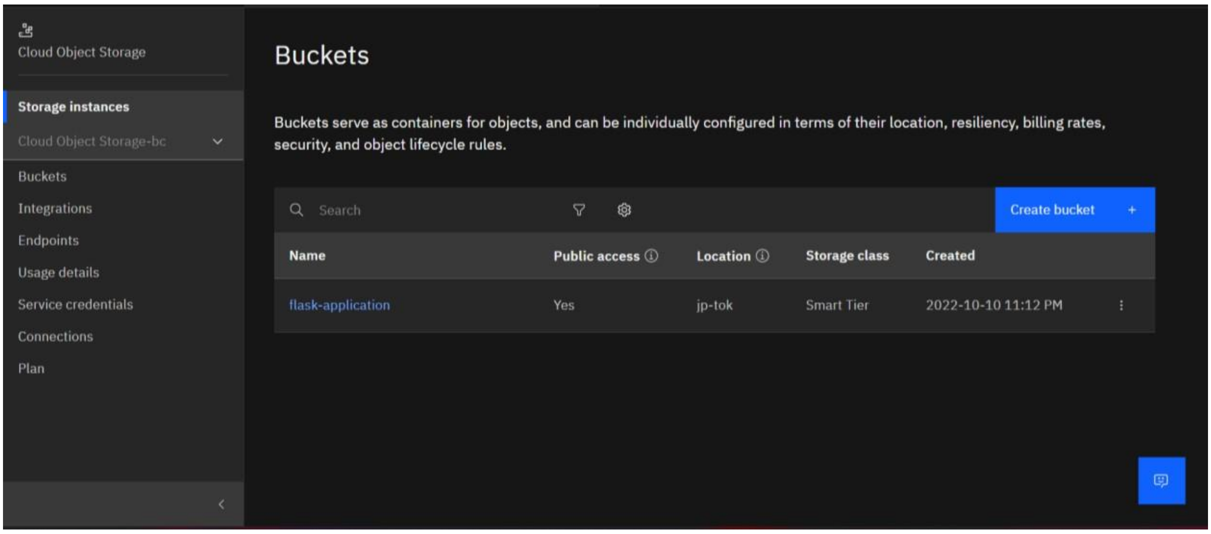
ibmCloudTest.py import ibm_boto3 from ibm_botocore.client

```
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="wprEMAxyjHj5sPI959wL_3HJczOWRbYn52XUuLrDSJON"

COS_INSTANCE_CRN="crn:v1:bluemix:public:cloud-object-
storage:global:a/602bcedcf9224f7b8c2e1aed60258292: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:



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.

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

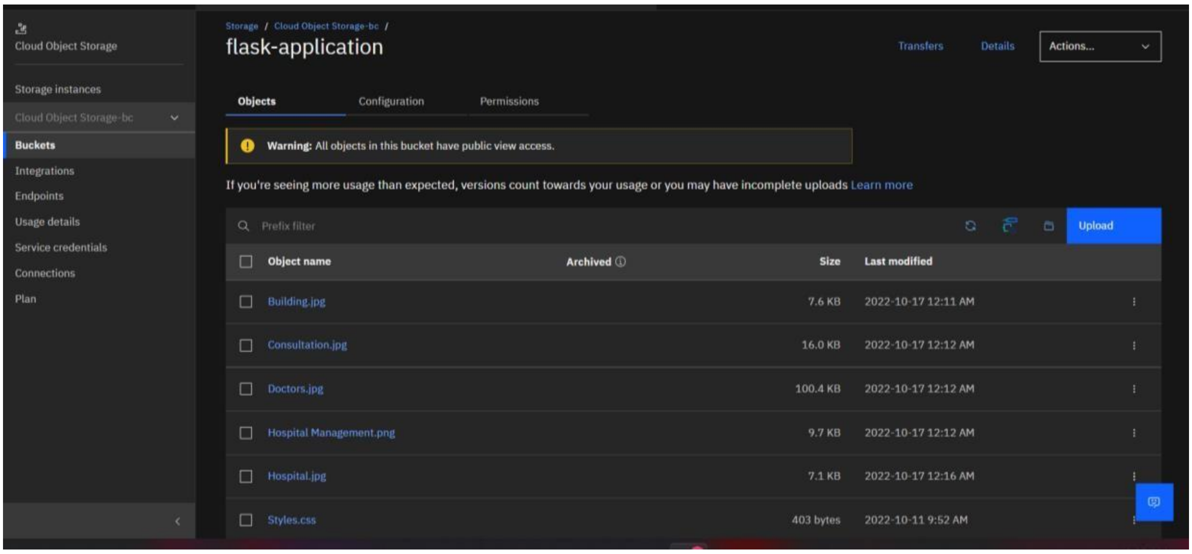
Question 2:

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: "440aaee1-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 #EFEFEF;margin:10px;">

        <h3>Filename : {{row}} </h3>
        <img src="https://flask-application.s3.jp-tok.cloud-object-storage.appdomain.cloud/{{row}}"
width="150px"></td>

      </div>

    {% endfor %}

  </body>

</html>
```

Output:



flask-application

Warning: All objects in this bucket have public view access.

