

# SteamCMS - Multi-Era Steam Website Content Management System

A comprehensive CMS backend that recreates and manages multiple versions of steampowered.com from 2002-2009, featuring a custom template engine, historical content, and full admin interface.



## Features

### Multi-Era Theme System

- **8 different Steam eras:** 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009
- **Historical accuracy:** Recreated layouts based on actual archive.org snapshots
- **Evolution showcase:** From table-based layouts (2002-2005) to modern CSS (2006-2009)
- **Dynamic theme switching:** Seamlessly switch between eras

### Custom Template Engine

- **Template inheritance:** Extend layouts with blocks
- **Dynamic content:** Variables, loops, conditionals
- **Include system:** Reusable template components
- **Theme-specific rendering:** Automatic theme-based template selection

### Content Management

- **News Articles:** Add, edit, remove news for each era with historical context
- **FAQ System:** Categorized FAQ entries with full CRUD operations

- **Navigation Management:** Dynamic navigation links with drag-and-drop reordering
- **Logo Management:** Upload custom logos for each theme era
- **Media Library:** File upload and management system

## Historical Data

- **Pre-loaded content:** Historical news articles for each Steam era
- **Era-appropriate navigation:** Theme-specific navigation structures
- **Sample FAQ entries:** Contextual help content for each time period
- **Default configurations:** Ready-to-use theme settings

## Admin Interface

- **Modern admin panel:** Responsive design with intuitive navigation
- **Theme-aware management:** Switch between eras while managing content
- **Real-time preview:** View site changes instantly
- **User authentication:** Secure admin access with role management

## Installation

### Prerequisites

- **PHP 7.4+** with PDO MySQL extension
- **MySQL 5.7+** or MariaDB 10.2+
- **Web server** (Apache/Nginx)
- **Modern web browser**

### Quick Installation

1. **Clone or download** the SteamCMS files to your web server

2. Navigate to `install.php` in your web browser

3. Follow the installation wizard:

- Configure database connection
- Create admin user account
- Install historical data

## Manual Installation

1. Database Setup:

```
sql CREATE DATABASE steamcms;
```

2. Configuration:

```
json { "host": "localhost", "username": "your_db_user", "password":  
"your_db_password", "database": "steamcms" }
```

3. Run Installation:

```
php require_once 'code/cms.php'; <span class="math-inline"  
style="display: inline;">
$$\frac{c}{m} = \frac{n}{w}$$

```

## Usage

### Admin Panel Access

- **URL:** `/admin/`
- **Default Login:** `admin / steamcms`
- **Features:** News, FAQ, Navigation, Media, Settings management

## Frontend Access

- **URL:** /index.php?theme=2004 (or any year 2002-2009)
- **Theme Switching:** Change the theme parameter to view different eras
- **Direct URLs:** Each theme has its own navigation structure

## Theme Examples

- **2002:** index.php?theme=2002 - Early beta with simple table layout
- **2004:** index.php?theme=2004 - Half-Life 2 era with promotional design
- **2006:** index.php?theme=2006 - Modern CSS store layout
- **2009:** index.php?theme=2009 - Semantic HTML with advanced features

## Architecture

### Template Engine (`template_engine.php`)

```
$template = new TemplateEngine();
$template->setTheme('2004');

<span class="math-inline" style="display: inline;"><math
xmlns="http://www.w3.org/1998/Math/MathML"
display="block"><mrow><mi>t</mi><mi>e</mi><mi>m</mi><mi>p</mi><mi>l</mi><mi>a</mi><mi>t</mi><mi>e</mi><mo>×02212;</mo><mo>×0003E;</mo><mi>a</mi><mi>s</mi><mi>s</mi><mi>i</mi><mi>g</mi><mi>n</mi><msup><mo stretchy="false">×00028;</mo><mi>×02032;</mi></msup><mi>n</mi><mi>e</mi><mi>w</mi><msup><mi>s</mi><mi>×02032;</mi></msup><mo>×0002C;</mo></mrow></math></span>news_articles);

echo $template->render('index');
```

