



[Course](#) > [Course 1: In...](#) > [Module 4 - T...](#) > [AI in Action ...](#)

AI in Action Using Computer Vision to Classify Images

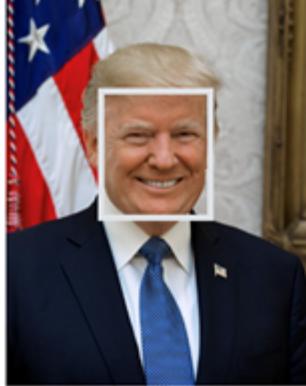
Exercise- Identifying objects in images with IBM Watson

About this exercise:

In this lesson, we'd like to take you on a bit of a side journey. It's a fun exercise and I hope you enjoy it as much as we enjoyed putting this short exercise together for you.

Image Classification with IBM Watson Visual Recognition:

What better way to understand the applications of AI than to try it out yourself? You'll be uploading images and seeing how IBM Watson identifies the various objects and faces (even gender and age!) in your images.

<p>donald_trump.jpg</p>  <p>Face 1</p> <p>Age: 59 to 62 0.80</p> <p>Male 0.99</p>	<p>barack_obama.jpg</p>  <p>Face 1</p> <p>Age: 43 to 47 0.70</p> <p>Male 1.00</p>
--	---

To learn how to classify your own images, continue on to the next reading!

Hands-on Lab: Classify your images with AI!

Scenario

IBM Watson Visual Recognition (VR) is a service that uses deep learning algorithms to identify objects and other content in an image. In this hands-on lab, you will use Watson VR to upload and classify images.

Note: To complete this exercise, you will create an IBM Cloud account and provision an instance of the Watson Visual Recognition service. A credit card is NOT required to sign up for an IBM Cloud Lite account and there is no charge associated in creating a Lite plan instance of the Watson VR service.

Objectives

After completing this lab, you will be able to:

1. Access IBM Cloud
2. Add resources to your IBM Cloud account
3. Add services to your IBM Cloud account
4. Create a project in Watson Studio
5. Analyze images using Watson VR

Exercise 1: Create an IBM Cloud Account

Scenario

To access the resources and services that the IBM Cloud provides, you need an IBM Cloud account.

If you already have an IBM Cloud account, you can skip Tasks 1 and 2 and proceed with *Task 3: Login to your IBM Cloud account*.

Task 1: Sign up for IBM Cloud

1. Go to: [Create a free account on IBM Cloud](#)
2. In the **Email** box, enter your email address and then click the arrow.

The screenshot shows the 'Create a free account' page on the IBM Cloud website. The left side features a dark blue sidebar with the text 'Build for free on IBM Cloud' and sections for 'Develop for free, no credit card required' and 'Access the full catalog at your fingertips'. The right side contains a registration form with fields for Email, First Name, Last Name, Country or Region, and Password. A note at the top right says 'Already have an IBM Cloud account? [Log in](#)'. Below the form, there's a section for marketing consent with checkboxes for 'by email' and 'by telephone', and links for privacy statement and terms and conditions.

Already have an IBM Cloud account? [Log in](#)

Create a free account

Join us in the cloud and start building today.

Let's get you started
You don't have an IBM Cloud account yet. Sign up for one with your IBMid to start building in the cloud.

Email

First Name

Last Name

Country or Region United States

Password

IBM may use my contact data to keep me informed of products, services and offerings:

by email. by telephone.

You can withdraw your marketing consent at any time by sending an email to netsupp@us.ibm.com. Also you may unsubscribe from receiving marketing emails by clicking the unsubscribe link in each such email.

More information on our processing can be found in the [IBM Privacy Statement](#). By submitting this form, I acknowledge that I have read and understand the IBM Privacy Statement.

I accept the product [Terms and Conditions](#) of this registration form.

- When your email address is accepted, enter your **First Name**, **Last Name**, **Country or Region**, and create a **Password**.

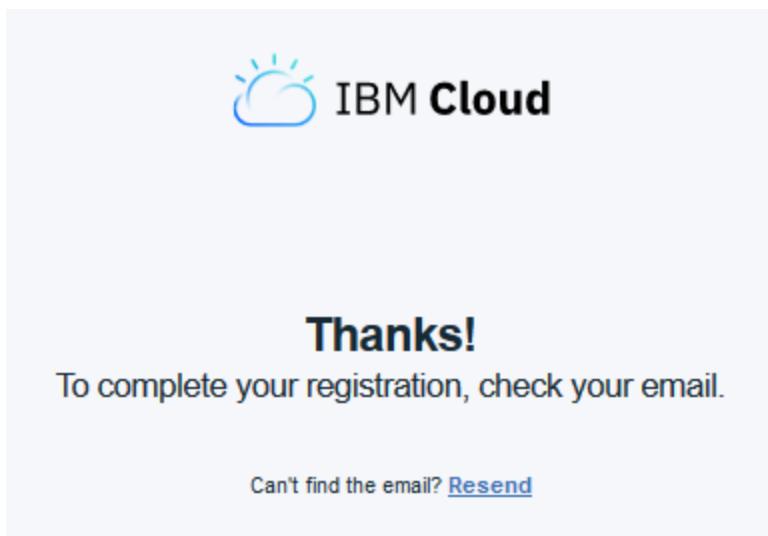
Note: To get enhanced benefits, please sign up with your company email address rather than a free email ID like Gmail, Hotmail, etc.

If you would like IBM to contact you for any changes to services or new offerings, then check the box to accept the option to be notified by email.

