



**INTERNSHIP PROJECT REPORT**

**ON**

**WEB BASED URL SHORTENER**

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**OCT -21**

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# ***WEB BASE URL SHORTENER***

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## **SUMMARY:**

URL stands for Uniform Resource Locator. **URL shortening** is a technique on the World Wide Web in which a Uniform Resource Locator (URL) may be made substantially shorter and still direct to the required page. This is achieved by using a redirect (**URL redirection**, also called **URL forwarding**) which links to the web page that has a long URL. Often the redirect domain name is shorter than the original one. A friendly URL may be desired for messaging technologies that limit the number of characters in a message (for example SMS), for reducing the amount of typing required if the reader is copying a URL from a print source, for making it easier for a person to remember, or for the intention of a permalink. Other uses of URL shortening are to "beautify" a link, track clicks, or disguise the underlying address

## **PURPOSE:**

There are several reasons to use URL shortening. Often regular unshortened links may be aesthetically unpleasing. Many web developers pass descriptive attributes in the URL to represent data hierarchies, command structures, transaction paths or session information. This can result in URLs that are hundreds of characters long and that contain complex character patterns. Such URLs are difficult to memorize, type out or distribute. As a result, long URLs must be copied and pasted for reliability. Thus, short URLs may be more convenient for websites or hard copy publications

## **SCOPE:**

With the advancement in a web system, security is one of the major aspects coming in through any form. The spamming of URL by making but attack a website can cause the website to crash. So there should be a check on which URLs are allowed to be shortened.

## ADVANTAGES:

The main advantage of a short link is that it is, as the name indicates, short, looks neat and clean and can be more easily communicated and entered without error. To a very limited extent it may obscure the destination of the URL, though easily discoverable; this may be advantageous, disadvantageous, or irrelevant

## GOAL :

The Goal of the project is to build the system which allows user to enter a URL.

The URL should be valid URL. If the URL is valid ,the Shortened URL is given to the user. Else System will ask user to enter the valid URL

## TECHNOLOGY STACK

1. Python
2. Flask
3. HTML
4. CSS
5. Javascript
6. SQLAlchemy

## TOOL Stack

1. Pycharm IDE
2. Web Browser

## Working Phase:

1. **User Input** = The Goal of this phase is to take the form of URL
2. **Validating the User Input** = The goal of URL input is to accept the valid URL from a user and pass it to the URL shortening module to shorten the URL
3. **URL Shortening** = The Goal of this phase is to map the given URL with 10 alphanumeric values.
4. **URL Mapping** = The goal of this phase is to map the short and long URL in database or dictionary so that the URL redirection phase can use this information for future use
5. **URL Redirecting(Testing Phase)** = The Goal of this phase is to test whether the shorten URL redirect to its address or path correctly or not

