Library's creation

- A library focuses on solving a specific problem with functions and objects developers can easily reuse. With a library comes a lot of flexibility. You can write custom code and components as you need.
  programming library is a collection of prewritten code that programmers can use to optimize tasks.
  This collection of reusable code is usually targeted for specific common problems
  A library usually includes a few different pre-coded components.

- A framework offers a blueprint for creating a specific type of program. Frameworks also come with pre-built components that are wired to work in a certain way. A developer is constrained to work within the preset architecture or design.
  difference between a library and a framework is also easy to understand by using a real-life analogy.

- A framework is like a physical framework of a house. It stands as a strong foundation of the house and leaves no room for customization.
- The library is like the decor and furniture that goes inside the house. You can choose all sorts of decor and furniture solutions and arrange them in a way that makes the house look nice.

How to use or create libraries:

-Most programmers use the security and simplest method to help them simplify their code by calling the library manually, a library that is included in the platform or the global community of each languege and authentic.
-other way to use library is due writing breve code in an external file and call it by writing it's name and which function is required of it.
-The last way is to download a library of reliable and unreliable websites and then do experiments to know whether the library do the function wich we need or not.

Library examples

Here are a few programming library examples you might encounter in Python, JavaScript, and other languages.

NumPy

Primary Language: Python

Use: NumPy is a library used to make powerful arrays. For machine learning, NumPy divides the data and manipulates it easily.

Meaning, machine learning uses many operations on arrays of data. These data sets often contain thousands of numbers and to iterate through every single value one at a time would be difficult and lengthy. NumPy simplifies all of this!

Matplotlib

Primary Language: Python

Use: Going off of the above, Matplotlib is used with NumPy to help with datasets. Specifically, Matplotlib handles large datasets and comes complete with standard graphing functions. It's also useful for visualizing values over time.

Basically, Matplotlib is great for plotting and works hand-in-hand with NumPy.

TensorFlow

Primary Language: Python or C++

Use: TensorFlow is a library developed by Google to facilitate the creation and training of machine learning models and neural networks. It can be used to create and train machine learning models.

SFML

Primary Language: C++
Use: The Simple and Fast Multimedia Library (SFML) is a library that allows for the creation of images, generation of sound effects, and even connecting of multiple computers!

https://www.youtube.com/watch?v=Pm3-d0DHxBw

https://www.youtube.com/watch?v=bTJ1JgrNl_w

https://www.youtube.com/watch?v=pDEsF0MDWF8

https://www.idtech.com/blog/what-are-libraries-in-coding

https://www.codingem.com/what-is-a-library/