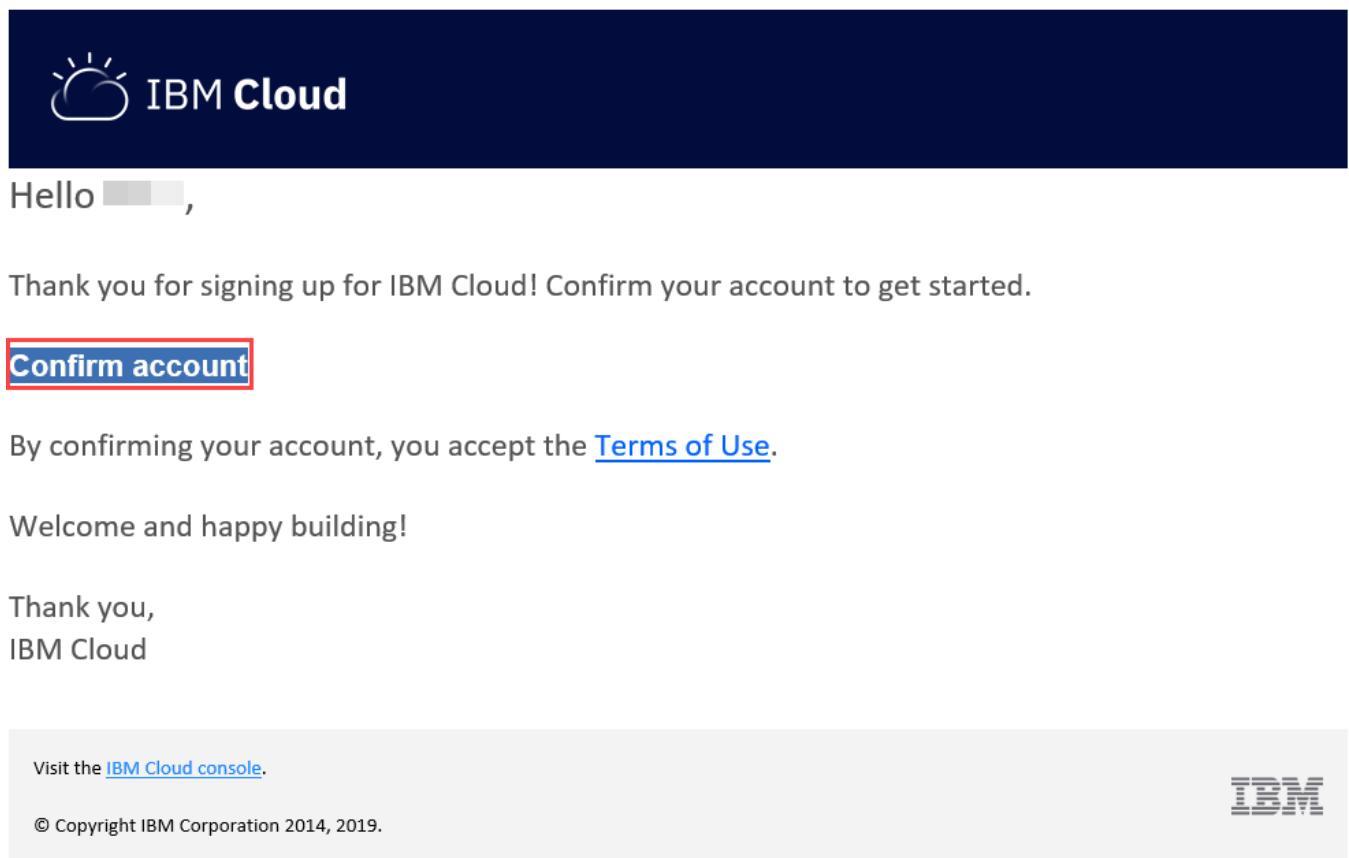
- Click **Create Account** to create your IBM Cloud account.

Task 2: Confirm your email address

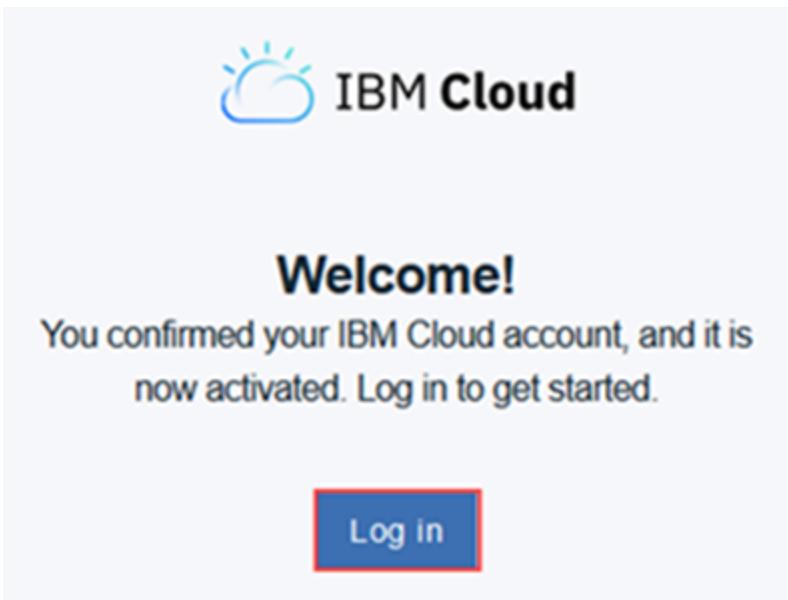
- An email is sent to the address that you signed up with.



2. Check your email, and in the email that was sent to you, click **Confirm Account**.



3. You will receive notification that your account is confirmed.



Click **Log In**, and you will be directed to the IBM Cloud Login Page.

Task 3: Login to your IBM Cloud account

1. On the [Log in to IBM Cloud](#) page, in the **ID** box, enter your email address and then click **Continue**.

A comparison image showing two side-by-side screenshots of the IBM Cloud interface. On the left is the main "Welcome to IBM Cloud" landing page, which features a dark blue header with the "IBM Cloud" logo, a "Create an IBM Cloud account" button, a "Get a \$200 credit when you upgrade" section, and links for "Pricing", "Catalog", "Docs", and "Status". The main body text says "Start building immediately using 190+ unique services.". On the right is the "Log in to IBM Cloud" page, which has a similar header. The main form area contains fields for "ID" (with "IBMid" selected from a dropdown) and "Password", a "Remember me" checkbox, and links for "Forgot ID?" and "Forgot password?". At the bottom right of the form is a blue "Continue" button.