If you're seeing more usage than expected, versions count towards your usage or you may have incomplete uploads Learn more

□	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

Question 3:

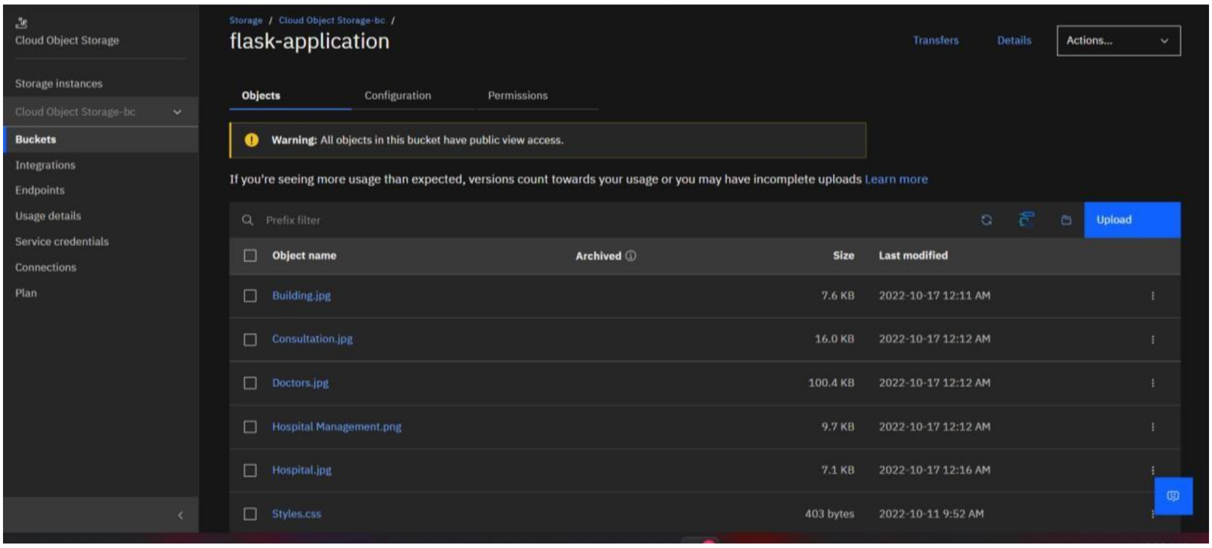
Upload a css page to the object storage and use the same page in your HTML code.

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:



Cloud Object Storage

Storage instances

Cloud Object Storage-bc

Buckets

Integrations

Endpoints

Usage details

Service credentials

Connections

Plan

Storage / Cloud Object Storage-bc /

flask-application

Transfers Details Actions...

Objects Configuration Permissions

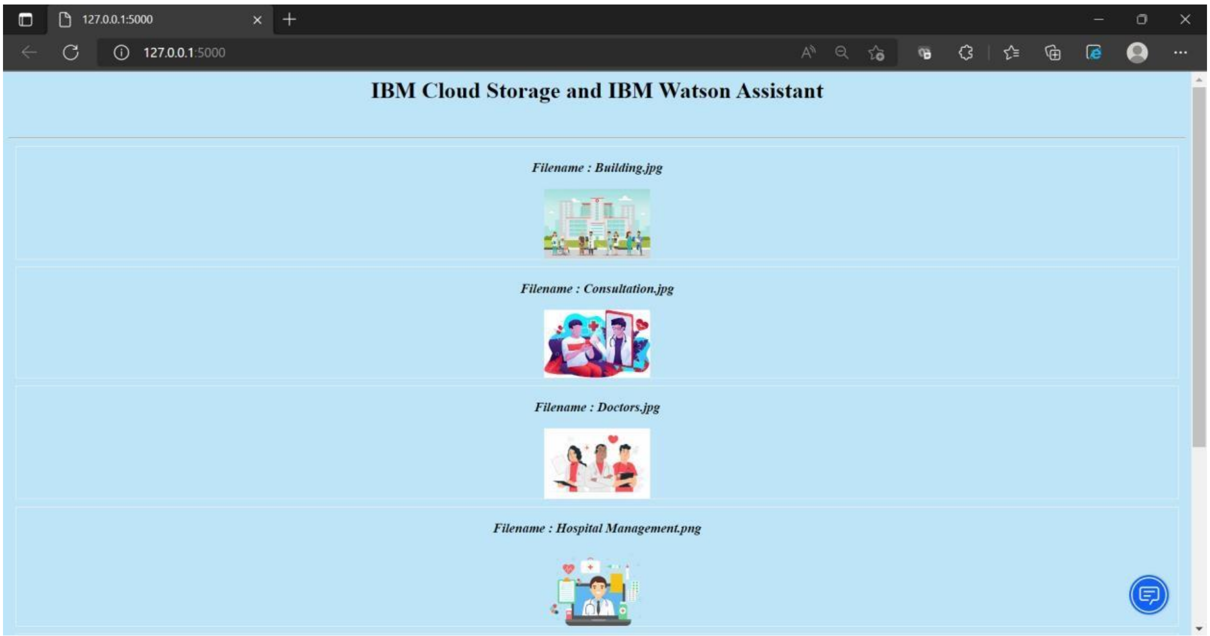
Warning: All objects in this bucket have public view access.

If you're seeing more usage than expected, versions count towards your usage or you may have incomplete uploads Learn more

Prefix filter Upload

	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:



