

# Glossary

In this glossary are words and phrases the team used in our research, documentations and deliverables. The definitions are derived from dictionary technical definitions. The intent of this glossary is to aid the audiences' understanding of the project.

## **Artificial Intelligence (AI)**

The simulation of human intelligence in machines.

## **Application Programming Interface (API)**

A software intermediary that allows two applications to talk to each other.

## **Aspect Level Analysis (ALA)**

Technique that breaks down text into aspects (attributes or components of a product or service), and then allocates each one a sentiment level (positive, negative or neutral).

## **Actionable Information**

Information from the USPTO's customers that indicates areas of improvement. This information can be about a service, experience, or future changes that allow the agency to improve customer experience.

## **Code**

Text that is written to instruct a computer on what to do. Code often depends on the computer programmer's (person writing the software) protocol.

## **Comma Separated Values file (CSV)**

A CSV file is a plain text file that stores tables and spreadsheet information with each value of the text file being separated by commas.

## **Customer Perceptions**

Personal expressions or opinions related to how a customer interprets a service, product, or experience provided by a company.

## **Customer Sentiment**

The quality a customer associates with a company (of a company's service) based on satisfaction and quality of experience over time.

**Database**

A structured set of information stored in a computer.

**Dataset**

A collection of related information that is composed of separate elements.

**Denial of Service (DoS)**

An attack on a web server that disrupts its normal function and prevents other users from accessing it.

**Developer**

A professional computer scientist who specializes in software engineering and computer programming.

**Element**

One specific part of a webpage (for example a section of text on a website). To elaborate, elements are sections that are broken up by commands in code.

**Extract**

To collect detailed information from a source.

**Feed**

A timeline of comments, post, or responses in chronological order.

**GitHub**

A website that contains shared code from developers, this is also a source for developers to exchange information about software, programming methods, and code.

**Hypertext Markup Language (HTML)**

General computer code that builds the structure of a website.

**Human Phenomena**

Feelings, emotions, and characteristics that are only created naturally by humans, but can be interpreted by computers.

**Hyperplane**

A boundary between points.

**JavaScript**

Computer code that allows developers to make webpages interactive for users (of the webpage) and developers.

**Lexicon**

A programmable dictionary of words or phrases. For example, a glossary is defined as a lexicon.

**Machine Learning**

An application of AI that provides systems the ability to automatically learn and improve without the need of a developer.

**Natural Language Processing (NLP)**

The process in which a computer analyzes raw text into the context of a human language.

**Neural Network**

Algorithms that replicate the function of the human brain to synthesize information like a person can.

**Parsing**

Also known as selecting, is the process in collecting information, data, or text. This can be done randomly, by theme, by category, or design.

**Probabilistic**

Describes information that can be supported by statistics.

**Program**

A computer program is a list of instructions that tell a computer what to do.

**Programming Expertise**

The amount of experience or knowledge a person has with developing or coding.

**Python**

A high level, object oriented, computer programming language.

**Query**

A precise request from a computer for information retrieval from the database.

**Server**

A computer connected to the internet that provides a service to multiple clients. This service could be storage or performance based.

**Supervised Learning**

Developers must manually train an algorithm to receive an output.

**Support Vector Machines (SVM)**

Machine Learning algorithm capable of performing classification, regression and even outlier detection of the input information.

**Topic Modeling**

Unsupervised machine learning technique that is capable of scanning and analyzing documents, detecting word and phrase patterns.

**Unsupervised Learning**

Machine learning that looks for previously undetected patterns in a data set with no pre-existing developer instructions. This method does not require a person to input information.

**User Interface (UI)**

The point of human-computer interaction and communication in a device.

**Web Crawler**

A computer program that automatically searches documents.

**Web Extension**

Extensions are software programs that customize the browsing experience.

**Web Scraper**

A tool that is used for extracting data from websites.

**Word Cloud**

A visual display of important text data

**XPATH**

A syntax used to identify and navigate through lines of HTML code documents.