2. In the **Password** box, enter your password, and then click **Log in**.

Welcome to

IBM Cloud

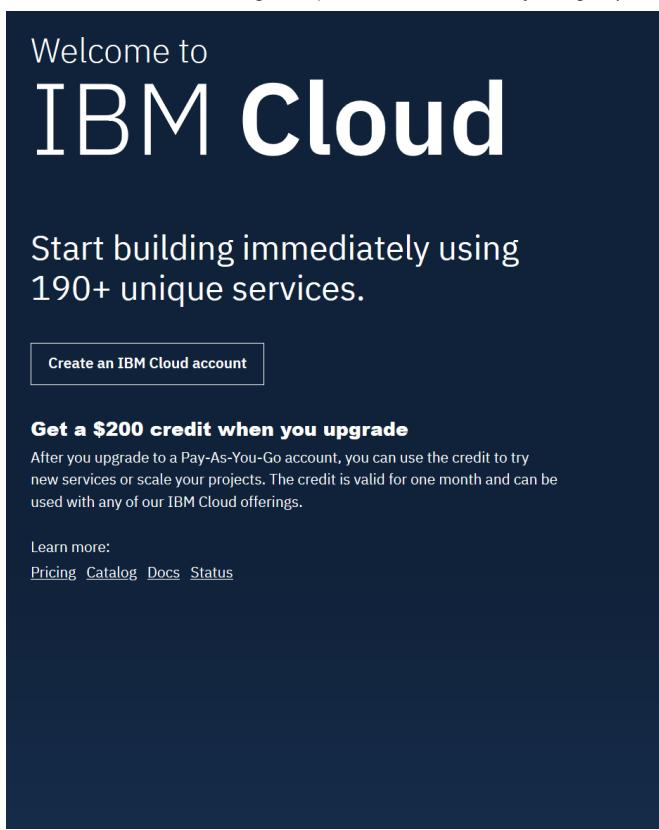
Start building immediately using
190+ unique services.

[Create an IBM Cloud account](#)

Get a \$200 credit when you upgrade

After you upgrade to a Pay-As-You-Go account, you can use the credit to try new services or scale your projects. The credit is valid for one month and can be used with any of our IBM Cloud offerings.

Learn more:
[Pricing](#) [Catalog](#) [Docs](#) [Status](#)



Log in to IBM Cloud

ID

IBMid 

Remember me

Password



[Forgot ID?](#) [Forgot password?](#)

Log in

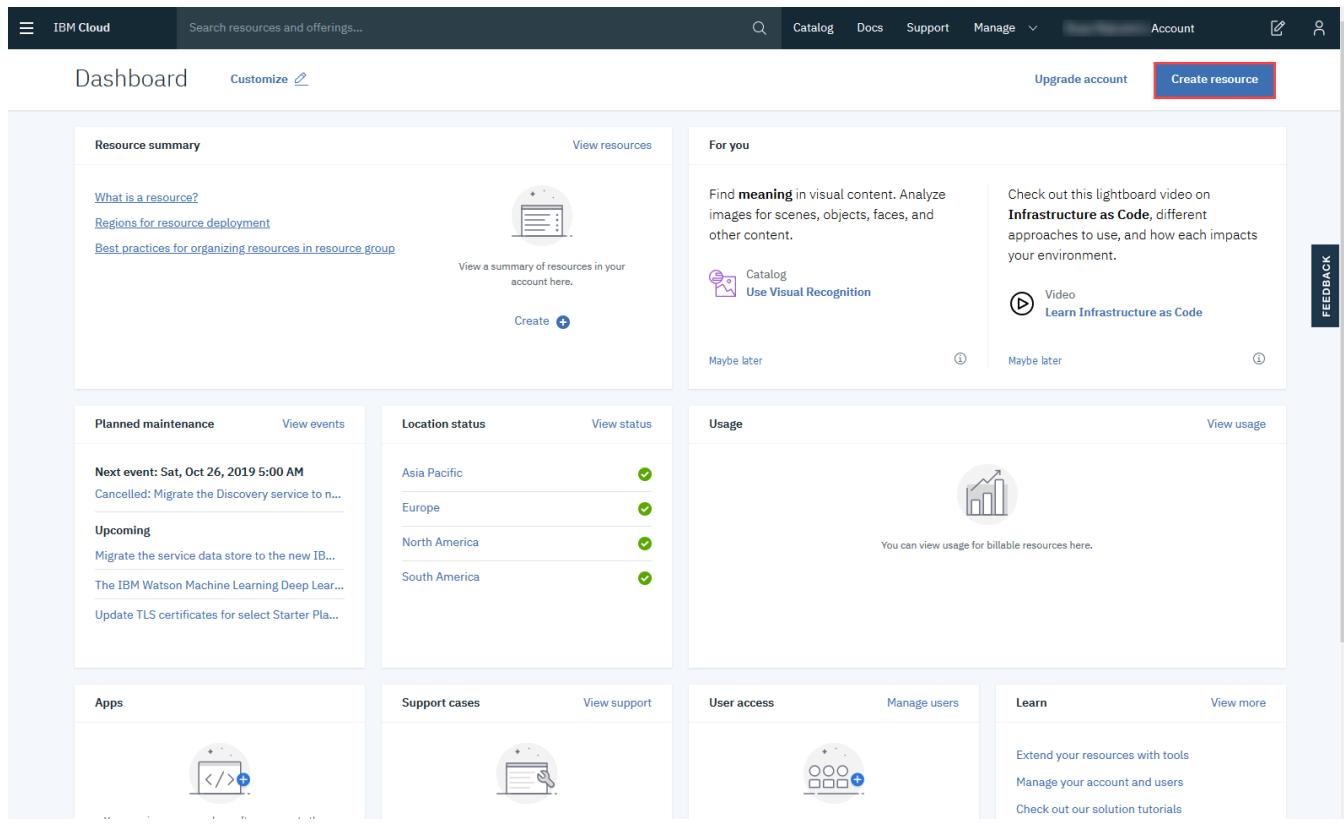
Exercise 2: Create a Watson Studio Resource

Scenario

To manage all your projects, you will use IBM Watson Studio. In this exercise, you will add Watson Studio as a Resource.