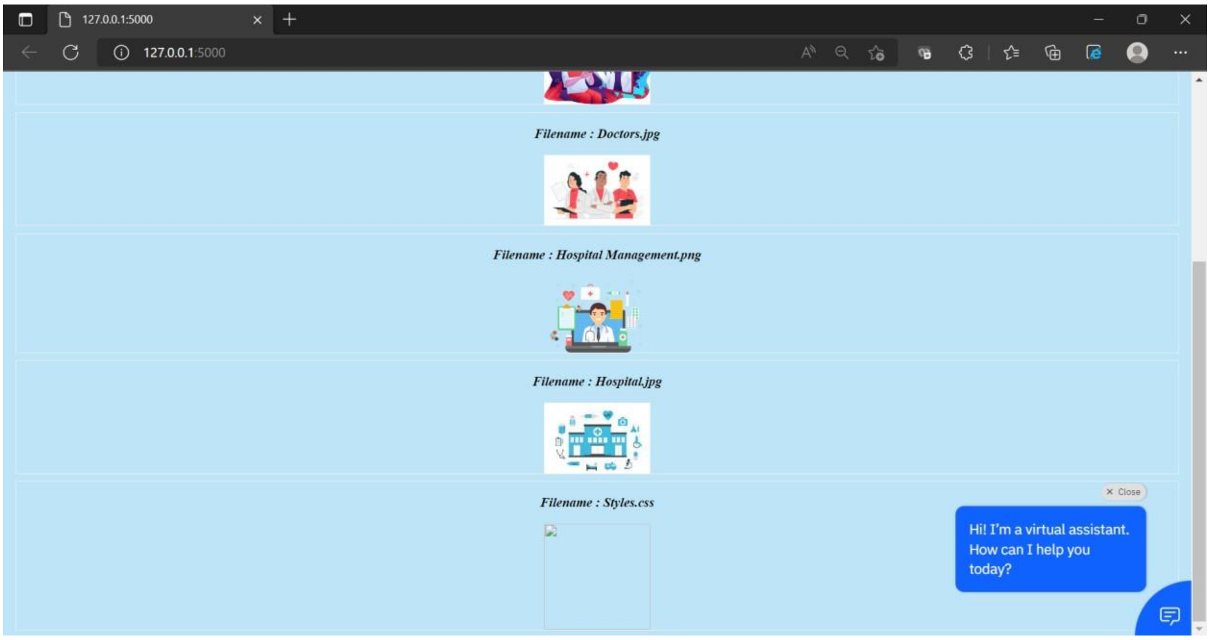
IBM Cloud Storage and IBM Watson Assistant

Filename : Building.jpg

Filename : Consultation.jpg

Filename : Doctors.jpg

Filename : Hospital Management.png



Filename : Doctors.jpg

Filename : Hospital Management.png

Filename : Hospital.jpg

Filename : Styles.css

Hi! I'm a virtual assistant. How can I help you today?

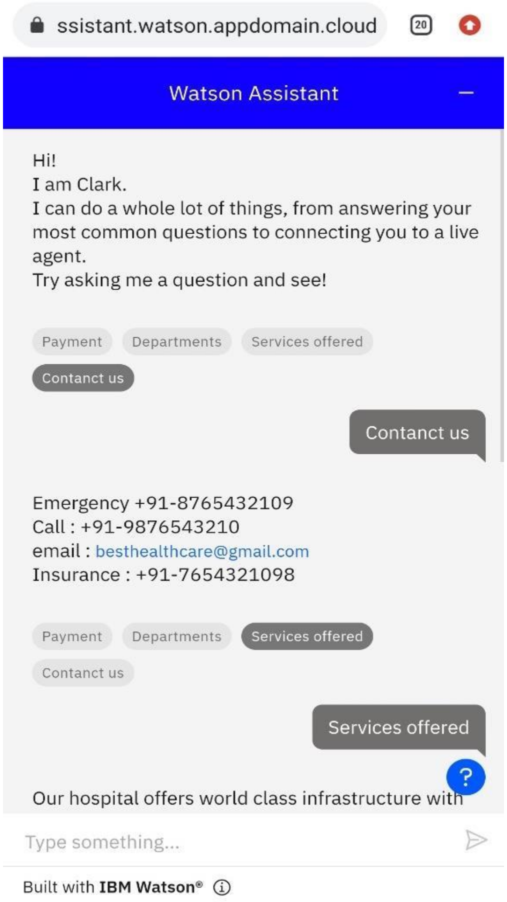
Question-4:

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-8604cb5d605fa157%3A%3Affa26b03-3295-42fd-a098-6723615c4e58&integrationID=a3e3b932-8ee443ee-9ccb-f3cfa9687188&region=jp-tok&serviceInstanceID=440aaee1-fbb4-4c2b-8604cb5d605fa157

Output:



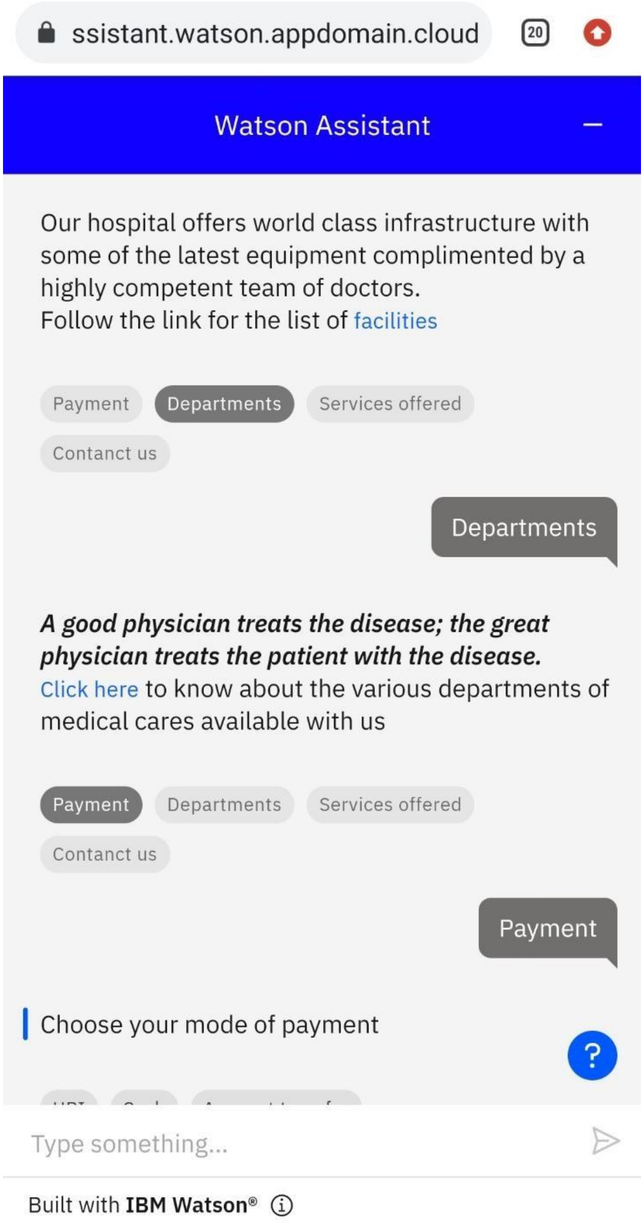
Hi!
I am Clark.
I can do a whole lot of things, from answering your most common questions to connecting you to a live agent.
Try asking me a question and see!