## Database Layer (`database.php`)

```
$db = new Database();
$db->createSchema();
<span class="math-inline" style="display: inline;"><math
xmlns="http://www.w3.org/1998/Math/MathML"
display="inline"><mrow><mi>n</mi><mi>e</mi><mi>w</mi><mi>s</
mi><mo>&#x0003D;</mo></mrow></math></span>$db->query("SELECT * FROM
news_articles WHERE theme = ?", ['2004']);
```

## CMS Core (`cms.php`)

```
$cms = new SteamCMS();
$cms->setTheme('2004');
echo $cms->renderPage('index');
```

## Models

- **NewsModel:** News article management
- **FAQModel:** FAQ categories and entries
- **NavigationModel:** Navigation link management
- **MediaModel:** File upload and media management

# Directory Structure

```
steamcms/
└── admin/                      # Admin panel
    ├── css/                      # Admin styles
    ├── pages/                     # Admin page controllers
    ├── index.php                 # Admin dashboard
    └── login.php                 # Authentication
└── code/                        # Core PHP classes
    ├── cms.php                   # Main CMS class
    ├── database.php              # Database layer
    └── template_engine.php       # Template system
└── themes/                      # Theme templates
    ├── 2002/                      # 2002 Steam theme
    ├── 2003/                      # 2003 Steam theme
    ├── 2004/                      # 2004 Steam theme (default)
    ├── 2005/                      # 2005 Steam theme
    ├── 2006/                      # 2006 Steam theme
    ├── 2007/                      # 2007 Steam theme
    ├── 2008/                      # 2008 Steam theme
    └── 2009/                      # 2009 Steam theme
└── uploads/                     # User uploaded files
└── index.php                   # Frontend entry point
└── install.php                 # Installation wizard
└── README.md                   # Documentation
```

# Theme Development

## Creating a New Theme

### 1. Create theme directory:

```
php $template->createThemeStructure('custom_theme');
```

2. **Main layout** (`themes/custom_theme/layouts/main.tpl`):

```html

```
{block_placeholder "content"}
```

...

1. **Index template** (`themes/custom_theme/index.tpl`):

```html

```
{block "content"}
```

# Welcome to {\$site\_title}

```
{foreach newsarticles as article}
```

```
  {$article.title}
```

```
{/foreach}
```

```
{/block}
```

...

## Template Syntax

- **Variables:** `{$variable_name}`

- **Loops:** `{foreach <span class="math-inline" style="display: inline;"><math xmlns="http://www.w3.org/1998/Math/MathML" display="block"><mrow><mi>i</mi><mi>t</mi><mi>e</mi><mi>m</mi><mi>s</mi><mi>a</mi><mi>s</mi></mrow></math></span>item} ...{/foreach}`

- **Conditionals:** `{if $condition} ...{/if}`

- **Includes:** `{include "partial_name"}`

- **Blocks:** `{block "block_name"} ...{/block}`

- **Extends:** `{extends "layout_name"}`



# Configuration

## Database Settings

Configure in `config.json` or pass to constructor:

```
$config = [  
    'host' => 'localhost',  
    'username' => 'steamcms_user',  
    'password' => 'secure_password',  
    'database' => 'steamcms_db'  
];
```

## Theme Settings

Manage through admin panel or programmatically:

```
$cms->setSetting('site_title', 'My Steam Site');  
$cms->setSetting('logo_url', '/uploads/custom_logo.png');
```



## Historical Content

### Pre-loaded News Articles

- **2002:** Steam beta launch, Counter-Strike 1.6
- **2003:** Public beta, Day of Defeat integration
- **2004:** Half-Life 2 release, Source Engine debut
- **2005:** Lost Coast, Steam platform updates
- **2006:** Episode One, Steam Store launch
- **2007:** Orange Box, Portal revolution

- **2008:** Left 4 Dead, 15M users milestone
- **2009:** Left 4 Dead 2, Steam Workshop beta

## Navigation Evolution

- **Early years (2002-2005):** Simple text links
- **Store era (2006-2009):** Modern navigation with categories
- **Theme-specific:** Each era has appropriate navigation structure