Task 1: Add Watson Studio as a resource

1. On the Dashboard, click **Create Resource**.



The screenshot shows the IBM Cloud dashboard. At the top, there's a navigation bar with 'IBM Cloud' and a search bar. To the right are links for Catalog, Docs, Support, Manage, Account, and a user icon. A red box highlights the 'Create resource' button. On the left, a 'Dashboard' section has a 'Customize' link. Below it is a 'Resource summary' card with links for 'What is a resource?', 'Regions for resource deployment', and 'Best practices for organizing resources in resource group'. It also features a 'View resources' button and a 'Create' button with a plus sign. To the right is a 'For you' section with cards for 'Find meaning in visual content' (Catalog, Use Visual Recognition), 'Check out this lightboard video on Infrastructure as Code', and two 'Maybe later' options. A vertical 'FEEDBACK' button is on the far right. The main area contains several cards: 'Planned maintenance' (Next event: Sat, Oct 26, 2019 5:00 AM, Cancelled: Migrate the Discovery service to n...), 'Location status' (Asia Pacific, Europe, North America, South America, all green checkmarks), 'Usage' (View usage), 'Apps' (Icon showing code and a plus sign), 'Support cases' (Icon showing a document with a hand cursor), 'User access' (Icon showing a user profile with a plus sign), and 'Learn' (View more, Extend your resources with tools, Manage your account and users, Check out our solution tutorials).

2. In the Catalog, click AI (16).

IBM Cloud Search resources and offerings... Catalog Docs Support Manage Account X

Try the best of the Catalog for free with no time restrictions with Lite plans.
The Lite filter is enabled. Remove the filter to see the full Catalog.

Catalog

Services (45) Software

All Categories (45) > Services

Explore our broad portfolio of managed services for infrastructure, developer tools, and more to build your apps on the public cloud.

Filters: Lite Clear all

All Categories

 Analytics Engine IBM Flexible framework to deploy Hadoop and Spark analytics applications. Analytics	 API Connect IBM Create, manage, enforce, and run APIs. Integration	 App Connect IBM Connect your applications, automate tasks, and improve productivity. Integration
 App ID IBM User Authentication and User Profiles for your apps. Security and Identity, Web and Mobile	 Availability Monitoring IBM Around the world, around the clock availability and performance monitoring. Developer Tools	 Cloud Foundry IBM Run your Cloud Foundry application in either a multi-tenant, or an isolated environment (Cloud Foundry Enterprise). Compute
 CloudAMQP Third party RabbitMQ as a Service. Web and Application	 Cloudant IBM A scalable JSON document database for web, mobile, IoT, and serverless applications. Databases	 Compare and Comply IBM Process governing documents to convert, identify, classify, and compare important elements. AI
 Container Registry IBM Securely store container images and monitor	 Continuous Delivery IBM Develop, build, test and deliver using DevOps	 Db2 IBM A next generation SQL database. Formerly

FEEDBACK

All Categories (45) > Services

Explore our broad portfolio of managed services for infrastructure, developer tools, and more to build your apps on the public cloud.

Filters: Lite Clear all

All Categories

 Analytics Engine IBM Flexible framework to deploy Hadoop and Spark analytics applications. Analytics	 API Connect IBM Create, manage, enforce, and run APIs. Integration	 App Connect IBM Connect your applications, automate tasks, and improve productivity. Integration
 App ID IBM User Authentication and User Profiles for your apps. Security and Identity, Web and Mobile	 Availability Monitoring IBM Around the world, around the clock availability and performance monitoring. Developer Tools	 Cloud Foundry IBM Run your Cloud Foundry application in either a multi-tenant, or an isolated environment (Cloud Foundry Enterprise). Compute
 CloudAMQP Third party RabbitMQ as a Service. Web and Application	 Cloudant IBM A scalable JSON document database for web, mobile, IoT, and serverless applications. Databases	 Compare and Comply IBM Process governing documents to convert, identify, classify, and compare important elements. AI
 Container Registry IBM Securely store container images and monitor	 Continuous Delivery IBM Develop, build, test and deliver using DevOps	 Db2 IBM A next generation SQL database. Formerly

Note that the **Lite** Pricing plan is selected.

3. In the list of Services, click **Watson Studio**.

IBM Cloud Search resources and offerings... Catalog Docs Support Manage Account

Try the best of the Catalog for free with no time restrictions with Lite plans.
The Lite filter is enabled. Remove the filter to see the full Catalog.

Catalog

Search the catalog...

Services (45) Software

All Categories (45)

VPC Infrastructure
Compute (2)
Containers (1)
Networking
Storage (1)

AI (16)

Analytics (4)
Databases (3)
Developer Tools (6)
Integration (4)
Internet of Things (1)
Security and Identity (3)
Starter Kits (1)
Web and Mobile (2)
Web and Application (4)

Provider IBM Community Third party

Pricing plan Lite Free

Compliance IAM-enabled

Services

Explore our broad portfolio of managed services for infrastructure, developer tools, and more to build your apps on the public cloud.

Filters: Lite Clear all

FEEDBACK

Watson Assistant IBM	Watson Studio IBM	Compare and Comply IBM
Watson Assistant lets you build conversational interfaces into any application, device, or channel.	Embed AI and machine learning into your business. Create custom models using your own data.	Process governing documents to convert, identify, classify, and compare important elements
AI	AI	AI
Discovery IBM	Knowledge Catalog IBM	Knowledge Studio IBM
Add a cognitive search and content analytics engine to applications.	Discover, catalog, and securely share enterprise data.	Teach Watson the language of your domain.
AI	AI	AI
Language Translator IBM	Machine Learning IBM	Natural Language Understanding IBM
Translate text, documents, and websites from one language to another. Create industry or region-specific translations via the service's...	IBM Watson Machine Learning - make smarter decisions, solve tough problems, and improve user outcomes.	Analyze text to extract meta-data from content such as concepts, entities, emotion, relations, sentiment and more.
AI	AI	AI

4. On the Watson Studio page, select the region closest to you, verify that the **Lite** plan is selected, and then click **Create**.

