**WEBSITE LINK SHORTENER AND TRACKER**

**A Mini Project Report**

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**(Autonomous)**

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**Problem Statement:**

Website Link Tracker: Allows users to shorten URLs and track the number of clicks on those links. (RDBMS: Links, Clicks; Backend: URL shortening logic, click tracking, basic analytics).

**Github Link:**

https://github.com/M-Dharani18/URLShortenerApp.git

https://github.com/dhavanithim/URLShortenerApp.git

**Modules and Description:**

**1. User Signup/Login Module** Users can register using their username, email, and password. This module handles login authentication and manages sessions to control access to dashboard features.

**2. Admin/User Dashboard Module** After logging in, users are taken to their dashboard where they can view analytics, manage their shortened URLs, and monitor click statistics.

**3. URL Shortening Module** Allows users to enter a long URL and generate a unique short URL. The module handles short code creation, validation, and storage.

**4. Redirection Module** Handles the redirection process. When a user visits a short URL, this module finds the original URL and redirects the user while logging the click.

**5. Analytics and Click Tracking Module** Tracks detailed information about each click on a short URL including timestamp, IP address, country, and browser. This data is displayed in the dashboard.

**6. Top Links & Stats Module** Displays the most clicked URLs for a user. Helps users quickly view the performance of their top-performing links.

**7. URL Management Module (Edit/Delete)** Users can delete their shortened URLs or view detailed analytics per link. This module ensures clean link management.

**8. Database Configuration Module** Manages the connection to the MySQL database using a secure configuration file. Ensures data persistence and integrity.

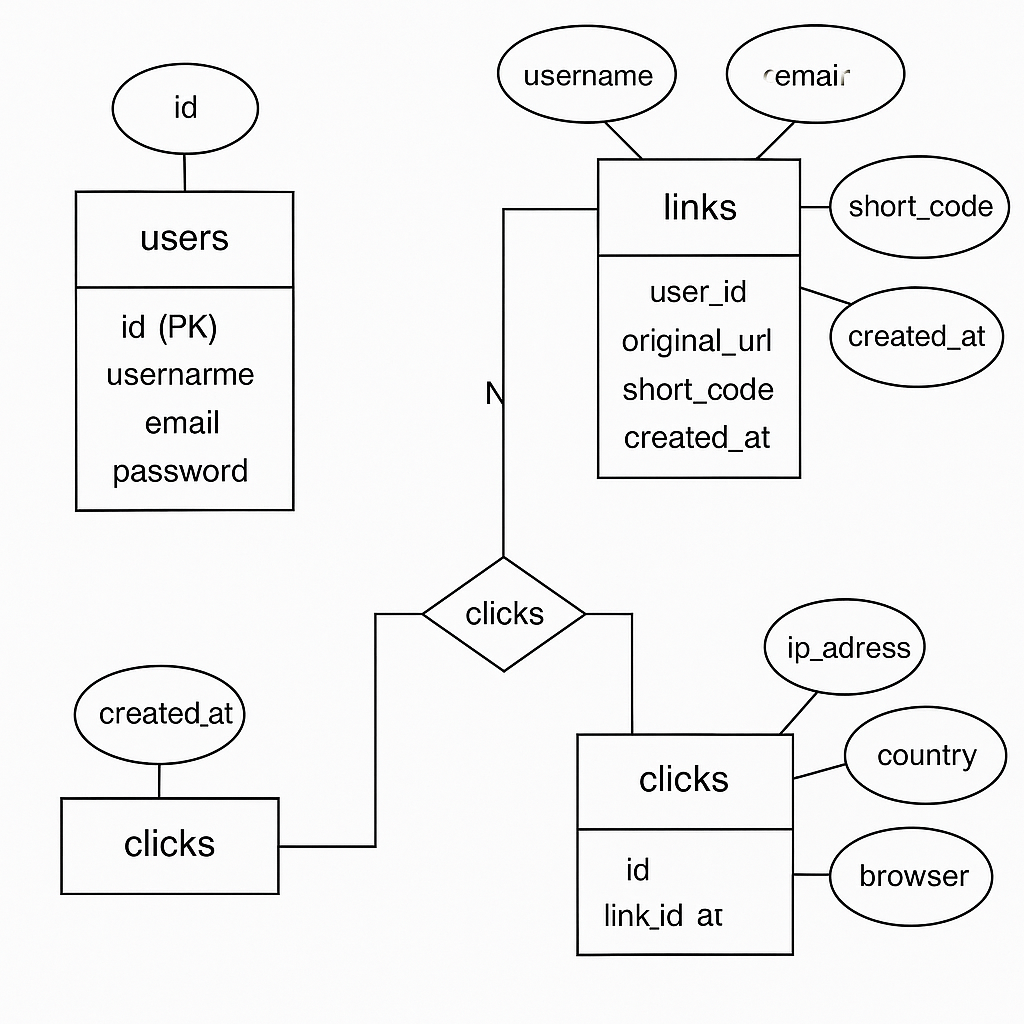
**9. Session Management Module** Maintains login sessions securely using PHP session handling. Prevents unauthorized access to restricted pages.

**10. Alerts and Form Validation Module** Provides real-time alerts like “URL shortened successfully” or “Invalid login credentials.” Also validates inputs such as empty fields or invalid URLs.

**11. Frontend UI Module** Uses CSS and JavaScript for styling and interactivity. Ensures the app is user-friendly and responsive.

**12. .htaccess Rewriting Module** Handles clean URL structures and redirects using Apache’s .htaccess, ensuring that short codes work as intended.

**ER Diagram:**



**Programming Tools:**

**1. Frontend (User Interface)**

These tools are used to design and structure the visual elements of the web application:

* **HTML (HyperText Markup Language)** Used to create the structure of the web pages like login, registration, shortening form, and dashboard.
* **CSS (Cascading Style Sheets)** Used to style the HTML elements, layout the interface, and improve the look and feel of the app (in assets/css/styles.css).
* **JavaScript (Basic)**  
   Provides interactivity in forms, such as showing alert messages and performing client-side validations (assets/js/scripts.js).

#### 2. Backend (Server-side Logic)

These tools power the main logic and functionalities behind the web pages:

* **PHP** The primary backend language used in this project to handle user authentication, URL processing, and data interaction.
* **Apache Server (.htaccess)** Used for URL rewriting and redirection of short URLs using mod\_rewrite rules (.htaccess file).

#### 3. Database (Data Storage)

This tool is responsible for storing persistent data such as user accounts, shortened URLs, and analytics:

* **MySQL** Relational database used to store user data, URL mappings, and click analytics. Tables include users, links, and clicks.

#### 4. Visual Studio Code (VS Code)

A source-code editor used to develop the project. Offers features like syntax highlighting, integrated terminal, and extension support for PHP and MySQL.

#### 5. Terminal / Command Prompt

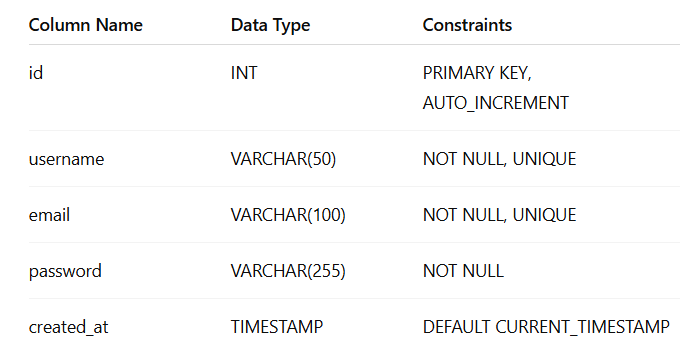
Used to start local servers (Apache/MySQL), run PHP scripts, and manage database operations (e.g., using phpMyAdmin or mysql CLI).

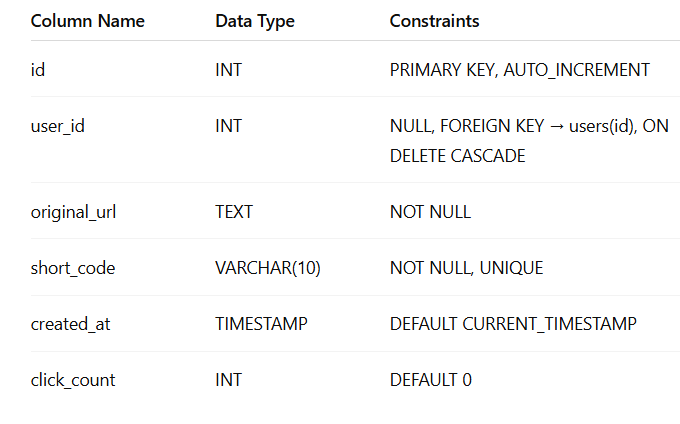
#### 6. Web Browser (e.g., Google Chrome)

Used to access and test the web application, including login, URL shortening, redirection, and analytics views.

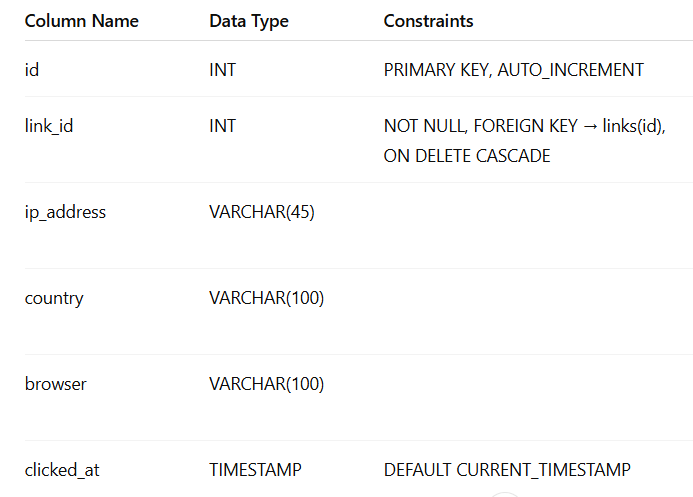
**Database Design:**

**(Give the table structure)**

1.  **User Table:**
2. **Links Table**



1. **Clicks Table**

****

**SQL Query:**

**Table: users** CREATE TABLE IF NOT EXISTS users (  
 id INT AUTO\_INCREMENT PRIMARY KEY,  
 username VARCHAR(50) NOT NULL UNIQUE,  
 email VARCHAR(100) NOT NULL UNIQUE,  
 password VARCHAR(255) NOT NULL,  
 created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP  
 );  
 **Table: links** CREATE TABLE IF NOT EXISTS links (  
 id INT AUTO\_INCREMENT PRIMARY KEY,  
 user\_id INT NULL, -- NULL for guest users  
 original\_url TEXT NOT NULL,  
 short\_code VARCHAR(10) NOT NULL UNIQUE,  
 created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,  
 click\_count INT DEFAULT 0,  
 FOREIGN KEY (user\_id) REFERENCES users(id) ON DELETE CASCADE  
 );  
 **Table: clicks** CREATE TABLE IF NOT EXISTS clicks (  
 id INT AUTO\_INCREMENT PRIMARY KEY,  
 link\_id INT NOT NULL,  
 ip\_address VARCHAR(45),  
 country VARCHAR(100),  
 browser VARCHAR(100),  
 clicked\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,  
 FOREIGN KEY (link\_id) REFERENCES links(id) ON DELETE CASCADE  
 );

**Coding:**

**index.php**

<?php

require\_once 'includes/session.php';

require\_once 'includes/functions.php';

require\_once 'config/db.php';

$error = '';

$shortened\_url = '';

if ($\_SERVER['REQUEST\_METHOD'] === 'POST') {

$original\_url = sanitizeInput($\_POST['url'] ?? '');

if (empty($original\_url)) {

$error = 'Please enter a URL to shorten';

} elseif (!filter\_var($original\_url, FILTER\_VALIDATE\_URL)) {

$error = 'Please enter a valid URL';

} else {

$user\_id = getUserId();

// Generate a unique short code

$short\_code = generateShortCode();

// Make sure the short code is unique

$stmt = $pdo->prepare("SELECT id FROM links WHERE short\_code = ?");

$stmt->execute([$short\_code]);

while ($stmt->rowCount() > 0) {

$short\_code = generateShortCode();

$stmt->execute([$short\_code]);

}

$stmt = $pdo->prepare("INSERT INTO links (user\_id, original\_url, short\_code) VALUES (?, ?, ?)");

if ($stmt->execute([$user\_id, $original\_url, $short\_code])) {

$site\_url = (isset($\_SERVER['HTTPS']) && $\_SERVER['HTTPS'] === 'on' ? "https" : "http") . "://$\_SERVER[HTTP\_HOST]";

// $shortened\_url = $site\_url . "/shorten/redirect.php?code=" . $short\_code;

$shortened\_url = $site\_url . "/UrlShortenerApp/" . $short\_code;

} else {

$error = 'An error occurred while shortening the URL. Please try again.';

}

}

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>URL Shortener</title>

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.0/css/all.min.css">

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/4.1.1/animate.min.css">

<style>

:root {

--primary: #3498db;

--primary-dark: #2980b9;

--secondary: #2c3e50;

--light: #ecf0f1;

--success: #2ecc71;

--danger: #e74c3c;

--gray: #95a5a6;

--white: #ffffff;

--shadow: 0 4px 6px rgba(0, 0, 0, 0.1);

--transition: all 0.3s ease;

}

\* {

margin: 0;

padding: 0;

box-sizing: border-box;

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

}

body {

background-color: #f5f7fa;

color: var(--secondary);

overflow-x: hidden;

}

.container {

width: 100%;

max-width: 1200px;

margin: 0 auto;

padding: 0 20px;

}

/\* Header styles \*/

header {

background-color: var(--primary);

color: var(--white);

padding: 20px 0;

box-shadow: var(--shadow);

position: sticky;

top: 0;

z-index: 100;

}

header .container {

display: flex;

justify-content: space-between;

align-items: center;

}

header h1 {

display: flex;

align-items: center;

font-size: 24px;

font-weight: 600;

}

header h1 i {

margin-right: 10px;

font-size: 28px;

}

nav {

display: flex;

gap: 15px;