Contanct us

Emergency +91-8765432109
Call : +91-9876543210
email : besthealthcare@gmail.com
Insurance : +91-7654321098

Services offered

Our hospital offers world class infrastructure with



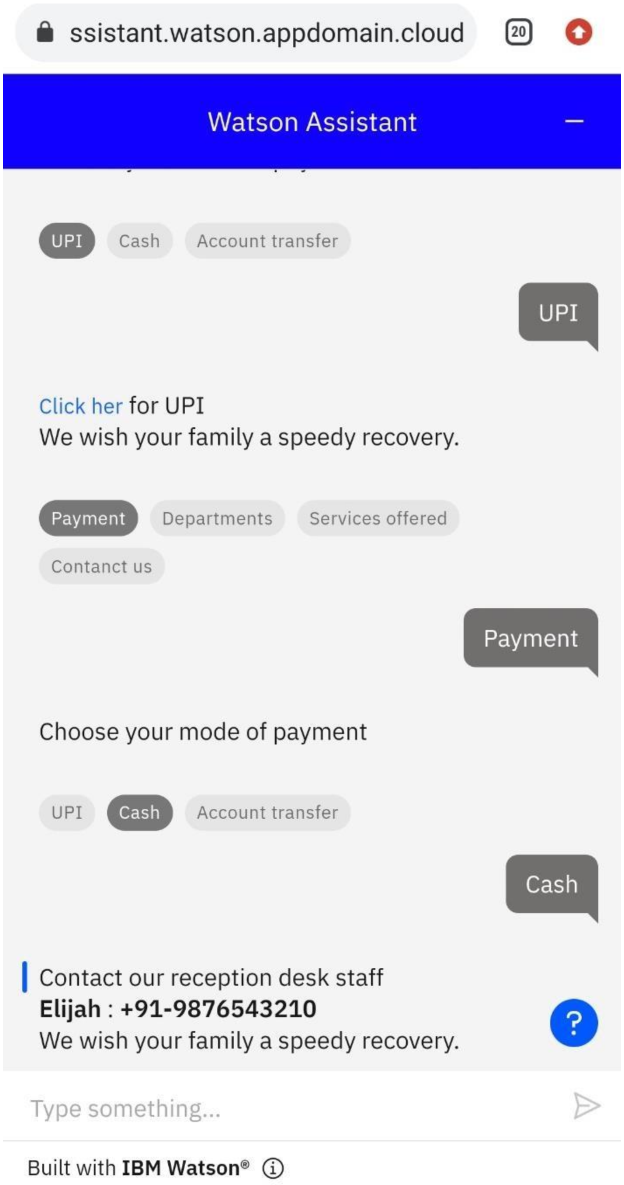
Our hospital offers world class infrastructure with some of the latest equipment complimented by a highly competent team of doctors.
Follow the link for the list of facilities

Departments

A good physician treats the disease; the great physician treats the patient with the disease.
Click here to know about the various departments of medical cares available with us

Payment

Choose your mode of payment



UPI

Click her for UPI
We wish your family a speedy recovery.

Payment

Choose your mode of payment

Cash

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

Question-5:

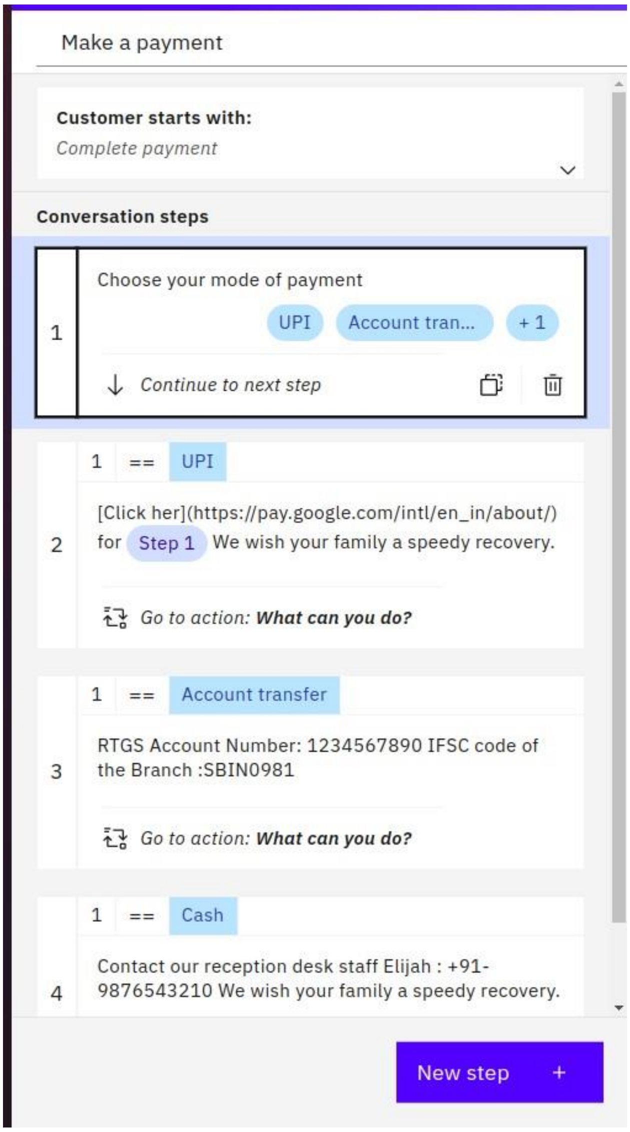
5.Create Watson assistant service with 10 steps and use 3 conditions in it. Load that script in HTML page.