Watson Studio Lite IBM Service IAM-enabled

Author: IBM • Date of last update: 07/18/2019

[Need Help?](#) [Contact Support](#) [View docs](#)

[Create](#) [About](#)

Select a region

Dallas

Select a pricing plan

Monthly prices shown are for country or region: [United States](#)

PLAN	FEATURES	PRICING
Lite	1 authorized user 50 capacity unit-hours included monthly (additional capacity available) Unlimited elastic compute environments Capacity Type: 1 vCPU and 4 GB RAM = 0.5 capacity units required per hour Capacity Type: 2 vCPU and 8 GB RAM = 1 capacity units required per hour Capacity Type: 3 vCPU and 12 GB RAM = 1.5 capacity units required per hour Capacity Type: 4 vCPU and 16 GB RAM = 2 capacity units required per hour Capacity Type: 8 vCPU and 32 GB RAM = 4 capacity units required per hour Capacity Type: 16 vCPU and 64 GB RAM = 8 capacity units required per hour Decision Optimization = (Capacity Type) + 20 capacity units required per hour	Free
Standard v1	1 authorized user + unlimited viewer collaborators 50 capacity unit-hours included monthly (additional capacity available) Unlimited elastic compute environments Capacity Type: 1 vCPU and 4 GB RAM = 0.5 capacity units required per hour Capacity Type: 2 vCPU and 8 GB RAM = 1 capacity units required per hour Capacity Type: 3 vCPU and 12 GB RAM = 1.5 capacity units required per hour Capacity Type: 4 vCPU and 16 GB RAM = 2 capacity units required per hour Capacity Type: 8 vCPU and 32 GB RAM = 4 capacity units required per hour Capacity Type: 16 vCPU and 64 GB RAM = 8 capacity units required per hour Decision Optimization = (Capacity Type) + 20 capacity units required per hour	\$99.00 USD/Instance \$0.50 USD/Capacity Unit-Hour \$99.00 USD/Authorized User
Enterprise v2	5 authorized users + unlimited viewer collaborators 5,000 capacity unit-hours included monthly (additional capacity available) Unlimited elastic compute environments Capacity Type: 1 vCPU and 4 GB RAM = 0.5 capacity units required per hour	Expand each section to view details

The Lite plan for Watson Studio offers everything you need to become a better data scientist or domain expert in a collaborative environment.

Lite plan services are deleted after 30 days of inactivity.

[Create](#) [Add to estimate](#) [View terms](#) [Feedback](#)

5. When the Watson Studio resource is successfully created, you will see the Watson Studio page. Click **Get Started**.

Resource list /  Watson Studio-00

Resource group: Default Location: Dallas [Add Tags](#)



Watson Studio

Welcome to Watson Studio. Let's get started!

[Get Started](#)

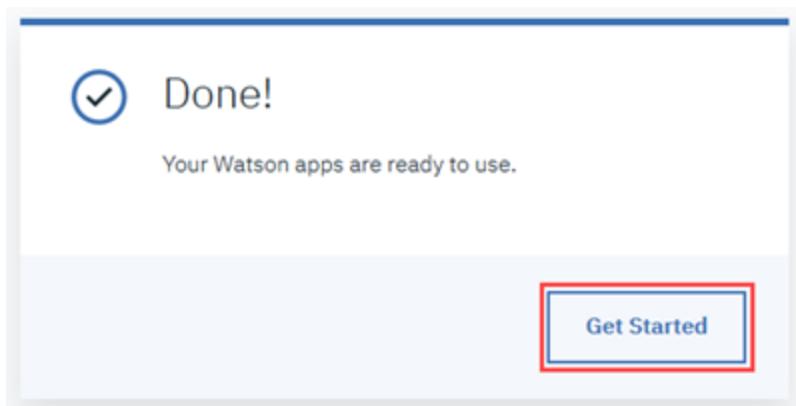
Documentation

From getting started to how to's — see what's available.

Community

Check out our tutorials, articles, along with sample notebooks and data sets you can use to get going.

6. You will see this message when Watson Studio is successfully set up for you.



Exercise 3: Create a project

Scenario

To manage all the resources and services that you are working with, you should create a Watson Studio Project. You will begin by creating an empty project, and then adding the resources and services that you need.

Task 1: Create an empty project

1. On the Watson Studio Welcome page, click **Create a project**.

A screenshot of the Watson Studio Welcome page. The page has a dark blue header with the "IBM Watson Studio" logo and a "Get started" button. The main content area features a "Welcome" section with a "Start by creating a project" callout. This callout contains the text "A project is how you organize your resources to work with data and collaborate with team members" and a "Create a project" button. The "Create a project" button is highlighted with a red rectangular box. Below this, there's a "Recently updated projects" section which shows a message: "No projects to show" and "You haven't made a project yet".

2. On the Create a project page, click **Create an empty project**.

[Back](#)

Create a project

Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.



Create an empty project

Add the data you want to prepare, analyze, or model. Choose tools based on how you want to work: write code, create a flow on a graphical canvas, or automatically build models.

NEW AutoAI experiment tool: Fully automated approach to building a classification or re...

USE TO

Prepare and visualize data
Analyze data in notebooks
Train models



Create a project from a sample or file

Get started fast by loading existing assets. Choose a project file from your system, or choose a curated sample project.

USE TO

Learn by example
Build on existing work
Run tutorials

3. On the New project page, enter a **Name** and **Description** for your project.

New project

Define project details

Name

Description

Choose project options

Restrict who can be a collaborator (i)

Project will include integration with Cloud Object Storage for storing project assets.

Define storage

① Select storage service

Add

Add an object storage instance and then return to this page and click Refresh.

② Refresh

[Cancel](#)

[Create](#)

4. You must define storage for your project before you can create it. Under **Select storage service**, click **Add**.

New project

Define project details

Name

Project name

Description

Project description

Choose project options

 Restrict who can be a collaborator i

Project will include integration with Cloud Object Storage for storing project assets.

Define storage

① Select storage service

Add

Add an object storage instance and then return to this page and click Refresh.

② Refresh

Cancel

Create5. On the Cloud Object Storage page, verify that **Lite** is selected, and then click **Create**.

IBM Watson Studio

Cloud Object Storage

New

Cloud Object Storage

IBM Cloud Object Storage is a highly scalable cloud storage service, designed for high durability, resiliency and security. Store, manage and access your data via our self-service portal and RESTful APIs. Connect applications directly to Cloud Object Storage using other IBM Cloud Services with your data.