}

nav a {

color: var(--white);

text-decoration: none;

padding: 8px 15px;

border-radius: 4px;

font-weight: 500;

transition: var(--transition);

display: flex;

align-items: center;

}

nav a i {

margin-right: 6px;

}

nav a:hover {

background-color: rgba(255, 255, 255, 0.15);

transform: translateY(-2px);

}

/\* Main content styles \*/

main {

padding: 60px 0;

}

.hero-section {

text-align: center;

margin-bottom: 40px;

}

.hero-section h2 {

font-size: 36px;

margin-bottom: 20px;

animation: fadeInDown 1s;

}

.hero-section p {

font-size: 18px;

color: var(--gray);

max-width: 600px;

margin: 0 auto 30px;

animation: fadeIn 1.5s;

}

/\* URL form styles \*/

.url-form {

background-color: var(--white);

border-radius: 10px;

padding: 40px;

box-shadow: var(--shadow);

margin-bottom: 60px;

animation: fadeInUp 1s;

max-width: 800px;

margin-left: auto;

margin-right: auto;

}

.url-form h2 {

margin-bottom: 30px;

text-align: center;

color: var(--secondary);

position: relative;

}

.url-form h2:after {

content: '';

position: absolute;

bottom: -10px;

left: 50%;

transform: translateX(-50%);

width: 50px;

height: 3px;

background-color: var(--primary);

border-radius: 3px;

}

.error {

background-color: #ffecee;

color: var(--danger);

padding: 12px;

border-radius: 6px;

margin-bottom: 20px;

font-size: 14px;

animation: shake 0.5s;

}

.form-group {

display: flex;

box-shadow: 0 2px 10px rgba(0, 0, 0, 0.08);

border-radius: 6px;

overflow: hidden;

}

.form-group input {

flex: 1;

padding: 16px 20px;

border: none;

font-size: 16px;

outline: none;

}

.form-group button {

background-color: var(--primary);

color: var(--white);

border: none;

padding: 0 30px;

font-size: 16px;

font-weight: 600;

cursor: pointer;

transition: var(--transition);

}

.form-group button:hover {

background-color: var(--primary-dark);

}

/\* Result section styles \*/

.result {

margin-top: 30px;

padding: 25px;

background-color: #f0f9ff;

border-radius: 8px;

border-left: 4px solid var(--primary);

animation: bounceIn 0.8s;

}

.result h3 {

color: var(--secondary);

margin-bottom: 15px;

font-size: 18px;

}

.shortened-url {

display: flex;

margin-bottom: 20px;

}

.shortened-url input {

flex: 1;

padding: 12px 15px;

border: 1px solid #ddd;

border-radius: 4px 0 0 4px;

font-size: 15px;

color: var(--primary);

background-color: var(--white);

}

.shortened-url button {

background-color: var(--success);

color: var(--white);

border: none;

padding: 0 20px;

border-radius: 0 4px 4px 0;

font-weight: 600;

cursor: pointer;

transition: var(--transition);

}

.shortened-url button:hover {

background-color: #27ae60;

}

/\* Register prompt styles \*/

.register-prompt {

background-color: #fff8e1;

padding: 20px;

border-radius: 8px;

text-align: center;

border-left: 4px solid #f1c40f;

animation: fadeIn 1s;

}

.register-prompt p {

margin-bottom: 15px;

font-size: 15px;

}

.btn {

display: inline-block;

padding: 10px 20px;

background-color: var(--primary);

color: var(--white);

text-decoration: none;

border-radius: 4px;

font-weight: 600;

transition: var(--transition);

}

.btn:hover {

background-color: var(--primary-dark);

transform: translateY(-2px);

}

/\* Features section styles \*/

.features {

padding: 40px 0;

}

.features h2 {

text-align: center;

margin-bottom: 50px;

font-size: 28px;

position: relative;

animation: fadeIn 1s;

}

.features h2:after {

content: '';

position: absolute;

bottom: -15px;

left: 50%;

transform: translateX(-50%);

width: 70px;

height: 3px;

background-color: var(--primary);

border-radius: 3px;

}

.feature-grid {

display: grid;

grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));

gap: 30px;

}

.feature {

background-color: var(--white);

border-radius: 8px;

padding: 30px;

box-shadow: var(--shadow);

transition: var(--transition);

text-align: center;

position: relative;

overflow: hidden;

}

.feature:hover {

transform: translateY(-10px);

box-shadow: 0 10px 20px rgba(0, 0, 0, 0.1);

}

.feature:before {

content: '';

position: absolute;

top: 0;

left: 0;

width: 4px;

height: 100%;

background-color: var(--primary);

transform: scaleY(0);

transition: transform 0.3s ease;

transform-origin: bottom;

}

.feature:hover:before {

transform: scaleY(1);

}

.feature i {

font-size: 40px;

color: var(--primary);

margin-bottom: 20px;

transition: var(--transition);

}

.feature:hover i {

transform: scale(1.1);

}

.feature h3 {

margin-bottom: 15px;

font-size: 20px;

}

.feature p {

color: var(--gray);

line-height: 1.6;

}

/\* Stats section \*/

.stats-section {

background-color: var(--primary);

color: var(--white);

padding: 60px 0;

margin: 60px 0;

}

.stats-container {

display: grid;

grid-template-columns: repeat(auto-fit, minmax(200px, 1fr));

gap: 30px;

text-align: center;

}

.stat-item {

padding: 30px;

}

.stat-number {

font-size: 46px;

font-weight: 700;

margin-bottom: 10px;

}

.stat-label {

font-size: 16px;

text-transform: uppercase;

letter-spacing: 1px;

}

/\* How it works sectio \*/

.how-it-works {

padding: 60px 0;

}

.how-it-works h2 {

text-align: center;

margin-bottom: 50px;

font-size: 28px;

position: relative;

}

.how-it-works h2:after {

content: '';

position: absolute;

bottom: -15px;

left: 50%;

transform: translateX(-50%);

width: 70px;

height: 3px;

background-color: var(--primary);

border-radius: 3px;

}

.steps {

display: flex;

justify-content: space-between;

max-width: 900px;

margin: 0 auto;

position: relative;

}

.steps:before {

content: '';

position: absolute;

top: 40px;

left: 60px;

right: 60px;

height: 3px;

background-color: #ddd;

z-index: 0;

}

.step {

text-align: center;

position: relative;

z-index: 1;

width: 120px;

}

.step-number {

width: 80px;

height: 80px;

background-color: var(--primary);

color: var(--white);

border-radius: 50%;

display: flex;

align-items: center;

justify-content: center;

font-size: 28px;

font-weight: 700;

margin: 0 auto 20px;

position: relative;

}

.step p {

font-size: 14px;

color: var(--secondary);

}

/\* Footer styles \*/

footer {

background-color: var(--secondary);

color: var(--light);

padding: 30px 0;

text-align: center;

}

footer p {

font-size: 14px;

}

/\* Animations \*/

@keyframes fadeIn {

from { opacity: 0; }

to { opacity: 1; }

}

@keyframes fadeInUp {

from {

opacity: 0;

transform: translateY(20px);

}

to {

opacity: 1;

transform: translateY(0);

}

}

@keyframes fadeInDown {

from {

opacity: 0;

transform: translateY(-20px);

}

to {

opacity: 1;

transform: translateY(0);

}

}

@keyframes bounceIn {

0% {

opacity: 0;

transform: scale(0.8);

}

70% {

transform: scale(1.05);

}

100% {

opacity: 1;

transform: scale(1);

}

}

@keyframes shake {

0% { transform: translateX(0); }

20% { transform: translateX(-10px); }

40% { transform: translateX(10px); }

60% { transform: translateX(-10px); }

80% { transform: translateX(10px); }

100% { transform: translateX(0); }

}

/\* Animation classes \*/

.animate-fadeIn { animation: fadeIn 1s; }

.animate-fadeInUp { animation: fadeInUp 1s; }

.animate-fadeInDown { animation: fadeInDown 1s; }

.animate-bounceIn { animation: bounceIn 0.8s; }

/\* Animation delays \*/

.delay-100 { animation-delay: 0.1s; }

.delay-200 { animation-delay: 0.2s; }

.delay-300 { animation-delay: 0.3s; }

.delay-400 { animation-delay: 0.4s; }

.delay-500 { animation-delay: 0.5s; }

/\* Responsive styles \*/

@media (max-width: 768px) {

.feature-grid {

grid-template-columns: 1fr;

}

.steps {

flex-direction: column;

align-items: center;

gap: 40px;

}

.steps:before {

left: 50%;

top: 40px;

bottom: 40px;

width: 3px;

height: auto;

transform: translateX(-50%);

}

.url-form {

padding: 25px;

}

.form-group {

flex-direction: column;

}

.form-group input {

border-bottom: 1px solid #eee;

}

.form-group button {

padding: 15px;

}

.shortened-url {

flex-direction: column;

}

.shortened-url input {

border-radius: 4px 4px 0 0;

}

.shortened-url button {

border-radius: 0 0 4px 4px;

padding: 12px;

}

}

</style>

</head>

<body>

<header>

<div class="container">

<h1><i class="fas fa-link"></i> URL Shortener</h1>

<nav>

<?php if (isLoggedIn()): ?>

<a href="dashboard/index.php"><i class="fas fa-chart-line"></i> Dashboard</a>

<a href="auth/logout.php"><i class="fas fa-sign-out-alt"></i> Logout</a>

<?php else: ?>

<a href="auth/login.php"><i class="fas fa-sign-in-alt"></i> Login</a>

<a href="auth/register.php"><i class="fas fa-user-plus"></i> Register</a>

<?php endif; ?>

</nav>

</div>

</header>

<main>

<div class="container">

<section class="hero-section">

<h2 class="animate-fadeInDown">Simplify Your Links</h2>

<p class="animate-fadeIn delay-200">Transform long, unwieldy URLs into clean, memorable, and trackable short links in seconds.</p>

</section>

<section class="url-form animate-fadeInUp delay-300">

<h2>Shorten Your URL</h2>

<?php if ($error): ?>

<div class="error"><?php echo $error; ?></div>

<?php endif; ?>

<form action="" method="post">

<div class="form-group">

<input type="url" name="url" id="url" placeholder="Enter your long URL here" required>

<button type="submit"><i class="fas fa-bolt"></i> Shorten</button>

</div>

</form>

<?php if ($shortened\_url): ?>

<div class="result">

<h3>Your Shortened URL:</h3>

<div class="shortened-url">

<input type="text" id="shortened-url" value="<?php echo $shortened\_url; ?>" readonly>

<button onclick="copyToClipboard()"><i class="fas fa-copy"></i> Copy</button>

</div>

<?php if (!isLoggedIn()): ?>

<div class="register-prompt">

<p><i class="fas fa-info-circle"></i> Create an account to track analytics and manage your shortened URLs!</p>

<a href="auth/register.php" class="btn"><i class="fas fa-user-plus"></i> Register Now</a>

</div>

<?php endif; ?>

</div>

<?php endif; ?>

</section>

<section class="features">

<h2>Why Use Our URL Shortener?</h2>

<div class="feature-grid">

<div class="feature animate-fadeInUp delay-100">

<i class="fas fa-bolt"></i>

<h3>Easy to Use</h3>

<p>Shorten your URLs with just one click, no registration required.</p>

</div>

<div class="feature animate-fadeInUp delay-200">

<i class="fas fa-chart-line"></i>

<h3>Track Your Links</h3>

<p>Create an account to access detailed analytics about your shortened URLs.</p>

</div>

<div class="feature animate-fadeInUp delay-300">

<i class="fas fa-history"></i>

<h3>Manage Your History</h3>

<p>View and delete your previously created links anytime.</p>

</div>

<div class="feature animate-fadeInUp delay-400">

<i class="fas fa-tachometer-alt"></i>

<h3>Fast Redirection</h3>

<p>Our system ensures quick redirection to your original URLs.</p>

</div>

</div>

</section>

<!-- Features Highlight Section -->

<section class="features-highlight">

<div class="container">

<div class="section-header animate-fadeIn">

<h2>Powerful Features to Supercharge Your Links</h2>

<p>Everything you need to create, manage, and analyze your shortened URLs</p>

</div>

<div class="features-grid">

<!-- Feature Card 1 -->

<div class="feature-card animate-fadeIn delay-100">

<div class="feature-icon">

<i class="fas fa-bolt"></i>

</div>

<div class="feature-content">

<h3>Instant Shortening</h3>

<p>Create short, memorable links in seconds with our lightning-fast URL shortener.</p>

</div>

</div>

<!-- Feature Card 2 -->

<div class="feature-card animate-fadeIn delay-200">

<div class="feature-icon">

<i class="fas fa-chart-line"></i>

</div>

<div class="feature-content">

<h3>Detailed Analytics</h3>

<p>Track clicks, geographic locations, devices, and more with our comprehensive dashboard.</p>

</div>

</div>

<!-- Feature Card 3 -->

<div class="feature-card animate-fadeIn delay-300">

<div class="feature-icon">

<i class="fas fa-lock"></i>

</div>

<div class="feature-content">

<h3>Secure & Reliable</h3>

<p>Enterprise-grade security and 99.9% uptime ensure your links work when you need them.</p>

</div>

</div>

<!-- Feature Card 4 -->

<div class="feature-card animate-fadeIn delay-400">

<div class="feature-icon">

<i class="fas fa-magic"></i>

</div>

<div class="feature-content">

<h3>Custom Domains</h3>

<p>Use your own branded domain for shortened links to increase trust and recognition.</p>

</div>

</div>

<!-- Feature Card 6 (now Card 5) -->

<div class="feature-card animate-fadeIn delay-500">

<div class="feature-icon">

<i class="fas fa-mobile-alt"></i>

</div>

<div class="feature-content">

<h3>Mobile Optimized</h3>

<p>Create and manage links on the go with our fully responsive mobile experience.</p>

</div>

</div>

</div>

</div>

</section>

<style>

/\* Features Highlight Section Styling \*/

.features-highlight {

padding: 80px 0;

background: #e6f7ff;

}

.section-header {

text-align: center;

margin-bottom: 50px;

