Additional Notes

Bootstrap is a front-end framework.

Framework vs Library

Framework	Library
It provides a standard way and a collection of reusable code for software development.	It is a collection of reusable code used for software development.
It is the incharge of the flow of your application. It means you have to plug in your code inside the skeleton functionalities that it provides.	You are the incharge of the flow of your application. It means you can plug in the functionalities that it provides anywhere in your code. It gives you the freedom to choose when and where to use it.

Pros and Cons of Using Bootstrap

Pros

- It is a bunch of reusable code, hence it saves you time.
- It provides loads of features for styling purposes.
- It uses a mobile-first approach and provides inbuilt functionalities to make a website responsive.
- It has great support and documentation for exploring and learning.

Cons

- It is very bulky i.e. it has a lot of features which your website may or may not require.
- Since it is very popular, there are many websites that are built using it. So it may produce similar designs that lack creativity.
- It's less flexible as it may require a lot of customizations to adjust it according to the required use case.

Content Delivery Network (CDN)

The Idea Behind CDN

When we enter a URL in a browser, it sends a request to the corresponding server to fetch the website content. This website content can be HTML, CSS, and JS files. The time taken to fetch a website over the internet often depends on the distance between the client (in this case a browser) and the server. If a server is located in a far-off country from where you are, the loading time of the website will be high. Hence it'll create a bad user experience.

What is CDN?

CDNs solve the above problem. They are geographically distributed servers across the world. Although they do not host content but provide a cache for the content. Whenever you enter a URL in your browser, the request will be sent to the nearby CDN which will provide the content, hence reducing the loading time.

Bootstrap using CDNs

Bootstrap uses these Content Delivery Network services. The bootstrap framework has lots of CSS and JS code that it provides to its users. The need for CDNs arises because bootstrap users are located all over the world. That is why you see **"https://cdn"** prefixed with the bootstrap links which means the bootstrap files will be fetched from the nearest CDN according to your geographical location.

Script Tags for Bootstrap

Bootstrap uses javascript for some of its functionalities. **JS script tags for bootstrap must be placed at the end of the body section of the HTML page.** Browser scans an HTML document from top to bottom to render it on the screen. So the HTML, CSS must be rendered first only then the functionality code (JS) will operate correctly on it. Otherwise, if you add functionality before rendering content on the screen, the functionality won't be able to operate as there's no content to be operated on.