

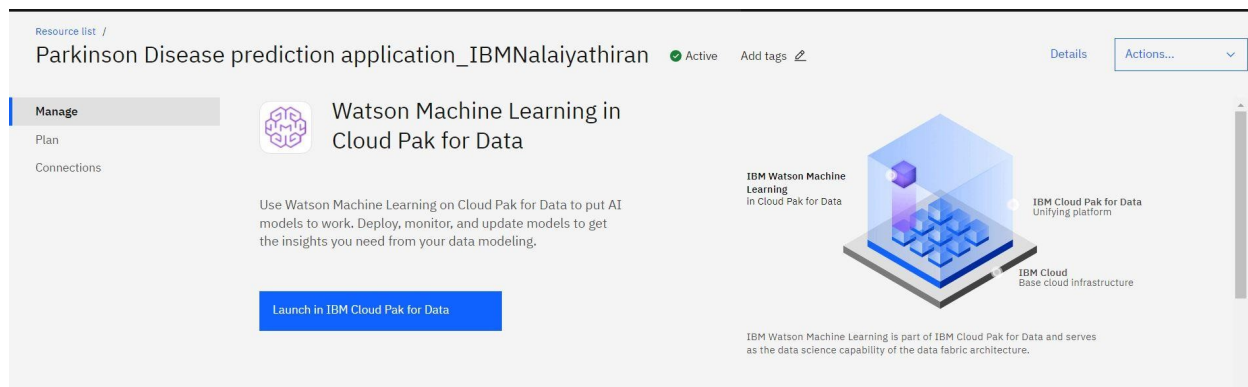
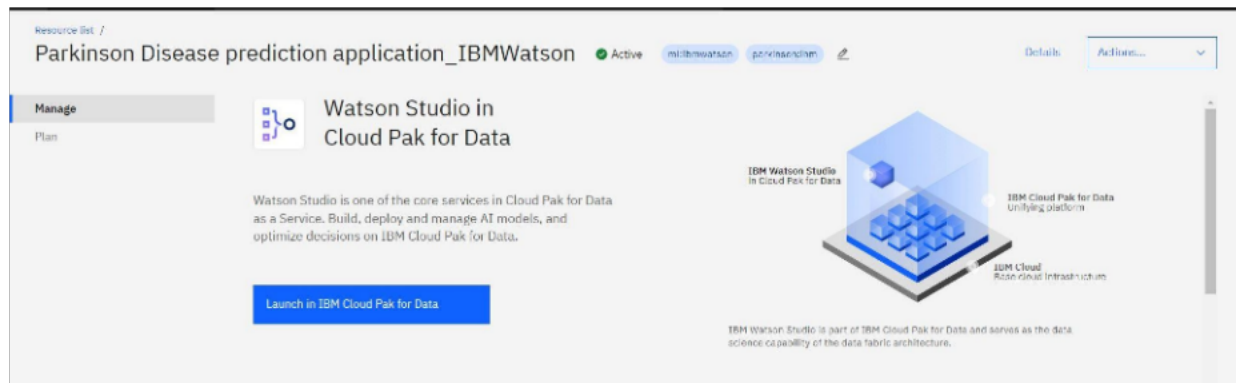
# IBM Cloud - Machine Learning model deployment and user data integration

**Team Id:** PNT2022TMID19104

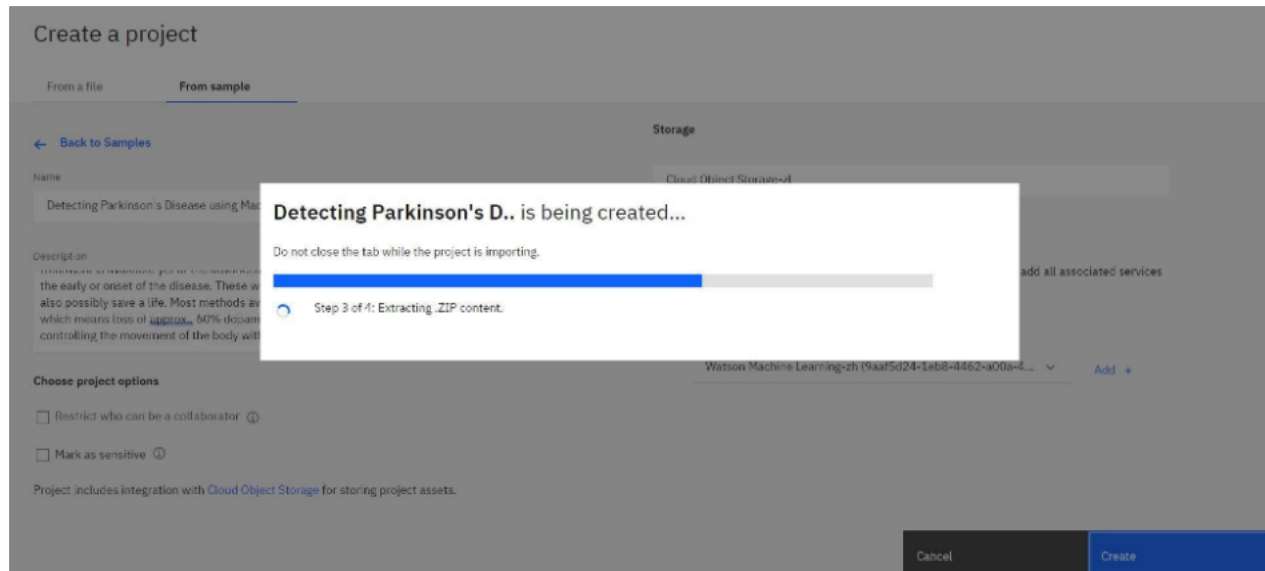
**Project Name:** Detecting Parkinson's Disease using Machine Learning

