



## IBM Bluemix Development & Certification

Summary decks for a course that covers the A to Z of IBM Bluemix.

For more information visit:  
<http://www.acloudfan.com>

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1. Cognitive Services
2. Alchemy Language API
3. Alchemy Vision API

**PS: Certification practice test questions NOT included in the summary decks**

# Discounted access to the courses:



<https://www.udemy.com/ibm-bluemix/?couponCode=BLUE100>

Coupon Code = **BLUE100**



<https://www.udemy.com/rest-api/?couponCode=REST100>

Coupon Code = **REST100**

## PS:

- For latest coupons & courses please visit: <http://www.acloudfan.com>
- Enter to **WIN Free access** – please visit: <http://www.acloudfan.com/win-free-access>





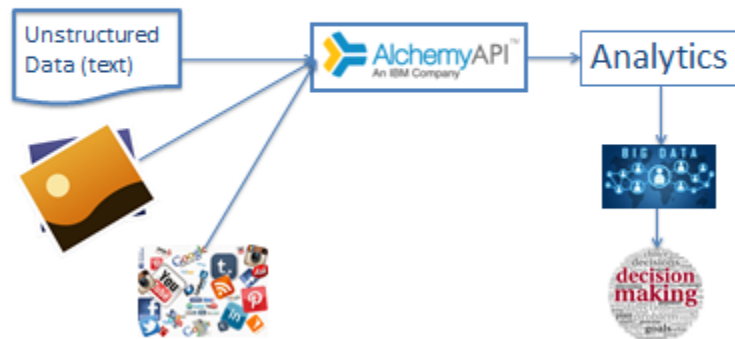
## Cognitive Services

- IBM Watson is a question answering computer system capable of answering questions posed in *natural language*
- Cognitive services refers to a capability to provide answers based on what the underlying system knows to be correct, and relies on information they acquire over time



## Alchemy API – Big Picture

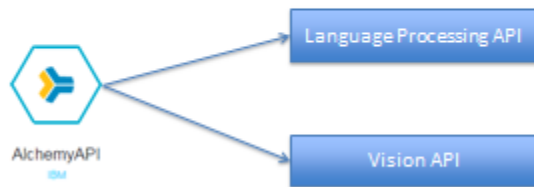
<http://www.alchemyapi.com/>



## Alchemy API

<http://www.alchemyapi.com/>

- Alchemy API is available as a managed service on Bluemix platform



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# Language Processing API

# Language Processing - API

<http://www.alchemyapi.com/>

Entity Extraction

Relation Extraction

Text Extraction

Sentiment Analysis

Taxonomy  
Classification

Feed Detection

Keyword Extraction

Author Extraction

Microformat Parsing

Concept Tagging

Language Detection

Linked Data Support



## Functions

### Entity Extraction

- Identify the proper nouns  
People, Companies, Locations....

### Sentiment Analysis

- Aims to determine the attitude of a speaker or a writer with respect to some topic



## Functions

### Keyword Extraction

- Extract the important words in the text



### Concept Tagging

- Identify the overall concepts in the text



## Functions

### Relation Extraction

- Extract subject-action-object relations



### Taxonomy Classification

- Categorizes content into a hierarchical taxonomy  
E.g., Automatic classification of websites



## Functions

### Author Extraction

- Extract the author of Blog/posts/articles

### Language Detection

- Detects 97+ languages

### Text Extraction

- Extracts text out of web pages
- Improve web page indexing
- Simplify analysis
- Improve relevancy of advertisements

## Functions

### Feed Detection

- Finds RSS/Atom feeds in web pages
- New content discovery

### Microformat Parsing

- Microformats are included in HTML for adding semantic information on web pages
  - Contact information
  - Geographic coordinates
  - License information
- Alchemy API automatically detects and parses the microformats

## Functions

### Linked Data Support

- The Semantic Web is a Web of Data that can be queried, used for drawing inference
- The data for semantic web is managed in a format known as linked data
- Alchemy API supports Linked Data in the web thereby exposing, sharing, and connecting pieces of data, information, and knowledge





# Vision Processing API

# Alchemy API - Vision

<http://www.alchemyapi.com/>



- Uses deep learning technology to understand a picture's content and context. These API may be used for effectively integrate images as part of big data analytics to make critical business decisions

Image Link  
Extraction

Image Tagging

Face Recognition

<http://vision.alchemy.ai/>

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<http://www.acloudfan.com>



## Functions

### Image Link Extraction

- Extracts the image link on internet accessible URLs and HTML



## Functions

### Image Tagging

- Image tagging is a process by which a computer system **automatically** assigns metadata in the form of captioning or keywords to a digital image.



## Functions

### Face Recognition

- Performs face detection and recognition on your Internet-accessible URLs and posted image files



## Summary

- Alchemy Vision API may be leveraged to analyze the images
- Metadata generated by vision API may be used as part of the big data analytics