}

.section-header h2 {

font-size: 2.5rem;

color: #2d3748;

margin-bottom: 15px;

font-weight: 700;

}

.section-header p {

font-size: 1.1rem;

color: #4a5568;

max-width: 700px;

margin: 0 auto;

}

.features-grid {

display: grid;

grid-template-columns: repeat(auto-fill, minmax(300px, 1fr));

gap: 30px;

margin-bottom: 50px;

}

.feature-card {

background: white;

border-radius: 10px;

padding: 30px;

box-shadow: 0 10px 20px rgba(0, 0, 0, 0.05);

transition: all 0.3s ease;

display: flex;

flex-direction: column;

height: 100%;

}

.feature-card:hover {

transform: translateY(-5px);

box-shadow: 0 15px 30px rgba(0, 0, 0, 0.1);

}

.feature-icon {

font-size: 2.5rem;

color: #3182ce;

margin-bottom: 20px;

transition: all 0.3s ease;

}

.feature-card:hover .feature-icon {

transform: scale(1.1);

}

.feature-content h3 {

font-size: 1.3rem;

color: #2d3748;

margin-bottom: 10px;

font-weight: 600;

}

.feature-content p {

color: #4a5568;

line-height: 1.6;

}

.cta-container {

display: flex;

justify-content: center;

gap: 20px;

margin-top: 20px;

}

.btn {

padding: 12px 25px;

font-size: 1rem;

font-weight: 600;

border-radius: 30px;

text-decoration: none;

transition: all 0.3s ease;

text-align: center;

}

.btn-primary {

background-color: #3182ce;

color: white;

box-shadow: 0 4px 6px rgba(49, 130, 206, 0.25);

}

.btn-primary:hover {

background-color: #2c5282;

transform: translateY(-2px);

box-shadow: 0 7px 14px rgba(49, 130, 206, 0.25);

}

.btn-secondary {

background-color: white;

color: #3182ce;

border: 2px solid #3182ce;

}

.btn-secondary:hover {

background-color: #ebf8ff;

transform: translateY(-2px);

}

/\* Animation classes \*/

.animate-fadeIn {

animation: fadeIn 0.8s ease forwards;

opacity: 0;

}

.delay-100 { animation-delay: 0.1s; }

.delay-200 { animation-delay: 0.2s; }

.delay-300 { animation-delay: 0.3s; }

.delay-400 { animation-delay: 0.4s; }

.delay-500 { animation-delay: 0.5s; }

.delay-600 { animation-delay: 0.6s; }

.delay-700 { animation-delay: 0.7s; }

@keyframes fadeIn {

from {

opacity: 0;

transform: translateY(20px);

}

to {

opacity: 1;

transform: translateY(0);

}

}

/\* Responsive adjustments \*/

@media (max-width: 768px) {

.features-grid {

grid-template-columns: 1fr;

}

.section-header h2 {

font-size: 2rem;

}

.cta-container {

flex-direction: column;

}

.btn {

width: 100%;

margin-bottom: 10px;

}

}

</style>

<section class="how-it-works">

<h2>How It Works</h2>

<div class="steps">

<div class="step animate-fadeInUp delay-100">

<div class="step-number">1</div>

<p>Paste your long URL</p>

</div>

<div class="step animate-fadeInUp delay-200">

<div class="step-number">2</div>

<p>Click "Shorten"</p>

</div>

<div class="step animate-fadeInUp delay-300">

<div class="step-number">3</div>

<p>Copy your short link</p>

</div>

<div class="step animate-fadeInUp delay-400">

<div class="step-number">4</div>

<p>Track performance</p>

</div>

</div>

</section>

</div>

</main>

<footer>

<div class="container">

<p>&copy; <?php echo date('Y'); ?> URL Shortener. All rights reserved.</p>

</div>

</footer>

<script>

// Animation for elements as they scroll into view

document.addEventListener('DOMContentLoaded', function() {

const animateOnScroll = function() {

const elements = document.querySelectorAll('.feature, .step, .stat-item');

elements.forEach(element => {

const position = element.getBoundingClientRect();

// If element is in viewport

if(position.top < window.innerHeight && position.bottom >= 0) {

if (!element.classList.contains('animated')) {

element.classList.add('animated');

element.style.opacity = '1';

element.style.transform = 'translateY(0)';

}

}

});

};

// Initial setup for animation

const elements = document.querySelectorAll('.feature, .step, .stat-item');

elements.forEach(element => {

if (!element.classList.contains('animated')) {

element.style.opacity = '0';

element.style.transform = 'translateY(20px)';

element.style.transition = 'opacity 0.5s ease, transform 0.5s ease';

}

});

// Run on load

animateOnScroll();

// Run on scroll

window.addEventListener('scroll', animateOnScroll);

// Animated counter function

function animateCounter(element, target, duration = 2000) {

let start = 0;

const increment = target > 1000 ? 1000 : 1;

const stepTime = Math.abs(Math.floor(duration / (target / increment)));

const timer = setInterval(() => {

start += increment;

element.textContent = start > target ? target : start.toLocaleString() + '+';

if (start >= target) {

clearInterval(timer);

}

}, stepTime);

}

// Initialize counters once in viewport

const statsSection = document.querySelector('.stats-section');

let countersInitialized = false;

function checkStatsVisible() {

if (!countersInitialized) {

const position = statsSection.getBoundingClientRect();

if (position.top < window.innerHeight && position.bottom >= 0) {

countersInitialized = true;

animateCounter(document.getElementById('stats-links'), 10000000);

animateCounter(document.getElementById('stats-users'), 500000);

animateCounter(document.getElementById('stats-clicks'), 50000000);

}

}

}

window.addEventListener('scroll', checkStatsVisible);

checkStatsVisible(); // Check on load

});

// Copy to clipboard function

function copyToClipboard() {

const shortenedUrl = document.getElementById('shortened-url');

shortenedUrl.select();

document.execCommand('copy');

// Change button text temporarily

const copyButton = shortenedUrl.nextElementSibling;

const originalHTML = copyButton.innerHTML;

copyButton.innerHTML = '<i class="fas fa-check"></i> Copied!';

copyButton.style.backgroundColor = '#27ae60';

setTimeout(() => {

copyButton.innerHTML = originalHTML;

copyButton.style.backgroundColor = '';

}, 2000);

}

</script>

</body>

</html>

**style.css**

/\* General \*/

body {

font-family: Arial, sans-serif;

margin: 0;

padding: 2rem;

background-color: #f8f9fa;

color: #333;

}

h1, h2 {

color: #2c3e50;

}

a {

color: #007bff;

text-decoration: none;

}

a:hover {

text-decoration: underline;

}

button {

padding: 0.5rem 1rem;

background-color: #28a745;

border: none;

color: white;

cursor: pointer;

border-radius: 4px;

transition: background-color 0.3s ease;

}

button:hover {

background-color: #218838;

}

/\* Navbar \*/

.navbar {

background-color: #2c3e50;

padding: 1rem;

}

.navbar-brand {

color: white;

font-weight: bold;

}

.navbar-nav .nav-link {

color: white;

padding: 0.5rem 1rem;

font-weight: bold;

}

.navbar-nav .nav-link:hover {

background-color: #007bff;

color: white;

}

/\* Forms \*/

form {

background: #ffffff;

padding: 1.5rem;

border-radius: 8px;

max-width: 500px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

margin: 0 auto;

}

label {

display: block;

margin-top: 1rem;

font-weight: bold;

}

input[type="url"],

input[type="text"],

input[type="email"],

input[type="password"] {

width: 100%;

padding: 0.5rem;

margin-top: 0.3rem;

border: 1px solid #ccc;

border-radius: 4px;

transition: border-color 0.3s ease;

}

input[type="url"]:focus,

input[type="text"]:focus,

input[type="email"]:focus,

input[type="password"]:focus {

border-color: #28a745;

}

form button {

width: 100%;

font-size: 1.1rem;

padding: 1rem;

}

/\* Steps Section \*/

.row {

margin-top: 3rem;

}

.row .col-md-4 {

background-color: #ffffff;

padding: 1.5rem;

border-radius: 8px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

margin-bottom: 1.5rem;

}

.row .col-md-4 h3 {

color: #2c3e50;

font-weight: bold;

}

/\* Alerts \*/

.alert {

margin-top: 2rem;

font-size: 1.1rem;

}

/\* Footer \*/

footer {

background-color: #343a40;

color: white;

font-size: 0.9rem;

padding: 1rem;

text-align: center;

}

/\* Table \*/

table {

width: 100%;

border-collapse: collapse;

margin-top: 2rem;

background: #fff;

}

table th,

table td {

border: 1px solid #ddd;

padding: 0.75rem;

text-align: left;

}

table th {

background-color: #343a40;

color: white;

}

table tr:nth-child(even) {

background-color: #f2f2f2;

}

/\* Responsive Design \*/

@media screen and (max-width: 768px) {

.container {

padding: 1rem;

}

.navbar .navbar-nav {

text-align: center;

}

.row {

display: block;

}

.row .col-md-4 {

margin-bottom: 1rem;

}

}

[**script.js**](http://script.js)

document.addEventListener('DOMContentLoaded', () => {

const chartElement = document.getElementById('clickChart');

if (chartElement) {

fetch('../dashboard/chart-data.php')

.then(response => response.json())

.then(data => {

const ctx = chartElement.getContext('2d');

new Chart(ctx, {

type: 'bar',

data: {

labels: data.labels,

datasets: [{

label: 'Clicks per Link',

data: data.clicks,

backgroundColor: 'rgba(54, 162, 235, 0.6)',

borderColor: 'rgba(54, 162, 235, 1)',

borderWidth: 1

}]

},

options: {

responsive: true,

scales: {

y: {

beginAtZero: true,

ticks: {

stepSize: 1

}

}

}

}

});

});

}

});

**login.php**

<?php

session\_start();

// Redirect logged-in users to the homepage

if (isset($\_SESSION['user\_id'])) {

header("Location: ../index.php");

exit();

}

// Handle login form submission

if ($\_SERVER['REQUEST\_METHOD'] == 'POST') {

// Include database connection

include('../config/db.php'); // Ensure the correct path to your db.php

// Sanitize user input to prevent XSS

$email = filter\_var($\_POST['email'], FILTER\_SANITIZE\_EMAIL);

$password = $\_POST['password'];

// Prepare SQL query

$query = "SELECT \* FROM users WHERE email = ?";

$stmt = $pdo->prepare($query);

$stmt->bindParam(1, $email, PDO::PARAM\_STR);

$stmt->execute();

// Check if user exists

if ($stmt->rowCount() > 0) {

$user = $stmt->fetch(PDO::FETCH\_ASSOC);

// Verify the password

if (password\_verify($password, $user['password'])) {

// Start the session and store user information

$\_SESSION['user\_id'] = $user['id'];

$\_SESSION['username'] = $user['username'];

// Redirect to the homepage

header("Location: ../index.php");

exit();

} else {

$error = "Invalid password!";

}

} else {

$error = "No user found with this email!";

}

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Login | URL Shortener</title>

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.0/css/all.min.css">

<link rel="stylesheet" href="../assets/css/auth-styles.css">

<style>

:root {

--primary-color: #3498db;

--secondary-color: #2980b9;

--accent-color: #1abc9c;

--dark-color: #2c3e50;

--light-color: #ecf0f1;

--danger-color: #e74c3c;

--success-color: #2ecc71;

}

\* {

margin: 0;

padding: 0;

box-sizing: border-box;

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

}

body {

background: linear-gradient(135deg, #3498db, #8e44ad);

height: 100vh;

display: flex;

justify-content: center;

align-items: center;

overflow: hidden;

}

.background-shapes {

position: fixed;

top: 0;

left: 0;

width: 100%;

height: 100%;

z-index: -1;

opacity: 0.4;

}

.background-shapes div {

position: absolute;

background: rgba(255, 255, 255, 0.1);

border-radius: 50%;

animation: float 10s infinite ease-in-out;

}

.background-shapes div:nth-child(1) {

width: 80px;

height: 80px;

top: 10%;

left: 10%;

animation-delay: 0s;

}

.background-shapes div:nth-child(2) {

width: 120px;

height: 120px;

top: 70%;

left: 80%;

animation-delay: 1s;

}

.background-shapes div:nth-child(3) {

width: 50px;

height: 50px;

top: 30%;

left: 90%;

animation-delay: 2s;

}

.background-shapes div:nth-child(4) {

width: 100px;

height: 100px;

top: 80%;

left: 20%;

animation-delay: 3s;

}

.background-shapes div:nth-child(5) {

width: 70px;

height: 70px;

top: 40%;

left: 40%;

animation-delay: 4s;

}

@keyframes float {

0%, 100% {

transform: translateY(0) rotate(0deg);

}

50% {

transform: translateY(-20px) rotate(10deg);

}

}

.container {

background-color: rgba(255, 255, 255, 0.9);

width: 400px;

border-radius: 12px;

box-shadow: 0 15px 35px rgba(0, 0, 0, 0.2);

padding: 40px;

text-align: center;

backdrop-filter: blur(10px);

transform: translateY(20px);

animation: fadeIn 0.8s forwards;

}

@keyframes fadeIn {

from {

opacity: 0;

transform: translateY(40px);

}

to {

opacity: 1;

transform: translateY(0);

}

}

.logo {

margin-bottom: 20px;

}

.logo i {

font-size: 3rem;

color: var(--primary-color);

animation: pulse 2s infinite;

}

@keyframes pulse {

0% {

transform: scale(1);

}

50% {

transform: scale(1.1);

}

100% {

transform: scale(1);

}

}

h1 {

color: var(--dark-color);

margin-bottom: 30px;

font-weight: 600;

position: relative;

}

h1::after {

content: '';

display: block;

width: 50px;

height: 3px;

background-color: var(--primary-color);

margin: 10px auto 0;

border-radius: 2px;

}

.form-group {

margin-bottom: 20px;

position: relative;

}

.form-control {

width: 100%;

padding: 15px 15px 15px 50px;

border: 1px solid #ddd;

border-radius: 30px;

font-size: 16px;

transition: all 0.3s ease;

outline: none;