## Machine Learning model registration and deployment initiation process:

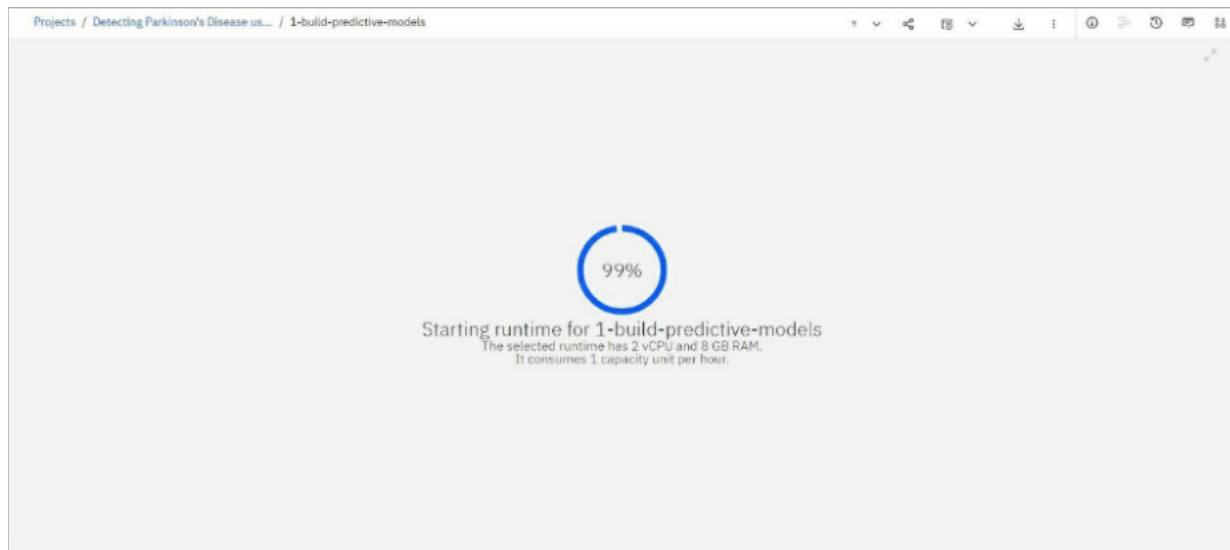
### Work 1)



## Work 2)



## Work 3)



## Work 4)

### Create a deployment space

Use a space to collect assets in one place to create, run, and manage deployments.

#### Define space details

Name

#### Define space assets (optional)

Populate your space with assets exported from a space to a zip file. You can add more assets after the space is created.

Drop .zip file or browse your files to upload

Description (Optional)

#### Deployment space tags (optional)

Start typing tag name, click + to create new tag

#### Select storage service

The space is ready

Import is complete! Click [View new space](#) to view the space and associated assets.

Step 1 of 1. Creating deployment space.

Close

View new space

## Work 5)

IAM

Manage identities

Users

Trusted profiles

Service IDs

API keys

Identity providers

Manage access

Access groups

Authorizations

Roles

Gain insight

Inactive identities

Inactive policies

## API keys

Create, view, and work with API keys that you have access to manage. IBM Cloud API keys are associated with a user's identity and can be used to access cloud platform and classic infrastructure APIs, depending on the access that is assigned to the user. The following table displays a list of API keys created in this account. [Learn more.](#)

Looking for more?

View: My IBM

API keys associated with

API key	Status	Date Created
.....		2022-11-16 14:11 GMT

Items per page

API key successfully created

Copy the API key or click download to save it. You won't be able to see this API key again, so you can't retrieve it later. The API key is no longer displayed after 115 seconds.

API key

.....