## Development

### Adding New Features

#### 1. Database changes:

```
php $db->getConnection()->exec("ALTER TABLE ...");
```

#### 2. Model methods:

```
php class CustomModel { public function getCustomData($theme)
{ return <span class="math-inline" style="display: inline;"><math
xmlns="http://www.w3.org/1998/Math/MathML"
display="block"><mrow><mi>t</mi><mi>h</mi><mi>i</mi><mi>s</mi><mo>&#x02212;</mo><mo>&#x0003E;</mo><mi>d</mi><mi>b</mi><mo>&#x02212;</mo><mo>&#x0003E;</mo><mi>q</mi><mi>u</mi><mi>e</mi><mi>r</mi><mi>y</mi><mo stretchy="false">&#x00028;</mo><mi>"</mi><mi>S</mi><mi>E</mi><mi>L</mi><mi>E</mi><mi>C</mi><mi>T</mi><mo>&#x0002A;</mo><mi>F</mi><mi>R</mi><mi>O</mi><mi>M</mi><mi>c</mi><mi>u</mi><mi>s</mi><mi>t</mi><mi>o</mi><msub><mi>m</mi><mi>t</mi></msub><mi>a</mi><mi>b</mi><mi>l</mi><mi>e</mi><mi>w</mi><mi>H</mi><mi>E</mi><mi>R</mi><mi>E</mi><mi>t</mi><mi>h</mi><mi>e</mi><mi>m</mi><mi>e</mi><mo>&#x0003D;</mo><mo>&#x0003F;</mo><mi>"</mi><mo>&#x0002C;</mo><mo stretchy="false">[</mo></mrow></math></span>theme]); } }
```

### 3. Admin pages:

Create new file in `admin/pages/` following existing patterns

### 4. Template functions:

Add to `TemplateEngine` class for new template features

## Extending Themes

1. **CSS customization:** Add to `themes/{theme}/css/`

2. **JavaScript:** Add to `themes/{theme}/js/`

3. **Images:** Add to `themes/{theme}/images/`

4. **Layouts:** Create new layouts in `themes/{theme}/layouts/`

## Security

## Best Practices

- **Input validation:** All user inputs are sanitized
- **SQL injection prevention:** PDO prepared statements
- **XSS protection:** HTML escaping in templates
- **Authentication:** Secure password hashing
- **File uploads:** Type and size validation

## Recommended Hardening

1. **Remove `install.php`** after installation
2. **Set strong admin passwords**
3. **Restrict file permissions**
4. **Use HTTPS** in production
5. **Regular backups**



# Troubleshooting

## Common Issues

### Database Connection Failed

- Check MySQL service is running
- Verify database credentials
- Ensure database exists

### Template Not Found

- Check theme directory exists
- Verify template file names
- Check file permissions

### Media Upload Failed

- Check `uploads/` directory permissions
- Verify PHP upload settings
- Check file size limits

### Theme Not Loading

- Verify theme exists in database
- Check theme configuration
- Clear any template cache

## Debug Mode

Enable error reporting during development:

```
error_reporting(E_ALL);  
ini_set('display_errors', 1);
```



# Performance

## Optimization Tips

1. Enable PHP OPcache
2. Use database indexing
3. Implement template caching
4. Optimize images
5. Use CDN for static assets

## Caching

The template engine supports caching:

```
$template = new TemplateEngine('themes', 'cache');
```



## Contributing

## Development Setup

1. Fork the repository
2. Create feature branch
3. Follow coding standards
4. Add tests for new features
5. Submit pull request

## Coding Standards

- **PSR-4** autoloading
- **PSR-12** coding style

- **Comprehensive comments**
- **Security-first approach**

## License

This project is open source software licensed under the MIT License.

## Credits

**Author:** MiniMax Agent

**Historical Research:** Based on Internet Archive snapshots of steampowered.com

**Inspiration:** Valve Corporation's Steam platform evolution

## Support

For support, documentation, or feature requests:

1. **Check the troubleshooting section**
2. **Review the admin panel help**
3. **Consult the code comments**
4. **Check database logs**

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**SteamCMS** - Preserving Steam's digital heritage through interactive content management.