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: "440aaee1-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

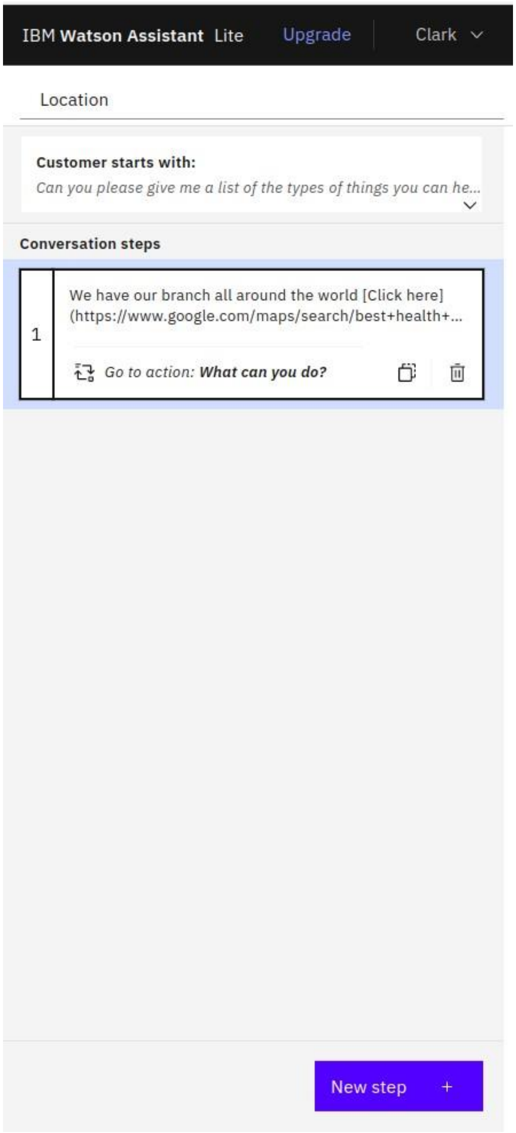
Continue to next step

2 1 == UPI
[Click her](https://pay.google.com/intl/en_in/about/) for Step 1 We wish your family a speedy recovery.
Go to action: ***What can you do?***

3 1 == Account transfer
RTGS Account Number: 1234567890 IFSC code of the Branch :SBIN0981
Go to action: ***What can you do?***

4 1 == Cash
Contact our reception desk staff Elijah : +91-9876543210 We wish your family a speedy recovery.

Steps in location



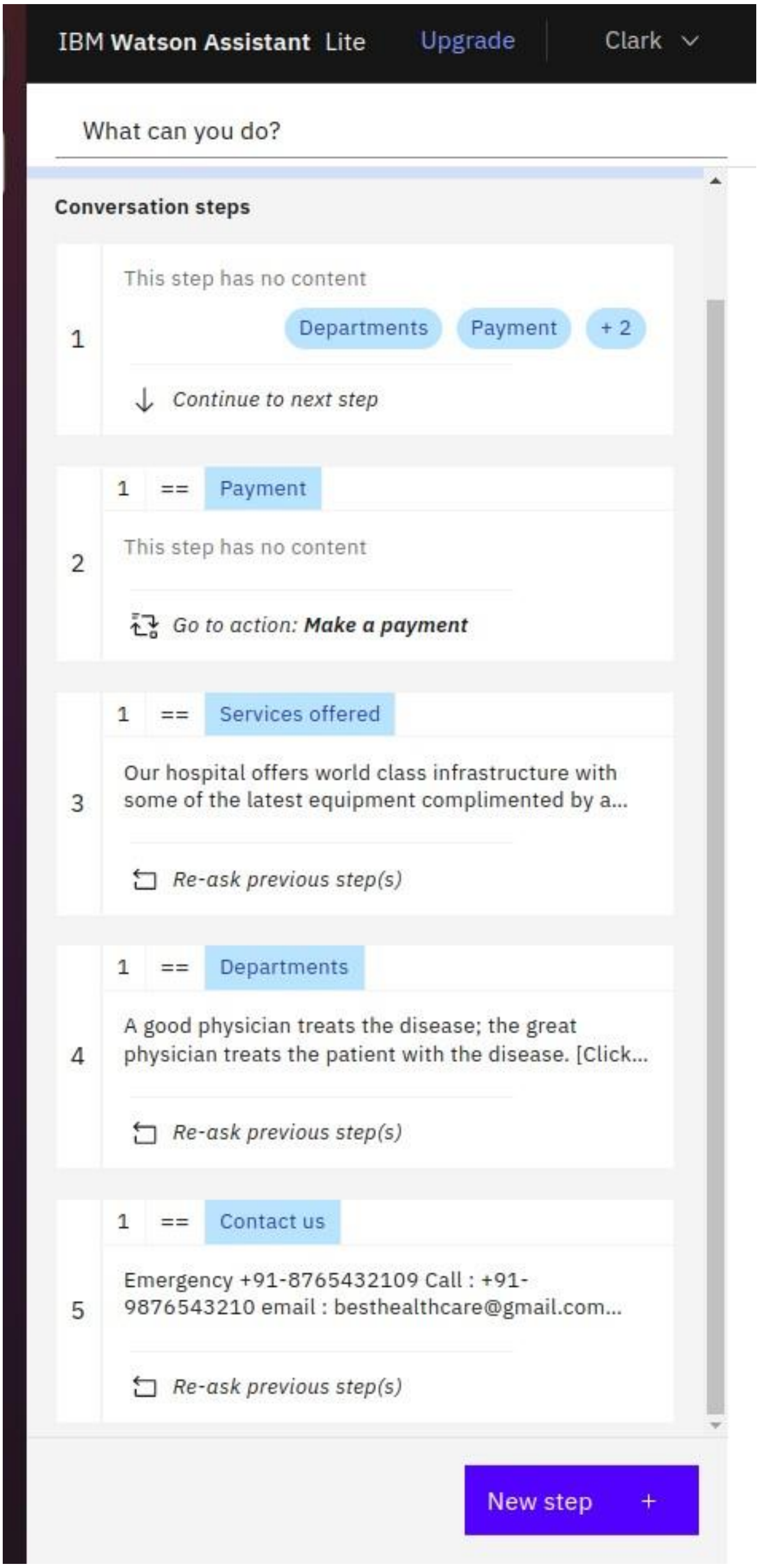
Location

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?***

steps in What can you do



What can you do?