}

.form-control:focus {

border-color: var(--primary-color);

box-shadow: 0 0 0 3px rgba(52, 152, 219, 0.2);

}

.form-group i {

position: absolute;

left: 20px;

top: 16px;

color: #aaa;

transition: all 0.3s ease;

}

.form-control:focus + i {

color: var(--primary-color);

}

.btn {

background: linear-gradient(to right, var(--primary-color), var(--secondary-color));

color: white;

border: none;

width: 100%;

padding: 15px;

border-radius: 30px;

font-size: 16px;

font-weight: 600;

cursor: pointer;

transition: all 0.3s ease;

margin-top: 10px;

box-shadow: 0 4px 10px rgba(52, 152, 219, 0.3);

}

.btn:hover {

transform: translateY(-3px);

box-shadow: 0 6px 15px rgba(52, 152, 219, 0.4);

}

.btn:active {

transform: translateY(0);

}

.error-message {

background-color: rgba(231, 76, 60, 0.1);

color: var(--danger-color);

padding: 10px;

border-radius: 5px;

margin: 20px 0;

font-size: 14px;

animation: shake 0.5s;

}

@keyframes shake {

0%, 100% { transform: translateX(0); }

10%, 30%, 50%, 70%, 90% { transform: translateX(-5px); }

20%, 40%, 60%, 80% { transform: translateX(5px); }

}

p {

margin-top: 25px;

color: #777;

font-size: 14px;

}

a {

color: var(--primary-color);

text-decoration: none;

font-weight: 600;

transition: all 0.3s ease;

}

a:hover {

color: var(--secondary-color);

text-decoration: underline;

}

.social-login {

margin-top: 25px;

display: flex;

justify-content: center;

gap: 15px;

}

.social-btn {

display: flex;

align-items: center;

justify-content: center;

width: 40px;

height: 40px;

border-radius: 50%;

background-color: #f8f9fa;

border: 1px solid #ddd;

transition: all 0.3s ease;

}

.social-btn:hover {

transform: translateY(-3px);

box-shadow: 0 5px 10px rgba(0, 0, 0, 0.1);

}

.social-btn i {

font-size: 18px;

}

.social-btn.google i {

color: #DB4437;

}

.social-btn.facebook i {

color: #4267B2;

}

.social-btn.twitter i {

color: #1DA1F2;

}

</style>

</head>

<body>

<div class="background-shapes">

<div></div>

<div></div>

<div></div>

<div></div>

<div></div>

</div>

<div class="container">

<div class="logo">

<i class="fas fa-link"></i>

</div>

<h1>Welcome Back</h1>

<!-- Login form -->

<form action="login.php" method="POST" class="login-form">

<div class="form-group">

<input type="email" name="email" required placeholder="Email" class="form-control" value="<?= isset($email) ? htmlspecialchars($email) : ''; ?>">

<i class="fas fa-envelope"></i>

</div>

<div class="form-group">

<input type="password" name="password" required placeholder="Password" class="form-control">

<i class="fas fa-lock"></i>

</div>

<button type="submit" class="btn">Sign In</button>

</form>

<!-- Display error message if any -->

<?php if (isset($error)): ?>

<div class="error-message">

<i class="fas fa-exclamation-circle"></i> <?= $error; ?>

</div>

<?php endif; ?>

<div class="social-login">

<a href="#" class="social-btn google"><i class="fab fa-google"></i></a>

<a href="#" class="social-btn facebook"><i class="fab fa-facebook-f"></i></a>

<a href="#" class="social-btn twitter"><i class="fab fa-twitter"></i></a>

</div>

<p>Don't have an account? <a href="register.php">Register here</a></p>

</div>

<script>

// Add animation when form is submitted

document.querySelector('.login-form').addEventListener('submit', function(e) {

document.querySelector('.container').style.animation = 'fadeOut 0.5s forwards';

});

// Add subtle input animations

const inputs = document.querySelectorAll('.form-control');

inputs.forEach(input => {

input.addEventListener('focus', function() {

this.parentElement.style.transform = 'translateY(-5px)';

this.parentElement.style.transition = 'transform 0.3s ease';

});

input.addEventListener('blur', function() {

this.parentElement.style.transform = 'translateY(0)';

});

});

</script>

</body>

</html>

**logout.php**

<?php

session\_start();

// Clear all session variables

$\_SESSION = [];

// Destroy the session cookie if it exists

if (ini\_get("session.use\_cookies")) {

$params = session\_get\_cookie\_params();

setcookie(session\_name(), '', time() - 42000,

$params["path"], $params["domain"],

$params["secure"], $params["httponly"]

);

}

// Finally destroy the session

session\_destroy();

// Redirect to home page

header("Location: ../index.php");

exit();

?>

**register.php**

</head>

<body>

<div class="background-shapes">

<div></div>

<div></div>

<div></div>

<div></div>

<div></div>

</div>

<div class="container">

<div class="logo">

<i class="fas fa-link"></i>

</div>

<h1>Create Account</h1>

<!-- Registration form -->

<form action="register.php" method="POST" class="register-form">

<div class="form-group">

<input type="text" name="username" required placeholder="Username" class="form-control" value="<?= isset($username) ? htmlspecialchars($username) : ''; ?>">

<i class="fas fa-user"></i>

</div>

<div class="form-group">

<input type="email" name="email" required placeholder="Email" class="form-control" value="<?= isset($email) ? htmlspecialchars($email) : ''; ?>">

<i class="fas fa-envelope"></i>

</div>

<div class="form-group">

<input type="password" name="password" required placeholder="Password" class="form-control">

<i class="fas fa-lock"></i>

</div>

<button type="submit" class="btn">Create Account</button>

</form>

<!-- Display error message if any -->

<?php if (isset($error)): ?>

<div class="error-message">

<i class="fas fa-exclamation-circle"></i> <?= $error; ?>

</div>

<?php endif; ?>

<div class="social-login">

<a href="#" class="social-btn google"><i class="fab fa-google"></i></a>

<a href="#" class="social-btn facebook"><i class="fab fa-facebook-f"></i></a>

<a href="#" class="social-btn twitter"><i class="fab fa-twitter"></i></a>

</div>

<p>Already have an account? <a href="login.php">Login here</a></p>

</div>

<script>

// Add animation when form is submitted

document.querySelector('.register-form').addEventListener('submit', function(e) {

document.querySelector('.container').style.animation = 'fadeOut 0.5s forwards';

});

// Add subtle input animations

const inputs = document.querySelectorAll('.form-control');

inputs.forEach(input => {

input.addEventListener('focus', function() {

this.parentElement.style.transform = 'translateY(-5px)';

this.parentElement.style.transition = 'transform 0.3s ease';

});

input.addEventListener('blur', function() {

this.parentElement.style.transform = 'translateY(0)';

});

});

</script>

</body>

</html><?php

session\_start();

if (isset($\_SESSION['user\_id'])) {

header("Location: ../index.php");

exit();

}

include('../config/db.php'); // Include database connection

if ($\_SERVER['REQUEST\_METHOD'] == 'POST') {

$username = $\_POST['username'];

$email = $\_POST['email'];

$password = password\_hash($\_POST['password'], PASSWORD\_DEFAULT);

// Check if the username already exists in the database

$checkQuery = "SELECT \* FROM users WHERE username = :username";

$stmt = $pdo->prepare($checkQuery);

$stmt->bindValue(':username', $username, PDO::PARAM\_STR);

$stmt->execute();

// If username exists, show error

if ($stmt->rowCount() > 0) {

$error = "Username already taken, please choose another one.";

} else {

// If username is available, insert the user

$query = "INSERT INTO users (username, email, password) VALUES (:username, :email, :password)";

$stmt = $pdo->prepare($query);

$stmt->bindValue(':username', $username, PDO::PARAM\_STR);

$stmt->bindValue(':email', $email, PDO::PARAM\_STR);

$stmt->bindValue(':password', $password, PDO::PARAM\_STR);

if ($stmt->execute()) {

$\_SESSION['user\_id'] = $pdo->lastInsertId(); // Get the last inserted ID

$\_SESSION['username'] = $username;

header("Location: ../index.php");

exit();

} else {

$error = "Registration failed!";

}

}

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Register | URL Shortener</title>

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.0/css/all.min.css">

<style>

:root {

--primary-color: #3498db;

--secondary-color: #2980b9;

--accent-color: #1abc9c;

--dark-color: #2c3e50;

--light-color: #ecf0f1;

--danger-color: #e74c3c;

--success-color: #2ecc71;

}

\* {

margin: 0;

padding: 0;

box-sizing: border-box;

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

}

body {

background: linear-gradient(135deg, #3498db, #8e44ad);

height: 100vh;

display: flex;

justify-content: center;

align-items: center;

overflow: hidden;

}

.background-shapes {

position: fixed;

top: 0;

left: 0;

width: 100%;

height: 100%;

z-index: -1;

opacity: 0.4;

}

.background-shapes div {

position: absolute;

background: rgba(255, 255, 255, 0.1);

border-radius: 50%;

animation: float 10s infinite ease-in-out;

}

.background-shapes div:nth-child(1) {

width: 80px;

height: 80px;

top: 10%;

left: 10%;

animation-delay: 0s;

}

.background-shapes div:nth-child(2) {

width: 120px;

height: 120px;

top: 70%;

left: 80%;

animation-delay: 1s;

}

.background-shapes div:nth-child(3) {

width: 50px;

height: 50px;

top: 30%;

left: 90%;

animation-delay: 2s;

}

.background-shapes div:nth-child(4) {

width: 100px;

height: 100px;

top: 80%;

left: 20%;

animation-delay: 3s;

}

.background-shapes div:nth-child(5) {

width: 70px;

height: 70px;

top: 40%;

left: 40%;

animation-delay: 4s;

}

@keyframes float {

0%, 100% {

transform: translateY(0) rotate(0deg);

}

50% {

transform: translateY(-20px) rotate(10deg);

}

}

.container {

background-color: rgba(255, 255, 255, 0.9);

width: 450px;

border-radius: 12px;

box-shadow: 0 15px 35px rgba(0, 0, 0, 0.2);

padding: 40px;

text-align: center;

backdrop-filter: blur(10px);

transform: translateY(20px);

animation: fadeIn 0.8s forwards;

}

@keyframes fadeIn {

from {

opacity: 0;

transform: translateY(40px);

}

to {

opacity: 1;

transform: translateY(0);

}

}

.logo {

margin-bottom: 20px;

}

.logo i {

font-size: 3rem;

color: var(--primary-color);

animation: pulse 2s infinite;

}

@keyframes pulse {

0% {

transform: scale(1);

}

50% {

transform: scale(1.1);

}

100% {

transform: scale(1);

}

}

h1 {

color: var(--dark-color);

margin-bottom: 30px;

font-weight: 600;

position: relative;

}

h1::after {

content: '';

display: block;

width: 50px;

height: 3px;

background-color: var(--primary-color);

margin: 10px auto 0;

border-radius: 2px;

}

.form-group {

margin-bottom: 20px;

position: relative;

}

.form-control {

width: 100%;

padding: 15px 15px 15px 50px;

border: 1px solid #ddd;

border-radius: 30px;

font-size: 16px;

transition: all 0.3s ease;

outline: none;

}

.form-control:focus {

border-color: var(--primary-color);

box-shadow: 0 0 0 3px rgba(52, 152, 219, 0.2);

}

.form-group i {

position: absolute;

left: 20px;

top: 16px;

color: #aaa;

transition: all 0.3s ease;

}

.form-control:focus + i {

color: var(--primary-color);

}

.btn {

background: linear-gradient(to right, var(--primary-color), var(--secondary-color));

color: white;

border: none;

width: 100%;

padding: 15px;

border-radius: 30px;

font-size: 16px;

font-weight: 600;

cursor: pointer;

transition: all 0.3s ease;

margin-top: 10px;

box-shadow: 0 4px 10px rgba(52, 152, 219, 0.3);

}

.btn:hover {

transform: translateY(-3px);

box-shadow: 0 6px 15px rgba(52, 152, 219, 0.4);

}

.btn:active {

transform: translateY(0);

}

.error-message {

background-color: rgba(231, 76, 60, 0.1);

color: var(--danger-color);

padding: 10px;

border-radius: 5px;

margin: 20px 0;

font-size: 14px;

animation: shake 0.5s;

}

@keyframes shake {

0%, 100% { transform: translateX(0); }

10%, 30%, 50%, 70%, 90% { transform: translateX(-5px); }

20%, 40%, 60%, 80% { transform: translateX(5px); }

}

p {

margin-top: 25px;

color: #777;

font-size: 14px;

}

a {

color: var(--primary-color);

text-decoration: none;

font-weight: 600;

transition: all 0.3s ease;

}

a:hover {

color: var(--secondary-color);

text-decoration: underline;

}

.social-login {

margin-top: 25px;

display: flex;

justify-content: center;

gap: 15px;

}

.social-btn {

display: flex;

align-items: center;

justify-content: center;

width: 40px;

height: 40px;

border-radius: 50%;

background-color: #f8f9fa;

border: 1px solid #ddd;

transition: all 0.3s ease;

}

.social-btn:hover {

transform: translateY(-3px);

box-shadow: 0 5px 10px rgba(0, 0, 0, 0.1);

}

.social-btn i {

font-size: 18px;

}

.social-btn.google i {

color: #DB4437;

}

.social-btn.facebook i {

color: #4267B2;

}

.social-btn.twitter i {

color: #1DA1F2;

}

</style>

**db.php**

<?php

$servername = "localhost"; // or your database server

$username = "root"; // your database username

$password = ""; // your database password

$dbname = "url\_shortener"; // your database name

try {

// Use $servername instead of $host in the PDO connection string

$pdo = new PDO("mysql:host=$servername;dbname=$dbname;charset=utf8mb4", $username, $password);

$pdo->setAttribute(PDO::ATTR\_ERRMODE, PDO::ERRMODE\_EXCEPTION);

} catch (PDOException $e) {

die("Database connection failed: " . $e->getMessage());

}

?>

**functions.php**

<?php

function generateShortCode($length = 6) {

return substr(str\_shuffle("0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ"), 0, $length);

