

## ASSIGNMENT - 3

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<b>Batch No</b>	<b>B9 - 3A5E</b>
<b>Project Name</b>	<b>Inventory Management System for Retailers</b>
<b>Team ID</b>	<b>PNT2022TMID31796</b>

### Create a Chat Bot in python Flask

#### Index.html

```
<a href="/">HOME</a>
<a href="/uploader">Upload</a>
<a href="/deletefile">Delete</a>
<br><hr>
<h1>IBM Object Storage</h1>

<!doctype html>
<html>
  <script>
    window.watsonAssistantChatOptions = {
      integrationID: "d1bdbacf-086b-48f6-b496-bf5724f077a2", // The ID of this integration.
      region: "jp-tok", // The region your integration is hosted in.
      serviceInstanceID: "139e5af7-39ed-4937-bcc5-9d1420782c5c", // 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>
  <link rel="stylesheet"
href="https://flaskapp-by-akaash.s3.jp-tok.cloud-object-storage.appdomain.cloud/style.css">
  <body>
    {% for row in files %}
```

```

        <div style="border: 1px solid #EFEFEF;margin:10px;">
            <h3>Filename : {{row}} </h3>
            </td>
        </div>
        {% endfor %}
    </body>
</html>

```

## Upload.html

```

<html>
    <script>
        window.watsonAssistantChatOptions = {
            integrationID: "d1bdbacf-086b-48f6-b496-bf5724f077a2", // The ID of this
integration.
            region: "jp-tok", // The region your integration is hosted in.
            serviceInstanceID: "139e5af7-39ed-4937-bcc5-9d1420782c5c", // 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>
    <link rel="stylesheet"
href="https://flaskapp-by-akaash.s3.jp-tok.cloud-object-storage.appdomain.cloud/style.css">
    <body>

    <a href="/">HOME</a>
    <a href="/uploader">Upload </a>
    <a href="/deletefile">Delete </a>
    <br><hr>

    <h1>IBM Upload File</h1>

```

```

<form action = "/uploader" method = "POST"
  enctype = "multipart/form-data">
    <input type = "text" placeholder="Enter bucket name" name = "bucket" />
    <br>
    <br>
    <input type = "text" placeholder="Enter file name" name = "filename" />
    <br>
    <br>
    <input type = "file" name = "file" />
    <br>
    <br>
    <input type = "submit"/>
  </form>
</body>
</html>

```

## Delete.html

```

<html>
  <script>
    window.watsonAssistantChatOptions = {
      integrationID: "d1bdbacf-086b-48f6-b496-bf5724f077a2", // The ID of this
integration.
      region: "jp-tok", // The region your integration is hosted in.
      serviceInstanceID: "139e5af7-39ed-4937-bcc5-9d1420782c5c", // 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>
  <link rel="stylesheet"
href="https://flaskapp-by-akaash.s3.jp-tok.cloud-object-storage.appdomain.cloud/style.css">
  <body>

    <a href="/">HOME</a>
    <a href="/uploader">Upload </a>
    <a href="/deletefile">Delete </a>
    <br><hr>

```

<h1>IBM Object Storage</h1>

```
<form action = "/deletefile" method = "POST" >

    <input type = "text" placeholder="Enter bucket name" name = "bucket" />
    <br>
    <br>
    <input type = "text" placeholder="Enter file name" name = "filename" />
    <br>
    <br>
    <input type = "submit"/>
</form>
</body>
</html>
```

## App.py

```
from flask import Flask,redirect,url_for,render_template,request
import ibm_boto3
from ibm_botocore.client import Config, ClientError

COS_ENDPOINT = "https://s3.jp-tok.cloud-object-storage.appdomain.cloud"
COS_API_KEY_ID = "fDuv-mL8y30SDvGs_mG-BGjWeSrSYXT2Mj7iNf7BKjQH"
COS_INSTANCE_CRN =
"crn:v1:bluemix:public:cloud-object-storage:global:a/870cd186abe443a38c10533f71e00157:11e
43fa8-e1ad-4236-b1e6-a8385ef2cffe::"

# Create resource https://s3.ap.cloud-object-storage.appdomain.cloud
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
)

app=Flask(__name__)

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 = []
        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))

def delete_item(bucket_name, object_name):
    try:
        cos.delete_object(Bucket=bucket_name, Key=object_name)
        print("Item: {0} deleted!\n".format(object_name))
    except ClientError as be:
        print("CLIENT ERROR: {0}\n".format(be))
    except Exception as e:
        print("Unable to delete object: {0}".format(e))

def multi_part_upload(bucket_name, item_name, file_path):
    try:
        print("Starting file transfer for {0} to bucket: {1}\n".format(item_name, bucket_name))
        # set 5 MB chunks
        part_size = 1024 * 1024 * 5

        # set threadhold to 15 MB
        file_threshold = 1024 * 1024 * 15

```

```

# set the transfer threshold and chunk size
transfer_config = ibm_boto3.s3.transfer.TransferConfig(
    multipart_threshold=file_threshold,
    multipart_chunksize=part_size
)

# the upload_fileobj method will automatically execute a multi-part upload
# in 5 MB chunks for all files over 15 MB
with open(file_path, "rb") as file_data:
    cos.Object(bucket_name, item_name).upload_fileobj(
        Fileobj=file_data,
        Config=transfer_config
    )

    print("Transfer for {0} Complete!\n".format(item_name))
except ClientError as be:
    print("CLIENT ERROR: {0}\n".format(be))
except Exception as e:
    print("Unable to complete multi-part upload: {0}".format(e))

```

```

@app.route('/')
def index():
    files = get_bucket_contents('flaskapp-by-akaash')
    return render_template('index.html', files = files)

```

```

@app.route('/deletefile', methods = ['GET', 'POST'])
def deletefile():
    if request.method == 'POST':
        bucket=request.form['bucket']
        name_file=request.form['filename']

        delete_item(bucket,name_file)
        return 'file deleted successfully <a href="/"> GO to Home</a>'

    if request.method == 'GET':
        return render_template('delete.html')

```

```

@app.route('/uploader', methods = ['GET', 'POST'])
def upload():
    if request.method == 'POST':
        bucket=request.form['bucket']
        name_file=request.form['filename']

```

```
f = request.files['file']  
multi_part_upload(bucket,name_file,f.filename)  
return 'file uploaded successfully <a href="/">GO to Home</a>'
```

```
if request.method == 'GET':  
    return render_template('upload.html')
```

```
if __name__ == '__main__':  
    app.run(host='0.0.0.0',port=8080,debug=True)
```