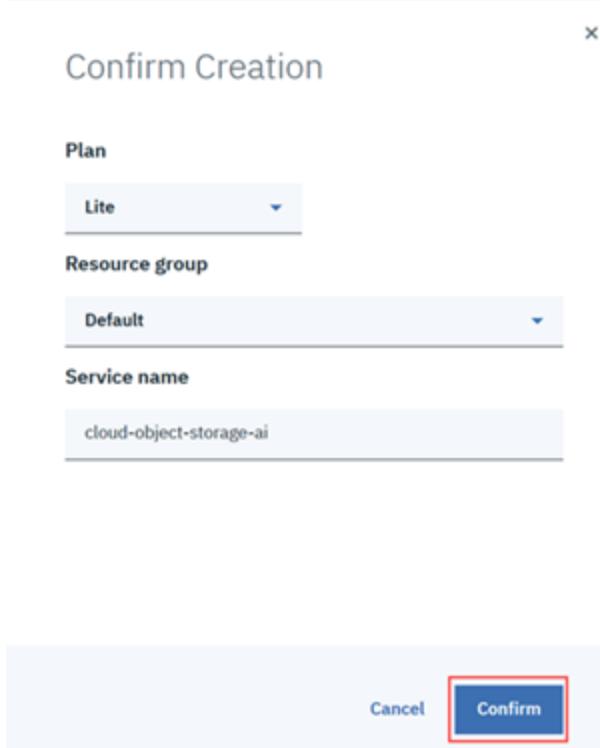
PLAN	FEATURES	PRICING
<input checked="" type="radio"/> Lite	1 COS Service Instance Storage up to 25 GB/mo. Up to 20,000 GET requests/mo. Up to 2,000 PUT requests/mo. Up to Data Retrieval 10 GB/mo. Up to 5GB Public Outbound Applies to aggregate total across all storage bucket classes	Free
<input type="radio"/> Standard	There is no minimum fee, so you pay only for what you use.	

The Lite service plan for Cloud Object Storage includes Regional and Cross Regional resiliency, flexible data classes, and built in security.

Expand each section to view details

Create

6. In the Confirm Creation box, click **Confirm**.



7. On the New project page, under **Define storage**, click **Refresh**, and then click **Create**.

Exercise 4: Add a Watson VR Service instance

Scenario

This project will focus on analyzing images, so you need to add the Watson Visual Recognition Service. You will also need some images to analyze, so follow the setup steps below to ensure you are prepared.

Setup

Before you begin this exercise, you must complete the following steps:

1. Collect a set of at least 20 images. You can use your own images, or download them from the internet.
2. Store the images in an easy to find location.

Task 1: Add the Visual Recognition Service

1. To add services to the project, click **Add to project**.

The screenshot shows the IBM Watson Studio interface. At the top, there's a navigation bar with 'IBM Watson Studio' and 'My Projects / Python Basics for Data Science Pr...'. On the right of the bar are 'Upgrade', 'Launch IDE', 'Add to project', and other icons. Below the bar, there are tabs for 'Overview', 'Assets', 'Environments', 'Jobs', 'Deployments', 'Access Control', and 'Settings'. The 'Overview' tab is selected.

Visual Recognition Project

Last Updated: 28 Oct, 2019

Recent activity

Date created
28 Oct, 2019

Description

Storage
Cloud Object Storage
0 Byte used

Collaborators
View all (1)
Admin

Alerts
Alerts related to this project will show here when the project is active.

Readme

Document your project using standard Markdown syntax. See the [Markdown cheatsheet](#).

2. In the Choose asset type box, click **Visual Recognition**.

The screenshot shows a modal dialog titled 'Choose asset type'. It lists various 'AVAILABLE ASSET TYPES' in a grid. One of the assets, 'Visual Recognition ...', is highlighted with a red border and a blue 'NEW' badge.

AVAILABLE ASSET TYPES			
Data	Connection	Connected data	AutoAI experiment
Dashboard	Visual Recognition ... NEW	Natural Language Cl...	Notebook
Modeler flow	Data Refinery flow	Streams flow	Watson Machine Lea...
			Deep learning experi...
			Decision Optimizatio...

Close

3. In the Associate a service box, click **here**.

The screenshot shows the IBM Watson Studio interface. At the top, there's a navigation bar with 'IBM Watson Studio' on the left, 'Upgrade' with a dropdown arrow, 'Account' with a dropdown arrow, and a 'RM' icon on the right. Below the navigation bar, the page title is 'Analyze images with Watson VR / Create visual recognition model'. Under this, there's a section titled 'Custom Models' with two options: 'Classify Images' and 'Detect Objects', each with a 'Create Model +' button. Below this is a section titled 'Prebuilt Models' with a 'General' option and a 'Test' button. A modal window titled 'Associate a service' is open, displaying the message: 'Your project needs to be associated with a Watson Visual Recognition service.' It also says 'To provision a new service or associate an existing one, click [here](#)'. There are two 'Test' buttons at the bottom of this modal.

4. On the Visual Recognition page, verify that **Lite** is selected, and then click **Create**.

Visual Recognition

 Existing New

Visual Recognition

Find meaning in visual content! Analyze images for scenes, objects, and other content. Choose a default model off the shelf, or create your own custom classifier. Develop smart applications that analyze the visual content of images or video frames to understand what is happening in a scene.

Features

General Model

Generate class keywords that describe the image. Use your own images, or extract relevant image URLs from publicly accessible webpages for analysis.

Food Model

Utilize a specialized vocabulary of over 2,000 foods to identify meals, food items, and dishes with enhanced accuracy.

Custom Model

Create custom, unique visual classifiers. Use the service to recognize custom visual concepts that are not available with general model.

Explicit Model

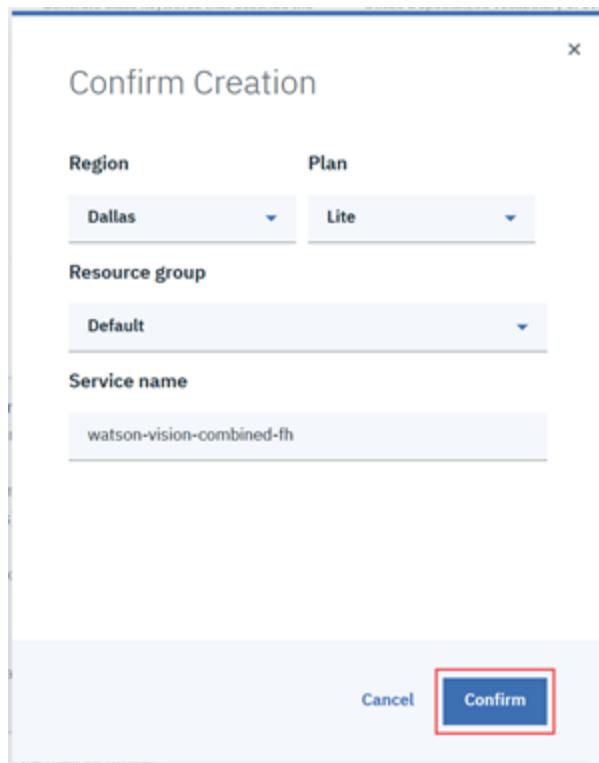
Assess whether an image contains objectionable or adult content that may be unsuitable for general audiences.