}

function sanitizeInput($input) {

return htmlspecialchars(trim($input), ENT\_QUOTES, 'UTF-8');

}

?>

**session.php**

<?php

session\_start();

function isLoggedIn() {

return isset($\_SESSION['user\_id']);

}

function getUserId() {

return $\_SESSION['user\_id'] ?? null;

}

?>

**shorten/index.php**

<?php

session\_start();

$isLoggedIn = isset($\_SESSION['user\_id']);

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Shorten URL</title>

<link rel="stylesheet" href="../assets/css/styles.css">

</head>

<body>

<h1>Shorten Your URL</h1>

<?php if ($isLoggedIn): ?>

<p>Welcome, <?= htmlspecialchars($\_SESSION['username']); ?>! <a href="../dashboard/index.php">Dashboard</a> | <a href="../auth/logout.php">Logout</a></p>

<?php else: ?>

<p><a href="../auth/login.php">Login</a> or <a href="../auth/register.php">Register</a> for tracking your links.</p>

<?php endif; ?>

<form action="shorten.php" method="post">

<label for="original\_url">Enter URL:</label>

<input type="url" name="original\_url" id="original\_url" required>

<button type="submit">Shorten</button>

</form>

<?php if (isset($\_GET['short'])): ?>

<p>Your shortened URL:

<a href="https://<?= $\_SERVER['HTTP\_HOST'] . '/UrlShortenerApp/' . htmlspecialchars($\_GET['short']); ?>" target="\_blank">

https://<?= $\_SERVER['HTTP\_HOST'] . '/UrlShortenerApp/' . htmlspecialchars($\_GET['short']); ?>

</a>

</p>

<?php endif; ?>

</body>

</html>

**redirect.php**

<?php

file\_put\_contents('debug.log', "Code received: " . $\_GET['code'] . "\n", FILE\_APPEND);

// Adjust paths based on how the script is accessed

$base\_path = dirname(dirname(\_\_FILE\_\_));

require\_once $base\_path . '/config/db.php';

require\_once $base\_path . '/includes/functions.php';

// Get short code - try both methods (clean URL or GET parameter)

$code = '';

if (isset($\_GET['code'])) {

// If accessed via redirect.php?code=ABC

$code = sanitizeInput($\_GET['code']);

} else {

// If accessed via clean URL (domain.com/ABC)

$uri = $\_SERVER['REQUEST\_URI'];

$parts = explode('/', trim($uri, '/'));

$code = sanitizeInput(end($parts));

}

// If no code found, redirect to home

if (empty($code)) {

header('Location: ../index.php');

exit;

}

try {

// Retrieve original URL for the given short code

$stmt = $pdo->prepare("SELECT original\_url, id FROM links WHERE short\_code = ?");

$stmt->execute([$code]);

if ($stmt->rowCount() > 0) {

$link = $stmt->fetch(PDO::FETCH\_ASSOC);

$original\_url = $link['original\_url'];

$link\_id = $link['id'];

// Update click count in the links table

$update\_stmt = $pdo->prepare("UPDATE links SET click\_count = click\_count + 1 WHERE short\_code = ?");

$update\_stmt->execute([$code]);

// Insert into clicks table (tracking IP, country, browser)

$ip\_address = $\_SERVER['REMOTE\_ADDR']; // Get the IP address of the visitor

$country = 'India'; // Set a default value or use an API for geolocation

$browser = $\_SERVER['HTTP\_USER\_AGENT']; // Get the user's browser info

$insert\_click\_stmt = $pdo->prepare("INSERT INTO clicks (link\_id, ip\_address, country, browser) VALUES (?, ?, ?, ?)");

$insert\_click\_stmt->execute([$link\_id, $ip\_address, $country, $browser]);

// Make sure URL has proper protocol

if (!preg\_match("~^(?:f|ht)tps?://~i", $original\_url)) {

$original\_url = "http://" . $original\_url;

}

// Redirect to the original URL

header("Location: $original\_url");

exit;

} else {

echo "<h1>URL Not Found</h1>";

echo "<p>The shortened URL you requested could not be found.</p>";

echo "<p><a href='../index.php'>Return to homepage</a></p>";

}

} catch (PDOException $e) {

echo "<h1>System Error</h1>";

echo "<p>We're experiencing technical difficulties. Please try again later.</p>";

error\_log("Redirect Error: " . $e->getMessage());

}

?>

**shorten.php**

<?php

session\_start();

include('../config/db.php');

if ($\_SERVER['REQUEST\_METHOD'] === 'POST') {

// Make sure original\_url is set

if (!isset($\_POST['original\_url'])) {

die("No URL provided or invalid request.");

}

$original\_url = trim($\_POST['original\_url']);

if (!filter\_var($original\_url, FILTER\_VALIDATE\_URL)) {

die("Invalid URL");

}

// Generate unique short code

$short\_code = substr(md5(uniqid(rand(), true)), 0, 6);

// Check for logged-in user

$user\_id = isset($\_SESSION['user\_id']) ? $\_SESSION['user\_id'] : null;

// Save to database using PDO

$stmt = $pdo->prepare("INSERT INTO links (user\_id, original\_url, short\_code) VALUES (:user\_id, :original\_url, :short\_code)");

$stmt->execute([

':user\_id' => $user\_id,

':original\_url' => $original\_url,

':short\_code' => $short\_code

]);

// Redirect back to index page with short code

header("Location: ../index.php?short=$short\_code");

exit();

} else {

header("Location: ../index.php");

exit();

}

**dashboard/index.php**

<?php

if (isset($\_SESSION['user\_id'])) {

$user\_id = $\_SESSION['user\_id'];

} else {

// Handle the case when not logged in

// Redirect to login page or treat as guest

$user\_id = null;

}

// Include session management

include('../includes/session.php');

// Redirect if not logged in

if (!isLoggedIn()) {

header('Location: ../auth/login.php');

exit();

}

// Include database connection

include('../config/db.php');

// Get user information

$userId = getUserId();

$stmt = $pdo->prepare("SELECT username FROM users WHERE id = ?");

$stmt->execute([$userId]);

$user = $stmt->fetch(PDO::FETCH\_ASSOC);

// Get user's links with click counts

$stmt = $pdo->prepare("

SELECT links.\*,

(SELECT COUNT(\*) FROM clicks WHERE clicks.link\_id = links.id) as click\_count

FROM links

WHERE user\_id = ?

ORDER BY created\_at DESC

");

$stmt->execute([$userId]);

$links = $stmt->fetchAll(PDO::FETCH\_ASSOC);

// Calculate total clicks for all links

$totalClicks = 0;

foreach ($links as $link) {

$totalClicks += $link['click\_count'];

}

// Calculate total links

$totalLinks = count($links);

// Get recent clicks (last 10)

$stmt = $pdo->prepare("

SELECT c.\*, l.short\_code, l.original\_url

FROM clicks c

JOIN links l ON c.link\_id = l.id

WHERE l.user\_id = ?

ORDER BY c.clicked\_at DESC

LIMIT 10

");

$stmt->execute([$userId]);

$recentClicks = $stmt->fetchAll(PDO::FETCH\_ASSOC);

$stmt = $pdo->prepare("

SELECT DATE(c.clicked\_at) AS click\_date, COUNT(\*) AS click\_count

FROM clicks c

JOIN links l ON c.link\_id = l.id

WHERE l.user\_id = ?

GROUP BY DATE(c.clicked\_at)

ORDER BY click\_date ASC");

$stmt->execute([$userId]);

$clicksOverTime = $stmt->fetchAll(PDO::FETCH\_ASSOC);

$clicksOverTimeJson = json\_encode($clicksOverTime);// for chronological order

// Fetch top links based on click count for Top Links chart

$stmt = $pdo->prepare("

SELECT l.short\_code, l.original\_url, COUNT(c.id) AS click\_count

FROM links l

LEFT JOIN clicks c ON l.id = c.link\_id

WHERE l.user\_id = ?

GROUP BY l.id

ORDER BY click\_count DESC

LIMIT 5

");

$stmt->execute([$userId]);

$topLinks = $stmt->fetchAll(PDO::FETCH\_ASSOC);

// Pass the data to JavaScript

$topLinksJson = json\_encode($topLinks);

?>

<script>

// Data for Clicks Over Time

var clicksOverTimeData = <?php echo $clicksOverTimeJson; ?>;

// Data for Top Links

var topLinksData = <?php echo $topLinksJson; ?>;

</script>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Dashboard | URL Shortener</title>

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.0/css/all.min.css">

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/Chart.js/2.9.4/Chart.min.css">

<script src="https://cdn.jsdelivr.net/npm/chart.js"></script>

<style>

:root {

--primary-color: #3498db;

--secondary-color: #2980b9;

--accent-color: #1abc9c;

--dark-color: #2c3e50;

--light-color: #ecf0f1;

--danger-color: #e74c3c;

--success-color: #2ecc71;

--warning-color: #f39c12;

--info-color: #3498db;

}

\* {

margin: 0;

padding: 0;

box-sizing: border-box;

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

}

body {

background-color: #f5f7fa;

color: #333;

line-height: 1.6;

}

.container {

width: 100%;

max-width: 1200px;

margin: 0 auto;

padding: 0 15px;

}

.navbar {

background: linear-gradient(135deg, var(--primary-color), var(--secondary-color));

color: white;

padding: 1rem 0;

box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);

}

.navbar .container {

display: flex;

justify-content: space-between;

align-items: center;

}

.logo {

display: flex;

align-items: center;

font-size: 1.5rem;

font-weight: 700;

}

.logo i {

margin-right: 10px;

}

.nav-links {

display: flex;

list-style: none;

}

.nav-links li {

margin-left: 20px;

}

.nav-links a {

color: white;

text-decoration: none;

padding: 5px 10px;

border-radius: 5px;

transition: background-color 0.3s;

}

.nav-links a:hover {

background-color: rgba(255, 255, 255, 0.2);

}

.dashboard {

padding: 2rem 0;

}

.dashboard-header {

margin-bottom: 2rem;

}

.dashboard-header h1 {

color: var(--dark-color);

margin-bottom: 0.5rem;

}

.stats-grid {

display: grid;

grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));

gap: 20px;

margin-bottom: 2rem;

}

.stat-card {

background-color: white;

border-radius: 8px;

padding: 1.5rem;

box-shadow: 0 4px 6px rgba(0, 0, 0, 0.05);

text-align: center;

transition: transform 0.3s, box-shadow 0.3s;

}

.stat-card:hover {

transform: translateY(-5px);

box-shadow: 0 8px 15px rgba(0, 0, 0, 0.1);

}

.stat-card i {

font-size: 2.5rem;

margin-bottom: 1rem;

color: var(--primary-color);

}

.stat-card h3 {

font-size: 1.8rem;

margin-bottom: 0.5rem;

color: var(--dark-color);

}

.stat-card p {

color: #777;

font-size: 0.9rem;

}

.chart-container {

background-color: white;

border-radius: 8px;

padding: 1.5rem;

box-shadow: 0 4px 6px rgba(0, 0, 0, 0.05);

margin-bottom: 2rem;

}

.chart-header {

display: flex;

justify-content: space-between;

align-items: center;

margin-bottom: 1rem;

}

.chart-title {

color: var(--dark-color);

font-size: 1.2rem;

font-weight: 600;

}

.chart-period {

display: flex;

align-items: center;

}

.chart-period button {

background: none;

border: none;

color: #777;

cursor: pointer;

font-size: 0.9rem;

padding: 5px 10px;

border-radius: 4px;

transition: background-color 0.3s, color 0.3s;

}

.chart-period button.active {

background-color: var(--primary-color);

color: white;

}

.chart-period button:hover:not(.active) {

background-color: #f1f1f1;

}

.charts-row {

display: grid;

grid-template-columns: repeat(auto-fit, minmax(500px, 1fr));

gap: 20px;

margin-bottom: 2rem;

}

.table-container {

background-color: white;

border-radius: 8px;

padding: 1.5rem;

box-shadow: 0 4px 6px rgba(0, 0, 0, 0.05);

margin-bottom: 2rem;

overflow-x: auto;

}

.table-header {

display: flex;

justify-content: space-between;

align-items: center;

margin-bottom: 1rem;

}

.table-title {

color: var(--dark-color);

font-size: 1.2rem;

font-weight: 600;

}

.search-box {

display: flex;

align-items: center;

background-color: #f1f1f1;

border-radius: 20px;

padding: 5px 15px;

}

.search-box input {

border: none;

background: none;

outline: none;

padding: 5px;

width: 200px;

}

.search-box i {

color: #777;

}

table {

width: 100%;

border-collapse: collapse;

}

th, td {

padding: 12px 15px;

text-align: left;

border-bottom: 1px solid #eee;

}

th {

background-color: #f9f9f9;

font-weight: 600;

color: #555;

}

tr:hover {

background-color: #f5f5f5;

}

.links-table .original-url {

max-width: 300px;

overflow: hidden;

text-overflow: ellipsis;

white-space: nowrap;

}

.links-table .short-url {

color: var(--primary-color);

font-weight: 500;

}

.links-table .actions {

display: flex;

gap: 10px;

}

.links-table .actions a {

color: #777;

font-size: 1.1rem;

transition: color 0.3s;

}

.links-table .actions a:hover {

color: var(--primary-color);

}

.links-table .actions a.delete {

color: var(--danger-color);

}

.pagination {

display: flex;

justify-content: center;

list-style: none;

margin-top: 1rem;

}

.pagination li {

margin: 0 5px;

}

.pagination a {

display: flex;

align-items: center;

justify-content: center;

width: 35px;

height: 35px;

background-color: white;

border-radius: 50%;

color: #555;

text-decoration: none;

transition: background-color 0.3s, color 0.3s;

box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);

}

.pagination a:hover, .pagination a.active {

background-color: var(--primary-color);

color: white;

}

.btn {

display: inline-block;

background-color: var(--primary-color);

color: white;

border: none;

padding: 8px 16px;

border-radius: 4px;

cursor: pointer;

font-size: 0.9rem;

font-weight: 500;

text-decoration: none;

transition: background-color 0.3s, transform 0.3s;

}

.btn:hover {

background-color: var(--secondary-color);

transform: translateY(-2px);