Conversation steps

1 This step has no content

Departments Payment + 2

Continue to next step

2 1 == Payment

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

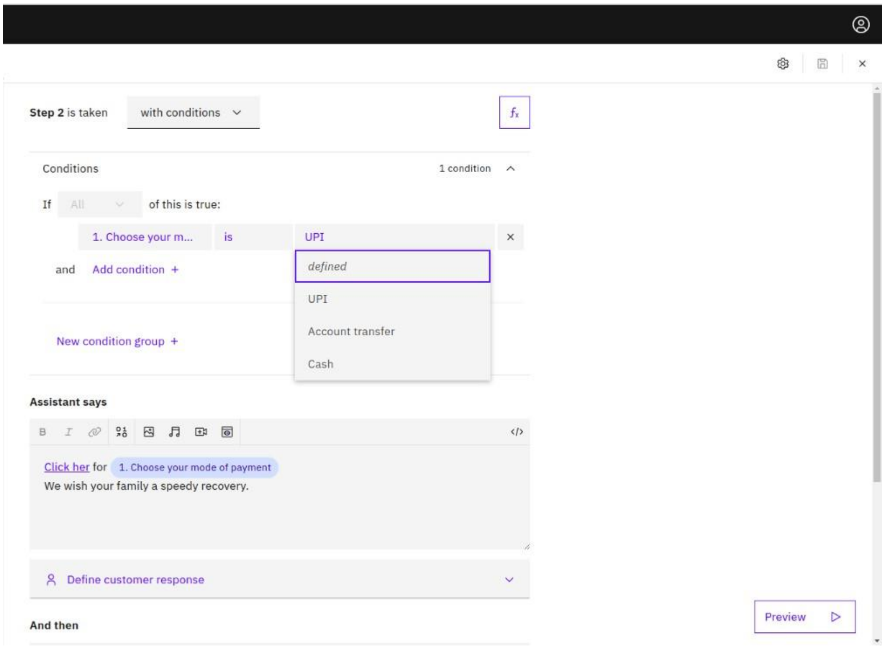
Emergency +91-8765432109 Call : +91-9876543210 email : besthealthcare@gmail.com...

Re-ask previous step(s)

Conditions:

Conditions in payment

- UPI
- Account transfer
- Cash



Step 2 is taken with conditions

Conditions 1 condition

If All of this is true:

1. Choose your m... is UPI

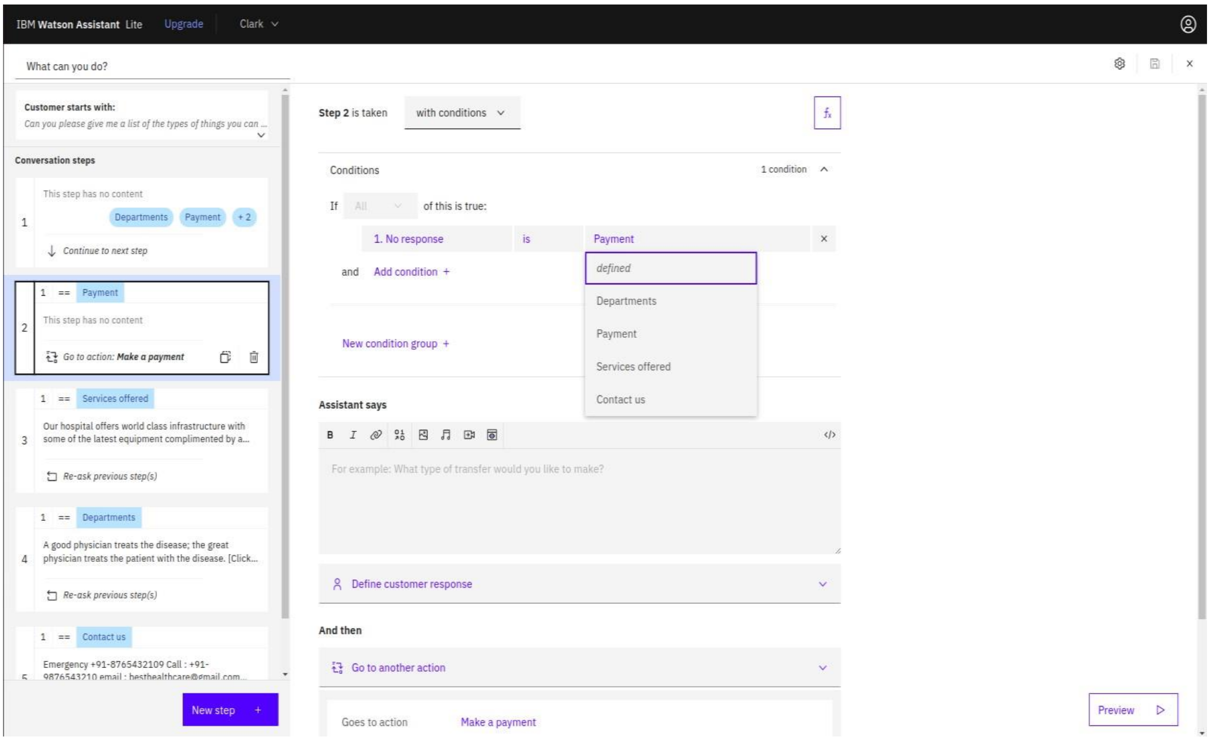
Assistant says

Click her for 1. Choose your mode of payment

We wish your family a speedy recovery.