Pricing Plan: Monthly Process shown above reflect the: [United States](#)

PLAN	FEATURES	PRICING
<input checked="" type="radio"/> Lite	<p>1,000 Events per month towards:</p> <ul style="list-style-type: none"> Pre-trained model classification (General, Food, Explicit) (images) Custom Model classification (images) Custom Model training (images) 2 Custom Models 1 Lite Plan instance per IBM Cloud Organization Free Exports to Core ML <p>The Lite Plan gets you started with 1,000 events (images) per month and the ability to train two Custom Models. Users wishing to use more premium features or increase usage must upgrade to a Standard Plan or a Subscription Plan.</p>	Free
<input type="radio"/> Standard	<p>Access to everything from the Lite Plan including...</p> <ul style="list-style-type: none"> Train up to 100,000 images per month (only charged if training occurs during the month) Unlimited image classifications per month (charged per image) Unlimited custom models Unlimited free exports to Core ML 	Expand each section to view details

[Cancel](#)[Create](#)

5. In the Confirm Creation box, click **Confirm**.



Task 2: Analyze images with Watson VR

Now you can see all the built-in image classification models that IBM Watson provides! Let's try the General model.

1. To analyze your images, on the Models page, under **Pre Built Models**, in the **General** box, click **Test**.

Custom Models

Classify Images

Create customized visual classifiers that go beyond the built-in image classes provided with the Watson Studio Visual Recognition tool.

[Create Model +](#)

Detect Objects

Build custom image classifiers that detect objects within images using coordinates.

[Create Model +](#)

Prebuilt Models

General

[Copy classifier ID](#)

Generate class keywords that describe the image. Use your own images, or extract relevant image URLs from publicly accessible webpages for analysis.

[Test](#)

Food

[Copy classifier ID](#)

Utilize a specialized vocabulary of over 2000 foods to identify meals, food items, and dishes with enhanced accuracy.

[Test](#)

Explicit

[Copy classifier ID](#)

Assess whether an image contains objectionable or adult content that may be unsuitable for general audiences.

[Test](#)

2. On the General page, click the **Test** tab.

General

Associated Service : watson-vision-combined-ey

[Overview](#) **Test** [Implementation](#)

Summary		<input type="text"/> Search Summary
Model ID	default	Edit
Status	Ready	
Explanation	Generate class keywords that describe the image. Use your own images, or extract relevant image URLs from publicly accessible webpages for analysis.	

3. To upload images, on the Test tab, click **Browse**.

General

Associated Service : [watson-vision-combined-ey](#)

The screenshot shows the Watson Studio Visual Recognition interface in the 'Test' tab. It features a 'Filter' section with a 'Threshold' slider set at 0.0. Below it is a 'Class' section. To the right is a circular icon with a hand holding a document and a plus sign, indicating where to drop files. A red box highlights the 'Browse' button next to the text 'Drop image files here to let the classifier analyze them or browse to select files.'

4. Select the images you want to upload and then click **Open**.

The screenshot shows a 'File Upload' dialog box. The file path is 'Documents > IBM Data Science > DS_1 What is Data Science > Labfiles > Images for Visual Recognition Lab'. The 'Organize' button is selected. The dialog displays a grid of image thumbnails and their filenames:

Birkenstocks.jpg	DM boots.jpg	formal shoes.jpg	Gaziano-Girlin g-chelseas-fash ion-men.jpg	high heeled boots.jpg	high heels.jpg	man coat 1.jpg	man coat 2.jpg	man suit 1.jpg	man suit 2.jpg	trainers.jpg
wedge boots.jpg	women coat 1.jpg	women coat 2.jpg	women jacket 1.jpg	women jacket 2.jpg	womens trainers 2.jpg	womens trainers.jpg	woolly hat 2.jpg	woolly hat.jpg		

At the bottom, there is a 'File name:' input field, a dropdown for 'Image Files (*.jpeg;*.jpg;*.jpeg;*.c)', and a red box highlighting the 'Open' button.

5. Once you have uploaded your images, Watson Studio Visual Recognition will tell you what it thinks it found in your images! Beside each class of object (or color, age, etc.), it gives you a confidence score (between 0 and 1) showing how confident it is that it found that particular object or feature in your image (0 for lowest confidence and 1 for highest confidence).

General

Associated Service : watson-vision-combined-ey

[Overview](#)
[Test](#)
[Implementation](#)

Filter

Threshold 1

Class

- accessory
- arctic shoe
- armchair
- ash grey color
- beanie
- beige color
- belt
- beret
- black tie
- blucher shoes
- bomber jacket
- boot
- booothose
- bootlace
- bootstrap
- bottle green color
- broadloom (carpet)
- Burberry (raincoat)
- candy
- cap
- cardigan (jacket)
- chair
- charcoal color
- chopine (platform) shoe
- claret red color
- clog
- clothing
- coal black color
- coat
- cowboy boot
- delicacy
- double-breasted jacket
- dress
- dress suit
- duffel coat
- easy chair
- espadrille shoes

[Clear results](#)

Birkenstocks.jpg



beige color	0.95
footwear	0.93
shoe	0.90
sandal	0.89
tool	0.79
light brown color	0.78
clog	0.50
espadrille shoes	0.50

DM boots.jpg

[SHOP WEATHERPROOF BOOTS](#)

maroon color	0.86
light brown color	0.77
footwear	0.75
shoe	0.75
protective covering	0.60
headress	0.59
wing tip	0.59
bootlace	0.59
saddle shoe	0.52
accessory	0.51
holster	0.51
belt	0.51
blucher shoes	0.51
nougat bar	0.50
candy	0.50
sweet	0.50
delicacy	0.50
nutrition	0.50
food	0.50

formal shoes.jpg



footwear	0.90
light brown color	0.86
protective covering	0.80
clothing	0.80
shoe	0.72
wing tip	0.69
boot	0.60
shoes	0.56
cowboy boot	0.50
beige color	0.47

high heeled boots.jpg



high heels.jpg



man coat 1.jpg



6. Use the checkboxes on the left to filter the images. In this example, only images in which Watson VR has detected **beige color** are displayed.