}

.btn-outline {

background-color: transparent;

border: 1px solid var(--primary-color);

color: var(--primary-color);

}

.btn-outline:hover {

background-color: var(--primary-color);

color: white;

}

.btn-danger {

background-color: var(--danger-color);

}

.btn-danger:hover {

background-color: #c0392b;

}

.empty-state {

text-align: center;

padding: 3rem 0;

}

.empty-state i {

font-size: 5rem;

color: #ddd;

margin-bottom: 1rem;

}

.empty-state h3 {

font-size: 1.5rem;

color: #777;

margin-bottom: 1rem;

}

.empty-state p {

color: #999;

margin-bottom: 1.5rem;

}

.tooltip {

position: relative;

display: inline-block;

}

.tooltip .tooltiptext {

visibility: hidden;

width: 200px;

background-color: #333;

color: #fff;

text-align: center;

border-radius: 6px;

padding: 5px;

position: absolute;

z-index: 1;

bottom: 125%;

left: 50%;

transform: translateX(-50%);

opacity: 0;

transition: opacity 0.3s;

}

.tooltip:hover .tooltiptext {

visibility: visible;

opacity: 1;

}

@media (max-width: 768px) {

.charts-row {

grid-template-columns: 1fr;

}

.table-header {

flex-direction: column;

align-items: flex-start;

}

.search-box {

margin-top: 10px;

width: 100%;

}

.search-box input {

width: 100%;

}

}

</style>

</head>

<body>

<nav class="navbar">

<div class="container">

<div class="logo">

<i class="fas fa-link"></i>

<span>URL Shortener</span>

</div>

<ul class="nav-links">

<li><a href="../index.php"><i class="fas fa-home"></i> Home</a></li>

<li><a href="index.php"><i class="fas fa-chart-bar"></i> Dashboard</a></li>

<li><a href="../auth/logout.php"><i class="fas fa-sign-out-alt"></i> Logout</a></li>

</ul>

</div>

</nav>

<div class="dashboard">

<div class="container">

<div class="dashboard-header">

<h1>Welcome, <?= htmlspecialchars($user['username']) ?></h1>

<p>Here's an overview of your shortened links and their performance.</p>

</div>

<div class="stats-grid">

<div class="stat-card">

<i class="fas fa-link"></i>

<h3><?= $totalLinks ?></h3>

<p>Total Links</p>

</div>

<div class="stat-card">

<i class="fas fa-mouse-pointer"></i>

<h3><?= $totalClicks ?></h3>

<p>Total Clicks</p>

</div>

<div class="stat-card">

<i class="fas fa-chart-line"></i>

<h3><?= $totalLinks > 0 ? round($totalClicks / $totalLinks, 1) : 0 ?></h3>

<p>Average Clicks per Link</p>

</div>

</div>

<div class="charts-row">

<div class="chart-container">

<div class="chart-header">

<div class="chart-title">Clicks over time</div>

<div class="chart-period">

<button class="active" data-period="week">Week</button>

<button data-period="month">Month</button>

<button data-period="year">Year</button>

</div>

</div>

<canvas id="clicksChart"></canvas>

</div>

<div class="chart-container">

<div class="chart-header">

<div class="chart-title">Top Links</div>

</div>

<canvas id="topLinksChart"></canvas>

</div>

</div>

<div class="table-container">

<div class="table-header">

<div class="table-title">Your Links</div>

<div class="search-box">

<i class="fas fa-search"></i>

<input type="text" id="linkSearch" placeholder="Search links...">

</div>

</div>

<?php if (count($links) > 0): ?>

<div class="links-table">

<table>

<thead>

<tr>

<th>Short URL</th>

<th>Original URL</th>

<th>Created</th>

<th>Clicks</th>

<th>Actions</th>

</tr>

</thead>

<tbody>

<?php foreach ($links as $link): ?>

<tr>

<td class="short-url">

<a href="../shorten/redirect.php?code=<?= $link['short\_code'] ?>" target="\_blank">

<?= $\_SERVER['HTTP\_HOST'] ?>/<?= $link['short\_code'] ?>

</a>

</td>

<td class="original-url">

<div class="tooltip">

<?= htmlspecialchars(substr($link['original\_url'], 0, 50)) ?>

<?= strlen($link['original\_url']) > 50 ? '...' : '' ?>

<span class="tooltiptext"><?= htmlspecialchars($link['original\_url']) ?></span>

</div>

</td>

<td><?= date('M j, Y', strtotime($link['created\_at'])) ?></td>

<td><?= $link['click\_count'] ?></td>

<td class="actions">

<a href="analytics.php?link\_id=<?= $link['id'] ?>" title="Analytics"><i class="fas fa-chart-bar"></i></a>

<a href="#" class="copy-link" data-url="<?= $\_SERVER['HTTP\_HOST'] ?>/<?= $link['short\_code'] ?>" title="Copy"><i class="fas fa-copy"></i></a>

<a href="delete.php?id=<?= $link['id'] ?>" class="delete" title="Delete" onclick="return confirm('Are you sure you want to delete this link?')"><i class="fas fa-trash-alt"></i></a>

</td>

</tr>

<?php endforeach; ?>

</tbody>

</table>

</div>

<?php else: ?>

<div class="empty-state">

<i class="fas fa-link-slash"></i>

<h3>No links found</h3>

<p>You haven't created any shortened links yet.</p>

<a href="../index.php" class="btn">Create your first link</a>

</div>

<?php endif; ?>

</div>

<?php if (count($recentClicks) > 0): ?>

<div class="table-container">

<div class="table-header">

<div class="table-title">Recent Clicks</div>

</div>

<table>

<thead>

<tr>

<th>Short URL</th>

<th>Location</th>

<th>Browser</th>

<th>Clicked at</th>

</tr>

</thead>

<tbody>

<?php foreach ($recentClicks as $click): ?>

<tr>

<td class="short-url"><?= $click['short\_code'] ?></td>

<td><?= $click['country'] ? $click['country'] : 'India' ?></td>

<td><?= $click['browser'] ? $click['browser'] : 'Unknown' ?></td>

<td><?= date('M j, Y H:i', strtotime($click['clicked\_at'])) ?></td>

</tr>

<?php endforeach; ?>

</tbody>

</table>

</div>

<?php endif; ?>

</div>

</div>

<script src="https://cdnjs.cloudflare.com/ajax/libs/Chart.js/2.9.4/Chart.min.js"></script>

<script>

document.addEventListener('DOMContentLoaded', function () {

// Fetch Clicks Over Time Data

fetch('get\_clicks\_data.php')

.then(response => response.json())

.then(data => {

const labels = data.map(row => row.click\_date).reverse();

const counts = data.map(row => row.click\_count).reverse();

const clicksCtx = document.getElementById('clicksChart').getContext('2d');

const clicksChart = new Chart(clicksCtx, {

type: 'line',

data: {

labels: labels,

datasets: [{

label: 'Clicks',

data: counts,

backgroundColor: 'rgba(52, 152, 219, 0.2)',

borderColor: 'rgba(52, 152, 219, 1)',

borderWidth: 2,

pointBackgroundColor: 'rgba(52, 152, 219, 1)',

pointBorderColor: '#fff',

pointHoverBackgroundColor: '#fff',

pointHoverBorderColor: 'rgba(52, 152, 219, 1)',

tension: 0.4

}]

},

options: {

responsive: true,

maintainAspectRatio: false,

scales: {

yAxes: [{

ticks: {

beginAtZero: true,

precision: 0

}

}]

}

}

});

// Chart period buttons (static adjustment)

document.querySelectorAll('.chart-period button').forEach(button => {

button.addEventListener('click', function () {

document.querySelector('.chart-period button.active').classList.remove('active');

this.classList.add('active');

// You can add filtering here later based on period (week/month/year)

});

});

});

// Fetch Top 5 Links Data

fetch('get\_top\_links.php')

.then(response => response.json())

.then(data => {

const labels = data.map(row => row.short\_code);

const counts = data.map(row => row.click\_count);

const topLinksCtx = document.getElementById('topLinksChart').getContext('2d');

const topLinksChart = new Chart(topLinksCtx, {

type: 'bar',

data: {

labels: labels,

datasets: [{

label: 'Clicks',

data: counts,

backgroundColor: [

'rgba(52, 152, 219, 0.7)',

'rgba(26, 188, 156, 0.7)',

'rgba(155, 89, 182, 0.7)',

'rgba(241, 196, 15, 0.7)',

'rgba(231, 76, 60, 0.7)'

],

borderColor: [

'rgba(52, 152, 219, 1)',

'rgba(26, 188, 156, 1)',

'rgba(155, 89, 182, 1)',

'rgba(241, 196, 15, 1)',

'rgba(231, 76, 60, 1)'

],

borderWidth: 1

}]

},

options: {

responsive: true,

maintainAspectRatio: false,

scales: {

yAxes: [{

ticks: {

beginAtZero: true,

precision: 0

}

}]

}

}

});

});

// Link search functionality

document.getElementById('linkSearch').addEventListener('input', function(e) {

const searchTerm = e.target.value.toLowerCase();

const rows = document.querySelectorAll('.links-table tbody tr');

rows.forEach(row => {

const originalUrl = row.querySelector('.original-url').textContent.toLowerCase();

const shortUrl = row.querySelector('.short-url').textContent.toLowerCase();

if (originalUrl.includes(searchTerm) || shortUrl.includes(searchTerm)) {

row.style.display = '';

} else {

row.style.display = 'none';

}

});

});

// Copy link functionality

document.querySelectorAll('.copy-link').forEach(link => {

link.addEventListener('click', function(e) {

e.preventDefault();

const url = this.getAttribute('data-url');

navigator.clipboard.writeText(url).then(() => {

alert('Link copied to clipboard!');

});

});

});

});

</script>

<script>

// Fetch data from PHP

var clicksOverTimeData = <?php echo $clicksOverTimeJson; ?>;

var topLinksData = <?php echo $topLinksJson; ?>;

// 1. Collect all unique dates and organize data by short\_code

var allDatesSet = new Set();

var dataByShortCode = {};

clicksOverTimeData.forEach(function(item) {

var date = item.click\_date;

var code = item.short\_code;

var count = parseInt(item.click\_count);

allDatesSet.add(date);

if (!dataByShortCode[code]) {

dataByShortCode[code] = {};

}

dataByShortCode[code][date] = count;

});

var allDates = Array.from(allDatesSet).sort();

// 2. Create datasets for each short\_code

var datasets = [];

Object.keys(dataByShortCode).forEach(function(code) {

var dataPoints = allDates.map(function(date) {

return dataByShortCode[code][date] || 0; // 0 if no data for that date

});

datasets.push({

label: code,

data: dataPoints,

borderWidth: 2,

fill: false,

borderColor: getRandomColor(),

tension: 0.3

});

});

// 3. Render Clicks Over Time Chart

var ctx1 = document.getElementById('clicksChart').getContext('2d');

var clicksChart = new Chart(ctx1, {

type: 'line',

data: {

labels: allDates,

datasets: datasets

},

options: {

responsive: true,

plugins: {

title: {

display: true,

text: 'Clicks Over Time (by Short Link)'

}

},

scales: {

y: {

beginAtZero: true,

title: {

display: true,

text: 'Number of Clicks'

}

},

x: {

title: {

display: true,

text: 'Date'

}

}

}

}

});

// Random color generator for each line

function getRandomColor() {

const r = Math.floor(Math.random() \* 200);

const g = Math.floor(Math.random() \* 200);

const b = Math.floor(Math.random() \* 200);

return `rgba(${r}, ${g}, ${b}, 1)`;

}

// 4. Top Links Chart (no change needed)

var topLinksLabels = [];

var topLinksDataValues = [];

topLinksData.forEach(function(item) {

topLinksLabels.push(item.short\_code);

topLinksDataValues.push(item.click\_count);

});

var ctx2 = document.getElementById('topLinksChart').getContext('2d');

var topLinksChart = new Chart(ctx2, {

type: 'bar',

data: {

labels: topLinksLabels,

datasets: [{

label: 'Click Count',

data: topLinksDataValues,

backgroundColor: 'rgba(255, 99, 132, 0.2)',

borderColor: 'rgba(255, 99, 132, 1)',

borderWidth: 1

}]

},

options: {

responsive: true,

scales: {

y: {

beginAtZero: true

}

}

}

});

</script>

</body>

</html>

**get\_top\_links.php**

<?php

require\_once '../config.php';

session\_start();

if (!isset($\_SESSION['user\_id'])) {

http\_response\_code(401);

echo json\_encode(['error' => 'Unauthorized']);

exit;

}

$user\_id = $\_SESSION['user\_id'];

try {

$stmt = $pdo->prepare("

SELECT short\_code, click\_count

FROM links

WHERE user\_id = :user\_id

ORDER BY click\_count DESC

LIMIT 5

");

$stmt->execute(['user\_id' => $user\_id]);

$data = $stmt->fetchAll(PDO::FETCH\_ASSOC);

echo json\_encode($data);

} catch (PDOException $e) {

http\_response\_code(500);

echo json\_encode(['error' => 'Database error: ' . $e->getMessage()]);

}

?>

**get\_clicks\_data.php**

<?php

require\_once '../config.php';

session\_start();

if (!isset($\_SESSION['user\_id'])) {

http\_response\_code(401);

echo json\_encode(['error' => 'Unauthorized']);

exit;

}

$user\_id = $\_SESSION['user\_id'];

try {

$stmt = $pdo->prepare("

SELECT DATE(c.clicked\_at) AS click\_date, COUNT(\*) AS click\_count

FROM clicks c

JOIN links l ON c.link\_id = l.id

WHERE l.user\_id = :user\_id

GROUP BY DATE(c.clicked\_at)

ORDER BY click\_date DESC

LIMIT 7

");

$stmt->execute(['user\_id' => $user\_id]);

$data = $stmt->fetchAll(PDO::FETCH\_ASSOC);

echo json\_encode($data);

} catch (PDOException $e) {

http\_response\_code(500);

echo json\_encode(['error' => 'Database error: ' . $e->getMessage()]);

}

?>

**analytics.php**

<?php

session\_start();

include('../config/db.php');

