

User Stories :

URL Shortener carrier takes an extended URL and compresses it in a quick hyperlink that is less complicated to share. You can create quick URLs programmatically the usage of PHP with none 1/3 party URL Shortener API. In this tutorial, we can display you a way to construct a URL Shortener library and create quick URL the usage of PHP and MySQL. With PHP URL Shortener library you could shorten the lengthy URLs and use your personal area withinside the quick URLs. In the instance script suggests the system to create a clean, quick, and tiny hyperlink that may be shared without problems through electronic mail or social media. The database is used to shop the data approximately lengthy and quick URL. Also, you could tune the wide variety of hits the fast URL receives with the aid of using the visitors.

Create Database Table

We will use the database to deal with the redirection primarily based totally at the shortcode. The following SQL creates a short_urls desk withinside the MySQL database to shop URL info (lengthy URL, quick code, hits, and create time).

URL Shortener Library (Shortener.class.php)

The URL Shortener class permit to programmatically create quick URL the use of PHP and MySQL. This class makes use of PDO Extension to paintings with the MySQL database, so, PDO item example is needed on initialization of Shortener class. Static Variables: \$chars – Allowed characters for the fast code. (Characters institution is separated by |) \$desk – Database desk call to keep the URL and quick code information. \$checkUrlExists – Set to TRUE, to test whether or not the lengthy URL exists. \$codeLength – The period of the fast code characters. Functions: __construct() – Set PDO item reference and timestamp. urlToShortCode() – Validate URL and create quick code. validateUrlFormat() – Validate the layout of the URL. verifyUrlExists() – Verify the URL whether or not it exist or now no longer the use of cURL in PHP. urlExistsInDB() – Check whether or not the lengthy URL is exist withinside the database. If exist, go back the shot code, otherwise, go back FALSE. createShortCode() – Create quick code for the lengthy URL and insert the lengthy URL & quick code withinside the database. generateRandomString() – Generate random string (quick code) with the desired characters withinside the \$chars variable.

insertUrlInDB() – Insert URL information withinside the database the use of PDO Extension and MySQL and go back the row ID. shortCodeToUrl() – Convert the fast code to lengthy URL and insert the hits matter withinside the database. validateShortCode() – Validate the fast code primarily based totally at the allowed characters. getUrlFromDB() – Fetch the lengthy URL from the database primarily based totally on the fast code. incrementCounter() – Increment the URL visits counter withinside the database for a selected record.

Database Configuration (dbConfig.php)

In the dbConfig.php file, PDO (PHP Data Objects) is used to attach and pick out the database. Specify the database host (\$dbHost), username (\$dbUsername), password (\$dbPassword), and name (\$dbName) as in step with your MySQL database server credentials.

Create Short URL with PHP

The following code creates quick code and generates quick URL with custom URL Shortener magnificence the usage of PHP and MySQL. Initialize Shortener magnificence and byskip the PDO object. Specify the lengthy URL that you need to transform in a quick link. Specify the quick URL

prefix. If you need to apply RewriteEngine to Rewrite the URL, specify most effective the bottom URI. Otherwise, specify the bottom URI with a question string to byskip the quick code. Call the urlToShortCode() characteristic to get the quick code of the lengthy URL. Create quick URL with URI prefix and quick code.

Redirect to Long URL

The following code handles the redirection from brief URL to the unique URL. Retrieve the quick code from the question string of the URL, or from the URI segment. Call shortCodeToUrl() feature to get the lengthy URL with the aid of using the quick code. Redirect person to the unique URL.

Conclusion

Our Shortener class lets you create brief URL without problems the use of PHP. You can use this library to construct your personal URL Shortener with PHP and MySQL. Use the instance code to shorten the URL at the fly with out the use of any third-birthday birthday celebration service. Also, the PHP URL Shortener class can without problems be prolonged to personalize the URL shorting functionality.