General

Associated Service : [watson-vision-combined-ey](#)

Overview **Test** **Implementation**

Filter

Threshold 0.0

Class

- accessory
- arctic shoe
- armchair
- ash grey color
- beanie
- beige color
- belt
- beret
- black tie
- blucher shoes
- bomber jacket
- boot
- boothose
- bootlace
- bootstrap
- bottle green color
- broadloom (carpet)
- Burberry (raincoat)
- candy
- cap
- cardigan (jacket)
- chair
- charcoal color
- chopine (platform) shoe
- claret red color
- clog
- clothing
- coal black color
- coat
- cowboy boot
- delicacy
- double-breasted jacket
- dress
- dress suit
- duffel coat
- easy chair

Clear results

Image	Classification	Confidence
Birkenstocks.jpg	beige color, footwear, shoe, sandal, tool, light brown color, clog, espadrille shoes	0.95, 0.93, 0.90, 0.89, 0.79, 0.78, 0.50, 0.50
formal shoes.jpg	footwear, light brown color, protective covering, clothing, shoe, wing tip, boot, shoes, cowboy boot, beige color	0.90, 0.86, 0.80, 0.80, 0.72, 0.69, 0.60, 0.56, 0.50, 0.47
high heeled boots.jpg	light brown color, beige color, footwear, shoe, protective covering, clothing, pump, spectator pump, chopine (platform) shoe, saddle shoe, sandal	0.95, 0.92, 0.91, 0.89, 0.80, 0.79, 0.69, 0.69, 0.62, 0.55, 0.50
man coat 1.jpg	beige color, overgarment, garment, coat, trench coat	1.00, 0.97, 0.97, 0.96, 0.82
women coat 1.jpg	beige color, garment, overgarment, coat, raincoat	1.00, 0.94, 0.94, 0.93, 0.92
women coat 2.jpg	overgarment, garment, coat, olive green color, sheepskin coat	0.96, 0.96, 0.95, 0.88, 0.86

7. Use the **Threshold** slider to only display images in which Watson VR has at least 90% confidence of the beige color.

General

Associated Service : [watson-vision-combined-ey](#)

Overview **Test** **Implementation**

Filter

Threshold 0.90

Class

- accessory
- arctic shoe
- armchair
- ash grey color
- beanie
- beige color
- belt
- beret
- black tie
- blucher shoes
- bomber jacket
- boot
- booothose
- bootlace
- bootstrap
- bottle green color
- broadloom (carpet)
- Burberry (raincoat)
- candy
- cap
- cardigan (jacket)
- chair
- charcoal color
- chopine (platform) shoe
- claret red color
- clog
- clothing
- coal black color
- coat
- cowboy boot
- delicacy
- double-breasted jacket
- dress
- dress suit
- duffel coat

Birkenstocks.jpg

Label	Confidence Score
beige color	0.95
footwear	0.93
shoe	0.90
sandal	0.89
tool	0.79
light brown color	0.78
clog	0.50
espadrille shoes	0.50

high heeled boots.jpg

Label	Confidence Score
light brown color	0.95
beige color	0.92
footwear	0.91
shoe	0.89
protective covering	0.80
clothing	0.79
pump	0.69
spectator pump	0.69
chopine (platform) shoe	0.62
saddle shoe	0.55
sandal	0.50

man coat 1.jpg

Label	Confidence Score
beige color	1.00
overgarment	0.97
garment	0.97
coat	0.96
trench coat	0.82
raincoat	0.82
clothing	0.80
fabric	0.80
double-breasted jacket	0.62
greatcoat	0.54
pea jacket	0.50

women coat 1.jpg

Label	Confidence Score
beige color	1.00
garment	0.94
overgarment	0.94
coat	0.93

Gaziano-Girling-chelseas-fashion-men.jpg

Label	Confidence Score
beige color	0.95
furniture	0.75
seat	0.73
chair	0.71

Task 3: Save a screenshot

Note: The screenshot saved in this step will be required as part of the Graded Final Assignment for those pursuing a certificate for this course. This step is *optional* for those auditing the course.

- From Task 2, choose just one of the images that you uploaded. Select an image that does not have too many classes of objects.
- Take and save a screenshot in .jpeg or .jpg format including the Watson Visual Recognition confidence scores (that are indicated below the image). Ensure the labels and confidence scores below the picture are readable. See the sample screenshot below.

women coat 1.jpg



beige color	1.00
garment	0.94
overgarment	0.94
coat	0.93

Task 4: Share your results

Follow us on Twitter and send us some of the funniest and most interesting results you found with IBM Watson Visual Recognition!

Tweet

I just learned how to use Artificial Intelligence to classify images with [@IBMWatson](#) in this Introduction to AI course by [@ravahuja](#) on Coursera - <https://www.coursera.org/learn/introduction-to-ai> - <https://www.coursera.org/learn/introduction-to-ai>





In today's modern age of disruption, SkillUp Online is your ideal learning platform that enables you to upskill to the most in-demand technology skills like Data Science, Big Data, Artificial Intelligence, Cloud, Front-End Development, DevOps & many more. In your journey of evolution as a technologist, SkillUp Online helps you work smarter, get to your career goals faster and create an exciting technology led future.

Corporate

- ▶ [Home](#)
- ▶ [Blog](#)
- ▶ [About Us](#)
- ▶ [Press](#)
- ▶ [Enterprise](#)

Support

- ▶ [Contact us](#)
- ▶ [Terms of Service](#)
- ▶ [Privacy & Cookie Policy](#)

Copyright ©2018 [Skillup](#). All Rights Reserved