Copy

Download

## Work 6)

```
# Set meta
deployment_props = {
    wml_client.deployments.ConfigurationMetaNames.NAME: DEPLOYMENT_NAME,
    wml_client.deployments.ConfigurationMetaNames.ONLINE: {}
}

# Deploy
deployment = wml_client.deployments.create(
    artifact_uid=model_uid,
    meta_props=deployment_props
)

# Output result
deployment
```

```
#####

Synchronous deployment creation for uid: '6717965d-bf1b-492f-9374-b9791915c168' started
#####

initializing
ready

-----
Successfully finished deployment creation, deployment_uid='01c279a5-21aa-41a2-92ae-5cfac2ad5d59'
-----
```



## Work 7)

[Deployments](#) / [PROD](#)

### PROD

[Assets](#)[Deployments](#)[Jobs](#)[Access control](#)[Settings](#)

#### Deployments (1)

Name	Type	Status	Asset
 Sklearn Deployment	Online	 Deployed	<a href="#">Sklearn Forecast</a>

## User data integration from react to the IBM DB2 service:

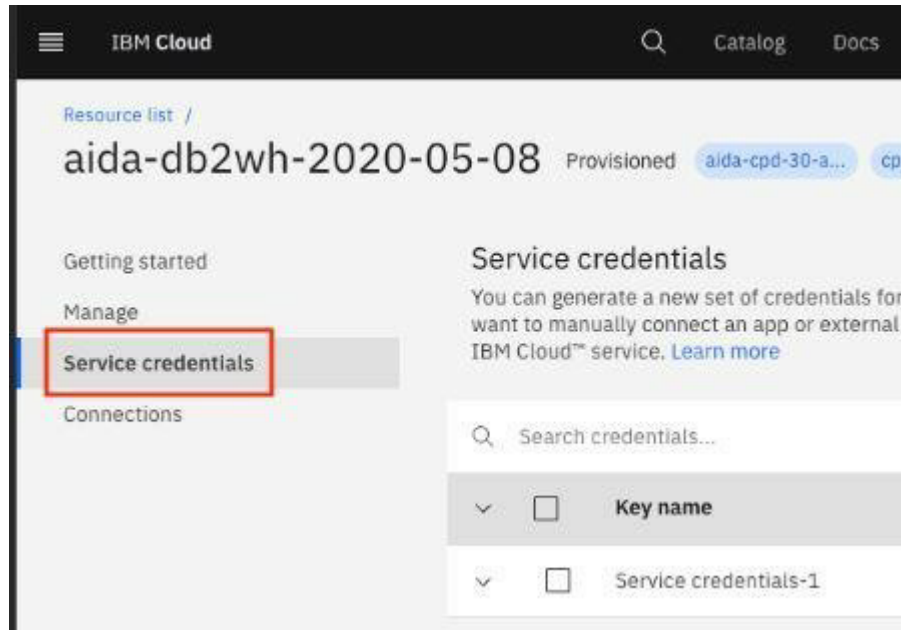
### Work 1)

The screenshot shows the IBM Cloud console interface. At the top, there's a navigation bar with 'IBM Cloud', a search bar, and links for 'Catalog', 'Manage', and 'Kamalesh S's Account'. Below this, the 'Enterprise' plan is selected for the 'Db2' service. The plan details include: 'Dedicated instance with flexible scaling of compute and storage', 'Base instance starts at 4 vCPU x 16 GB RAM x 20 GB Storage', 'Uses dedicated virtual machines', 'HIPAA Enabled', and pricing of '\$1.30 USD/Instance-Hour', '\$0.00027 USD/Gigabyte-Hours', '\$0.30 USD/Virtual Processor Core-Hour', '\$0.00003 USD/BACKUP\_GIGABYTE\_HOURS', '\$0.0959 USD/SERVICEENDPOINT\_INSTANCE\_HOURS', and '\$0.0959 USD/SERVICEENDPOINT\_INSTANCE\_HOURS'. On the right, a 'Summary' panel shows: 'Db2', 'Free', 'Location: Dallas', 'Plan: Lite', 'Service name: Parkinson\_Disease\_user\_Db2-59', and 'Resource group: Default'. The 'Configure your resource' section has a 'Service name' field with 'Parkinson\_Disease\_user\_Db2-59', a 'Select a resource group' dropdown with 'Default', a 'Tags' field with 'user:database', and an 'Access management tags' field with 'Examples: access:dev, proj:version-1'.

### Work 2)

```
JS IBM db2_userdata-Node.js
C: > Users > Kamalesh S > OneDrive > Desktop 1 > IBM Nalaiyathiran > Project Development Phase > Sprint 4 > IBM Cloud deployment > JS IBM db2_userdata-Node.js > [options] > [headers]
1 var http = require("https");
2
3 var options = {
4   "method": "POST",
5   "hostname": "{REST_API_HOSTNAME}",
6   "port": null,
7   "path": "/dbapi/v4/auth/tokens",
8   "headers": {
9     "content-type": "application/Parkinson_MLmodel.sav",
10    "x-deployment-id": "D6717965d-bf1b-492f-9374-b9791915c168",
11    "api-key": "s3nHigNLEv3RNdHwux58n0UNRXQdcR4AzYDumYrPwTV"
12  };
13 };
14
15 var req = http.request(options, function (res) {
16   var chunks = [];
17
18   res.on("data", function (chunk) {
19     chunks.push(chunk);
20   });
21
22   res.on("end", function () {
23     var body = Buffer.concat(chunks);
24     console.log(body.toString());
25   });
26 });
```

### Work 3)



### Work 4)