Conditions in What can you do

- Departments
- Payment
- Services offered
- Contact us



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 1 == Payment
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@gmail.com...

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 +

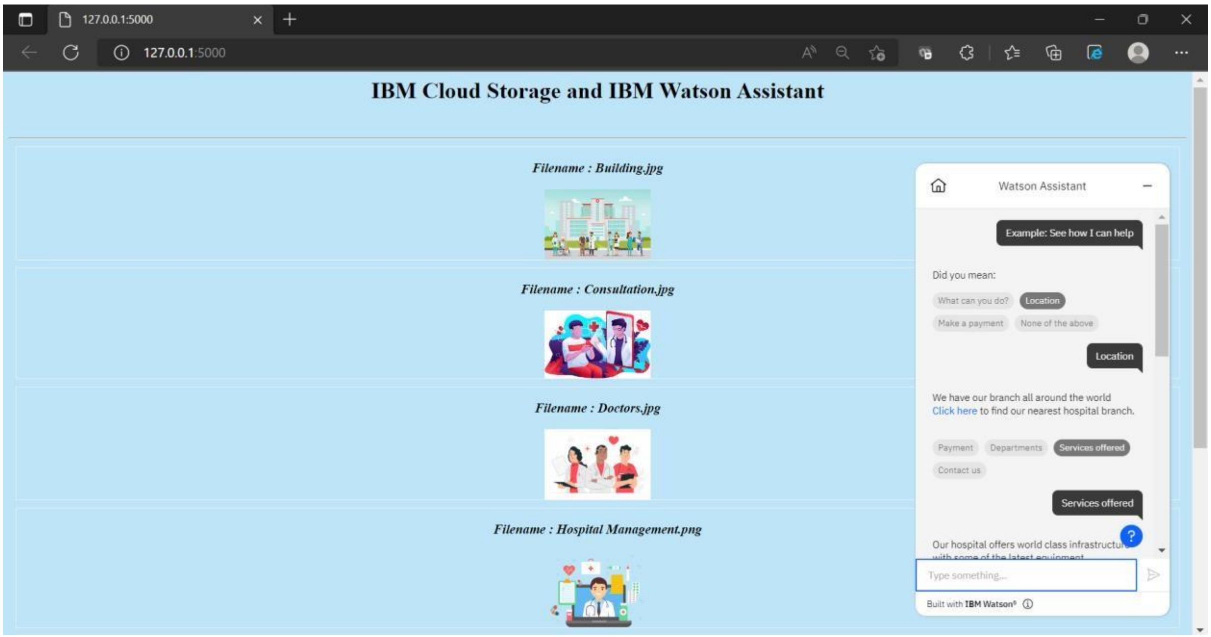
Assistant says

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

And then

Goes to action Make a payment

Output:



IBM Cloud Storage and IBM Watson Assistant

Filename : Building.jpg

Filename : Consultation.jpg

Filename : Doctors.jpg

Filename : Hospital Management.png

Watson Assistant

Example: See how I can help

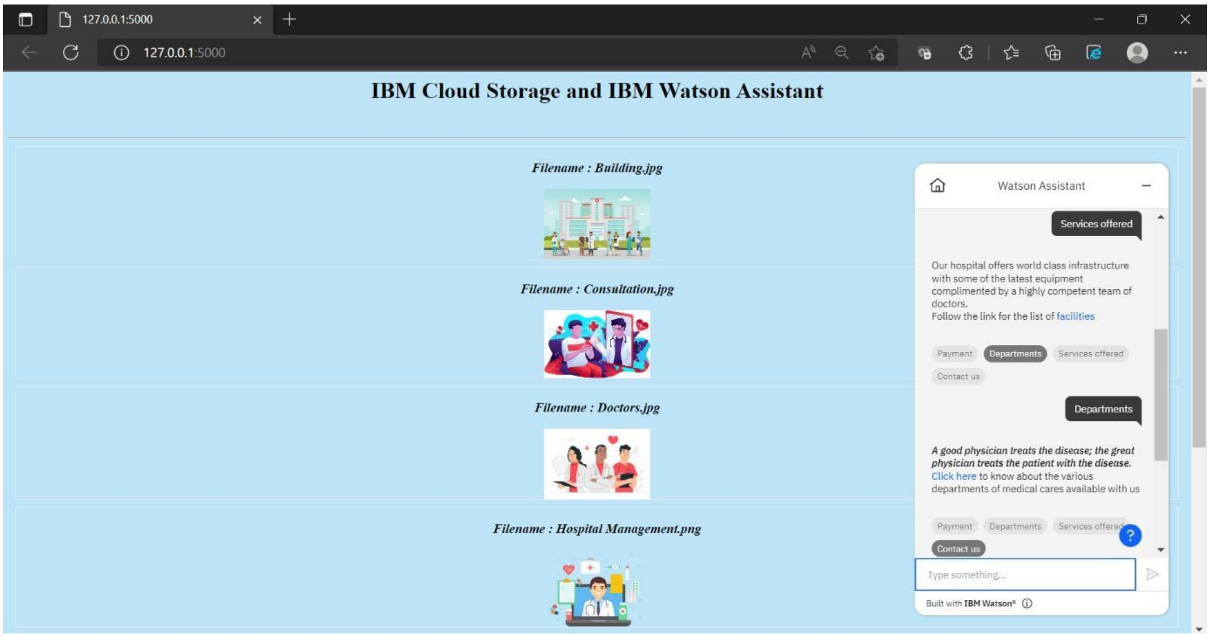
Did you mean:

Location

We have our branch all around the world
Click here to find our nearest hospital branch.