// Check if the user is logged in

if (!isset($\_SESSION['user\_id'])) {

header("Location: ../auth/login.php");

exit();

}

if (isset($\_GET['id'])) {

$link\_id = $\_GET['id'];

$user\_id = $\_SESSION['user\_id'];

// Ensure the link belongs to the logged-in user

$query = "SELECT \* FROM links WHERE id = ? AND user\_id = ?";

$stmt = $pdo->prepare($query);

$stmt->bindValue(1, $link\_id, PDO::PARAM\_INT); // Bind parameters using bindValue

$stmt->bindValue(2, $user\_id, PDO::PARAM\_INT); // Bind parameters using bindValue

$stmt->execute();

if ($stmt->rowCount() > 0) {

// Delete the link and its associated clicks

$delete\_link\_query = "DELETE FROM links WHERE id = ?";

$delete\_clicks\_query = "DELETE FROM clicks WHERE link\_id = ?";

try {

$pdo->beginTransaction(); // Start transaction

// Delete the clicks first

$stmt = $pdo->prepare($delete\_clicks\_query);

$stmt->bindValue(1, $link\_id, PDO::PARAM\_INT); // Bind parameter

$stmt->execute();

// Delete the link

$stmt = $pdo->prepare($delete\_link\_query);

$stmt->bindValue(1, $link\_id, PDO::PARAM\_INT); // Bind parameter

$stmt->execute();

$pdo->commit(); // Commit transaction

header("Location: index.php"); // Redirect back to dashboard

exit();

} catch (Exception $e) {

$pdo->rollBack(); // Rollback in case of an error

echo "Error: " . $e->getMessage();

}

} else {

echo "Unauthorized access!";

}

} else {

echo "No link ID provided!";

}

?>

**delete.php**

<?php

session\_start();

include('../config/db.php');

// Check if the user is logged in

if (!isset($\_SESSION['user\_id'])) {

header("Location: ../auth/login.php");

exit();

}

if (isset($\_GET['id'])) {

$link\_id = $\_GET['id'];

$user\_id = $\_SESSION['user\_id'];

// Ensure the link belongs to the logged-in user

$query = "SELECT \* FROM links WHERE id = ? AND user\_id = ?";

$stmt = $pdo->prepare($query);

$stmt->bindValue(1, $link\_id, PDO::PARAM\_INT); // Bind parameters using bindValue

$stmt->bindValue(2, $user\_id, PDO::PARAM\_INT); // Bind parameters using bindValue

$stmt->execute();

if ($stmt->rowCount() > 0) {

// Delete the link and its associated clicks

$delete\_link\_query = "DELETE FROM links WHERE id = ?";

$delete\_clicks\_query = "DELETE FROM clicks WHERE link\_id = ?";

try {

$pdo->beginTransaction(); // Start transaction

// Delete the clicks first

$stmt = $pdo->prepare($delete\_clicks\_query);

$stmt->bindValue(1, $link\_id, PDO::PARAM\_INT); // Bind parameter

$stmt->execute();

// Delete the link

$stmt = $pdo->prepare($delete\_link\_query);

$stmt->bindValue(1, $link\_id, PDO::PARAM\_INT); // Bind parameter

$stmt->execute();

$pdo->commit(); // Commit transaction

header("Location: index.php"); // Redirect back to dashboard

exit();

} catch (Exception $e) {

$pdo->rollBack(); // Rollback in case of an error

echo "Error: " . $e->getMessage();

}

} else {

echo "Unauthorized access!";

}

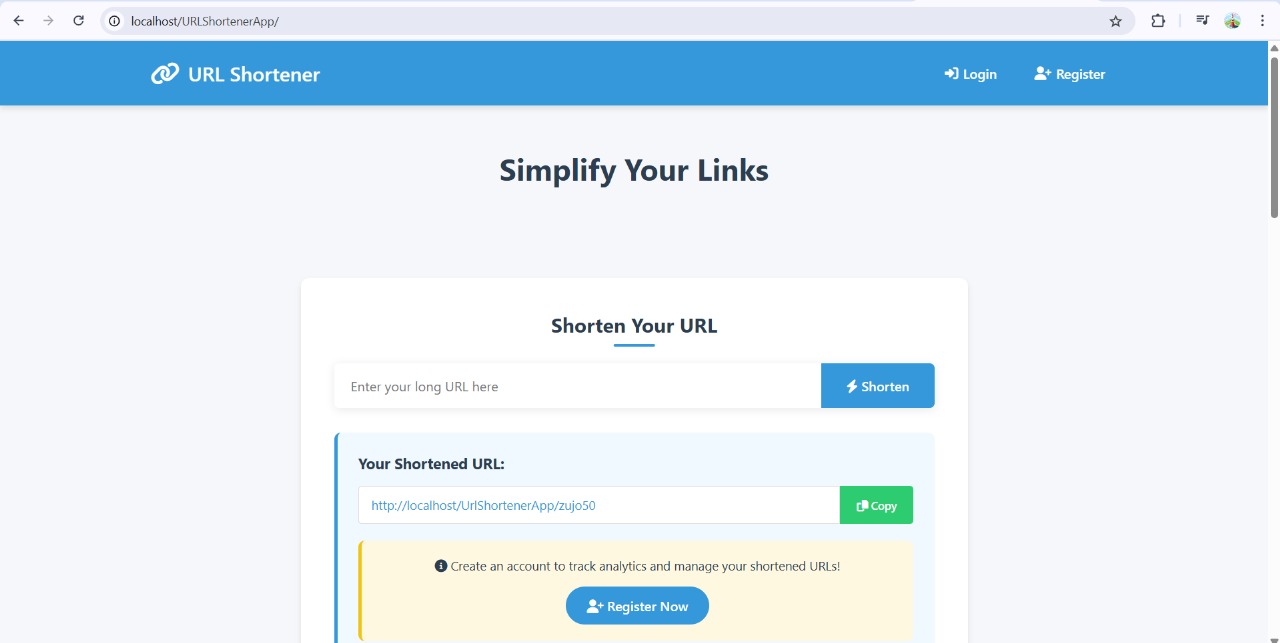
} else {

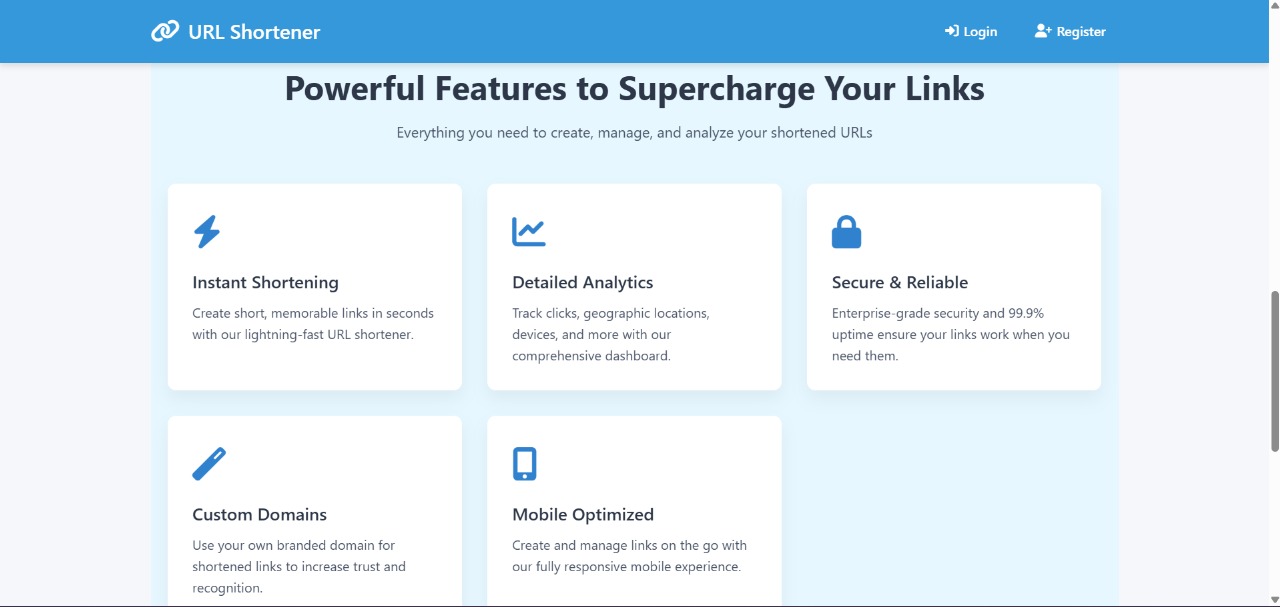
echo "No link ID provided!";