Services offered

Our hospital offers world class infrastructure
with some of the latest equipment



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Watson Assistant

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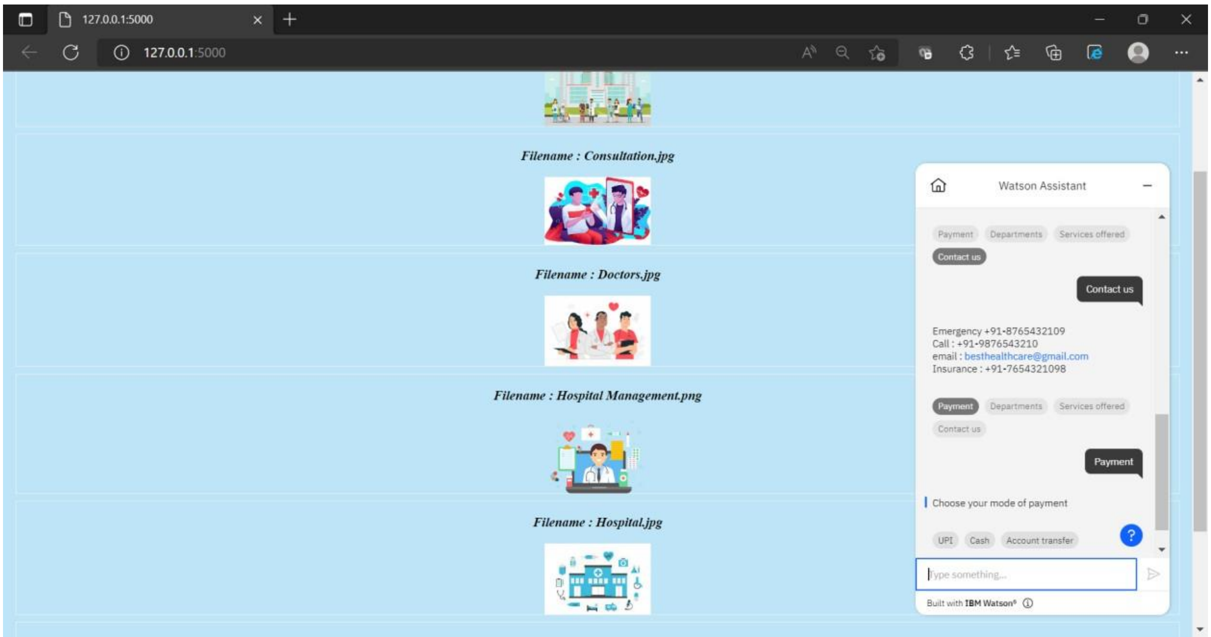

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Filename : Hospital Management.png

Filename : Hospital.jpg

Contact us

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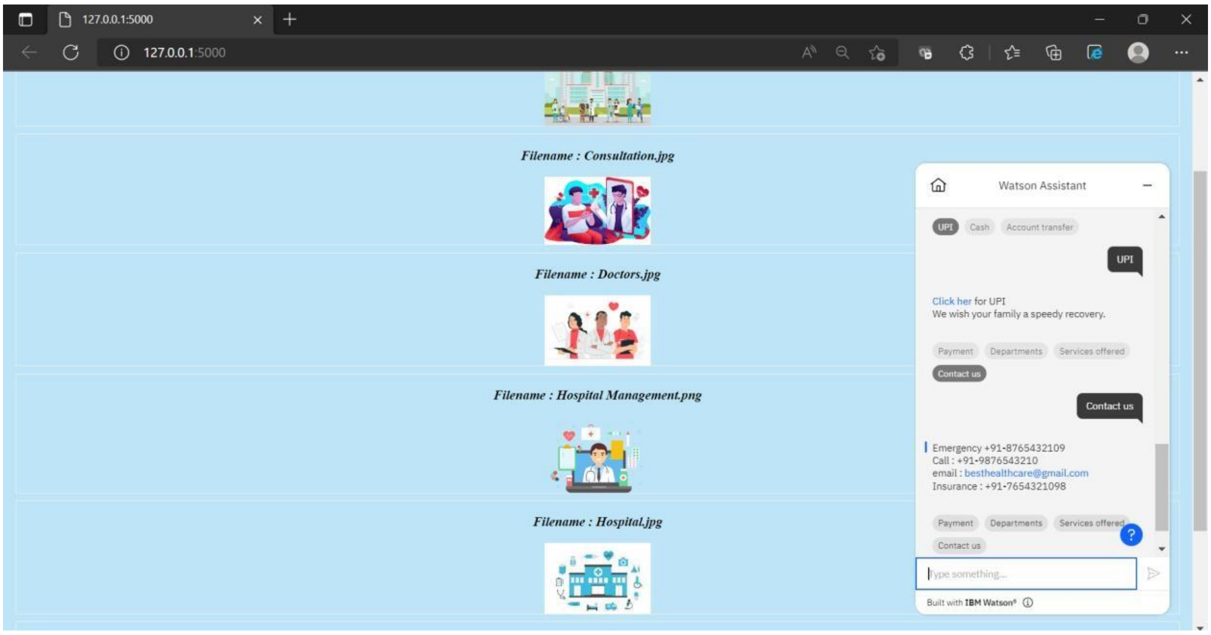
Call : +91-9876543210
email : besthealthcare@gmail.com
Insurance : +91-7654321098

Payment

Choose your mode of payment

UPI Cash Account transfer



Filename : Consultation.jpg

Filename : Doctors.jpg

Filename : Hospital Management.png

Filename : Hospital.jpg

UPI

Click her for UPI
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email : besthealthcare@gmail.com
Insurance : +91-7654321098