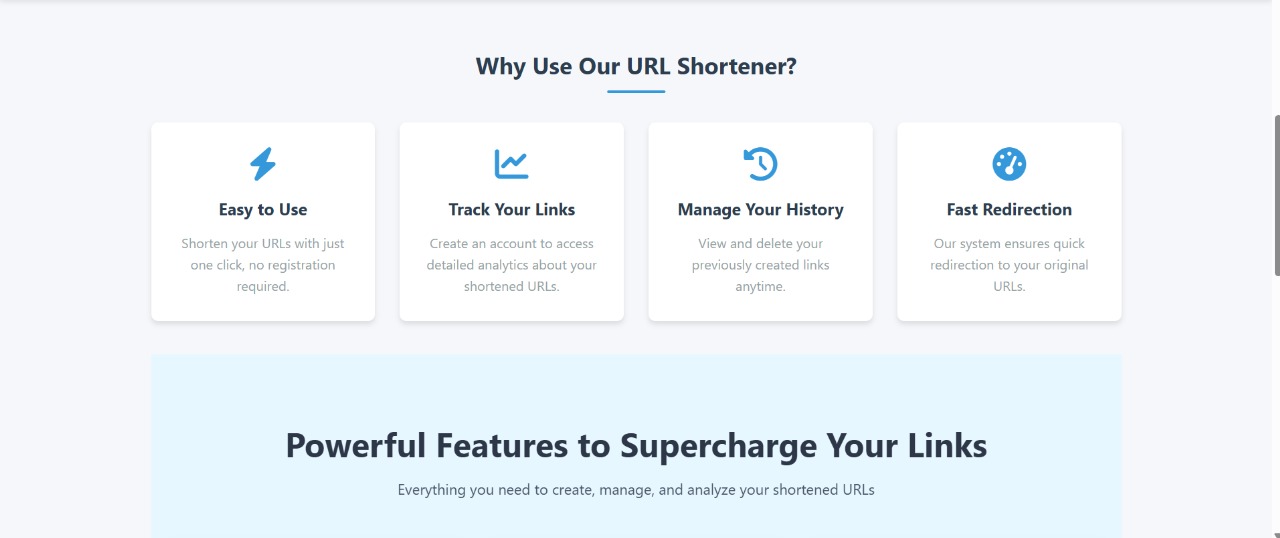
}

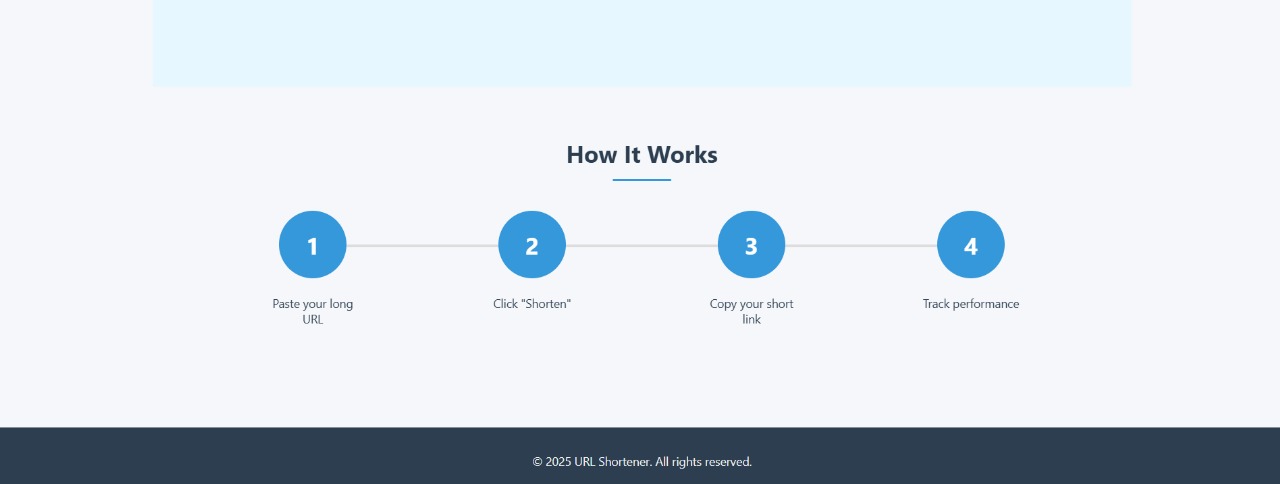
?>

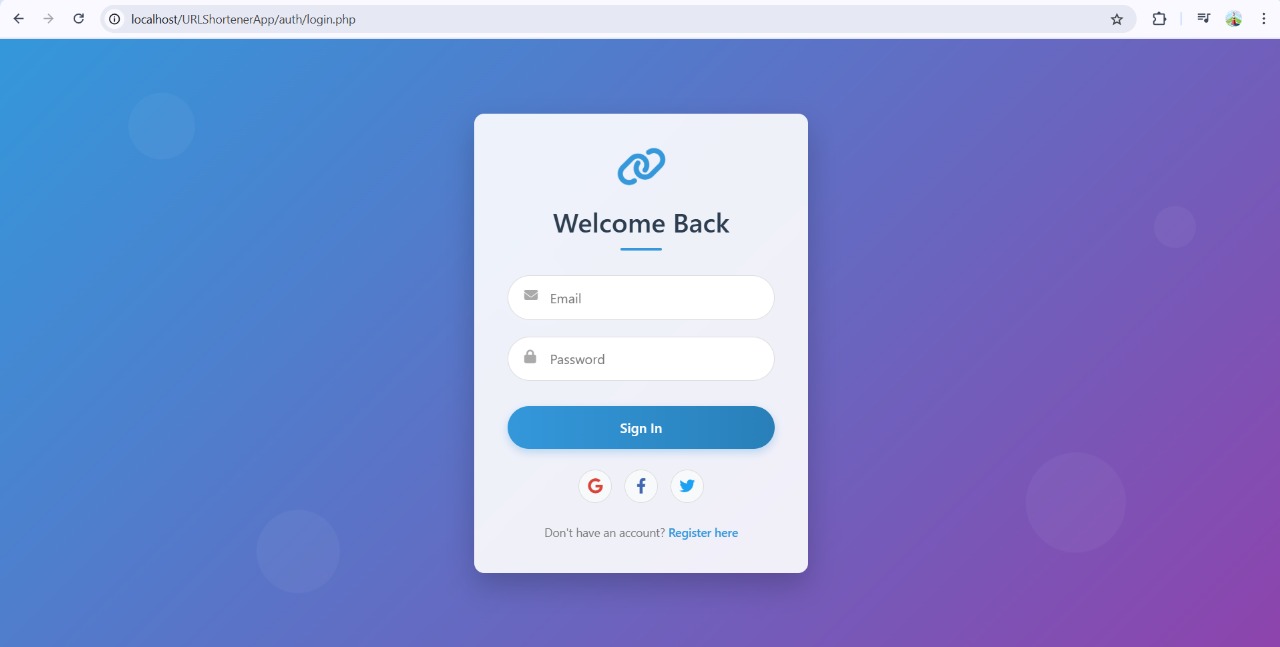
**Output:**

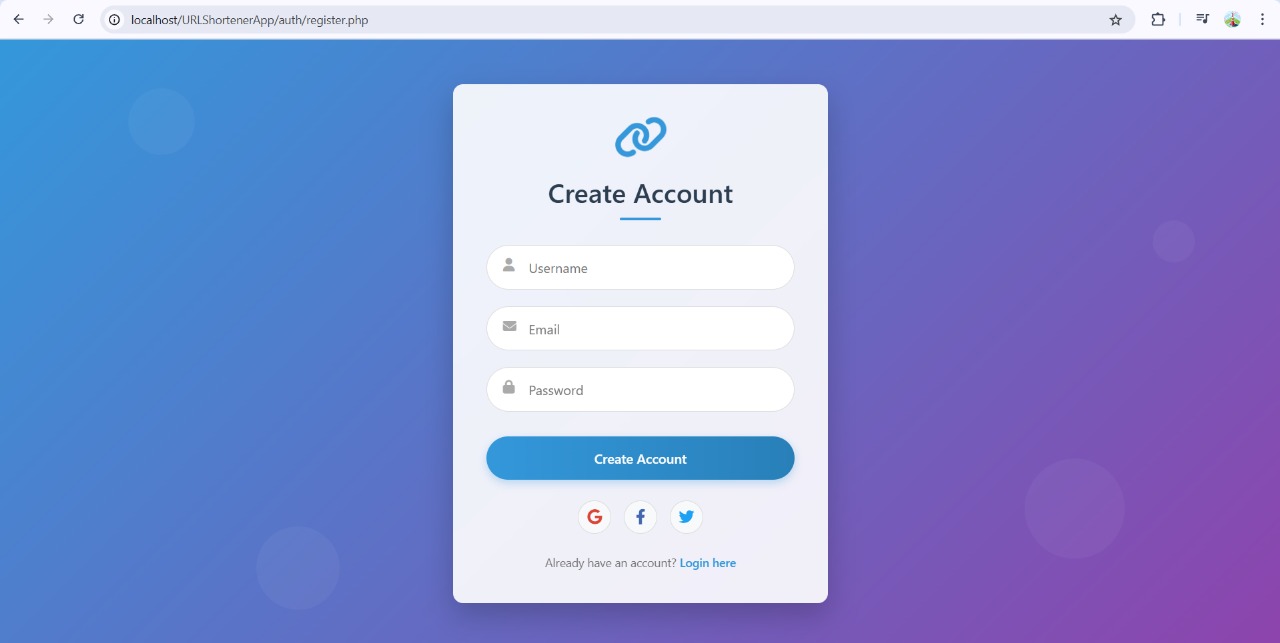


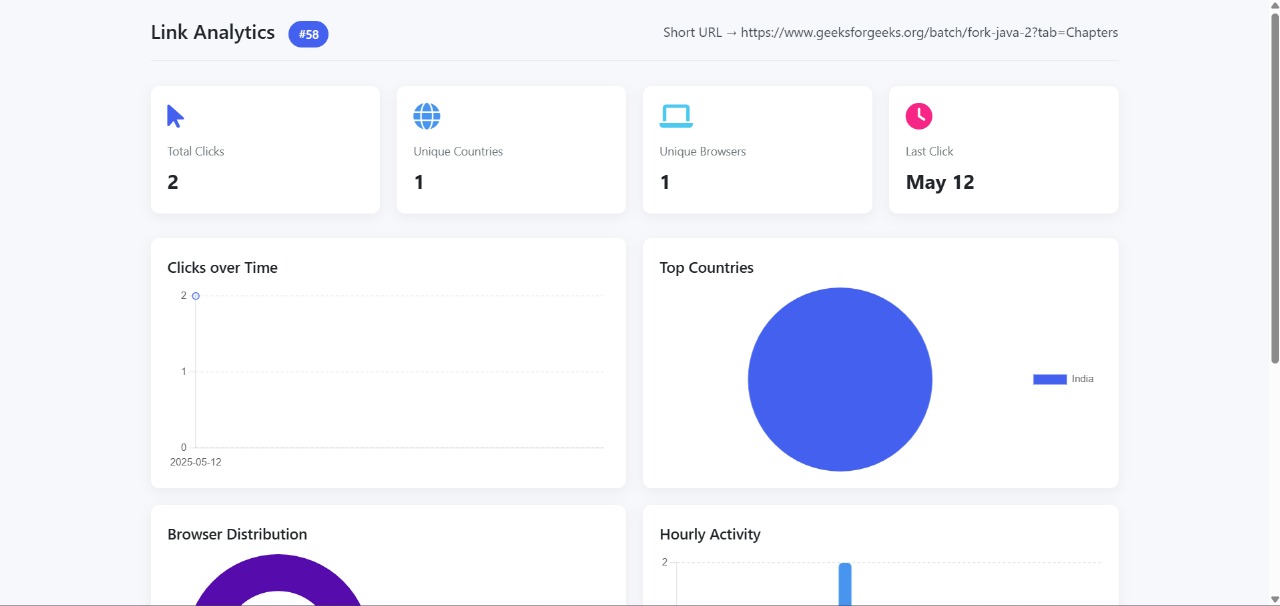
****

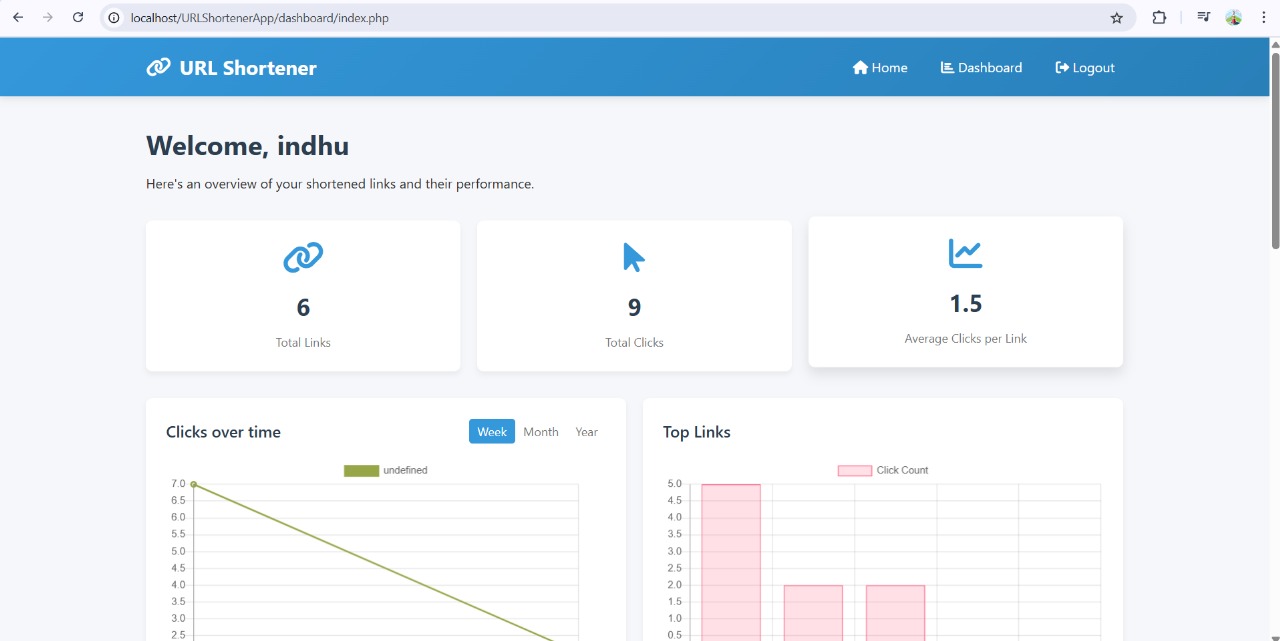
****

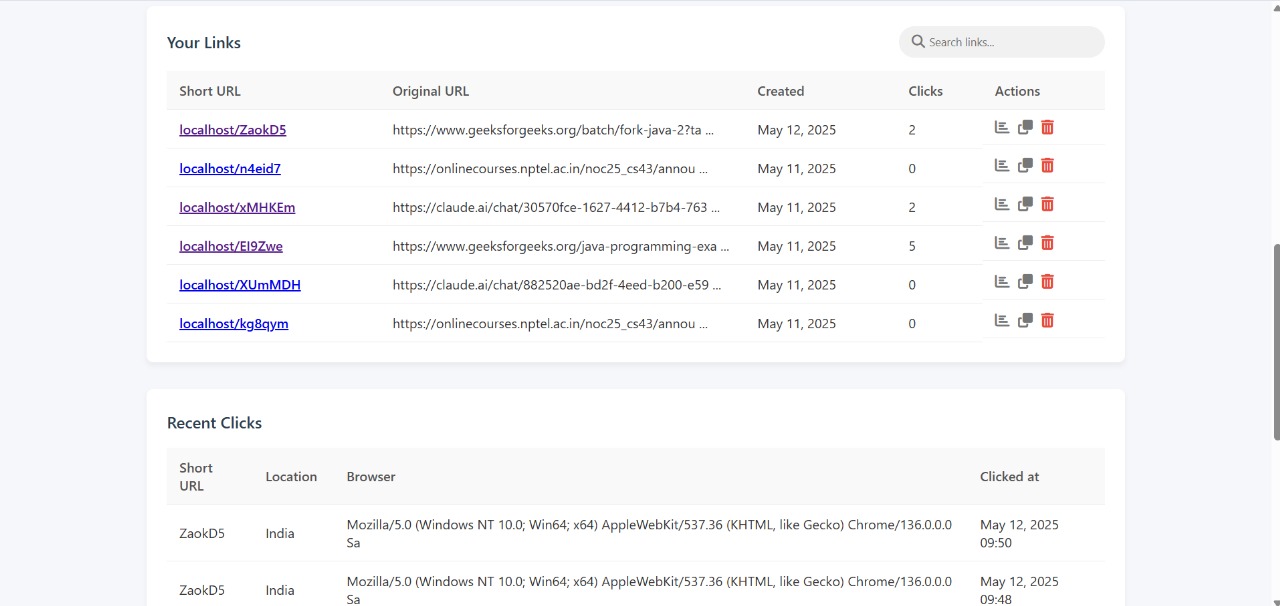
****

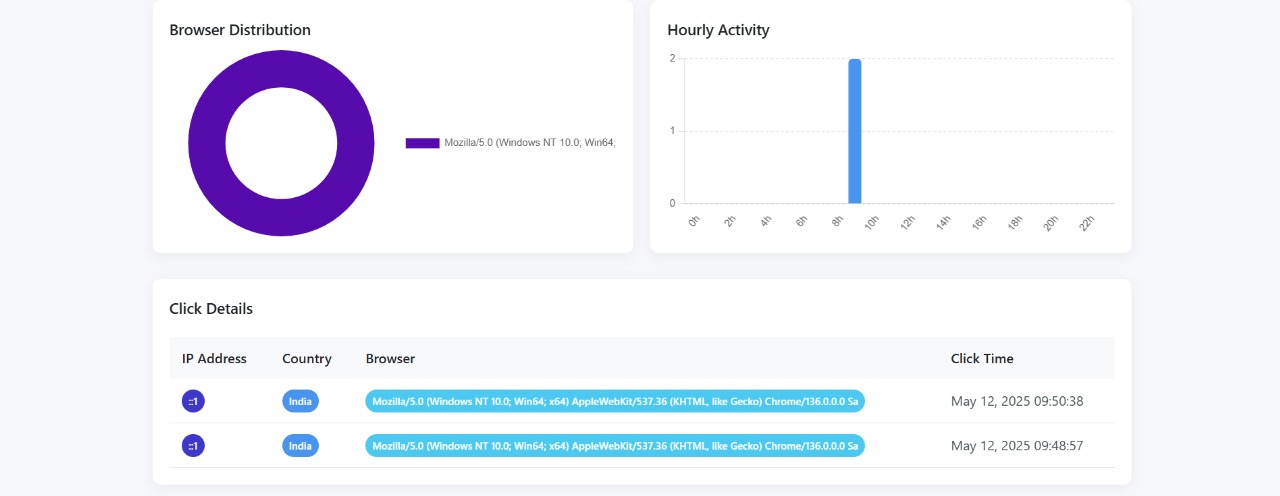
****

****

****

****

****



**Reference:**

1. "Database Management Systems" book by Raghu Ramakrishnan and Johannes Gehrke
2. *JavaScript and jQuery: Interactive Front-End Web Development* by Jon Duckett
3. <https://phpgurukul.com/php-tutorials/>
4. <https://www.tutorialspoint.com/plsql/index.html>