# Healthcare Portal Project Documentation

## Project Overview

\*\*Project Name\*\*: Healthcare Portal

\*\*Technology Stack\*\*: PHP, MySQL, HTML5, CSS3, JavaScript

\*\*Features\*\*:

- Role-based access (Admin, Doctor, Patient)

- Appointment scheduling

- Patient records management

- Prescription system

- Responsive dashboard interfaces

## System Architecture

```

healthcare\_portal/

├── assets/

│ ├── css/ # All stylesheets

│ ├── js/ # JavaScript files

│ └── images/ # Static images

├── config/

│ └── database.php # Database configuration

├── includes/ # Reusable components

│ ├── header.php # Header template

│ ├── footer.php # Footer template

│ └── auth\_check.php # Authentication middleware

├── admin/ # Admin interface

├── doctor/ # Doctor interface

├── patient/ # Patient interface

└── index.php # Entry point

```

## Database Schema

```mermaid

erDiagram

users ||--o{ doctors : "1:1"

users ||--o{ patients : "1:1"

users {

int id PK

varchar(50) username

varchar(255) password

varchar(100) email

enum('admin','doctor','patient') role

varchar(50) first\_name

varchar(50) last\_name

datetime created\_at

datetime updated\_at

}

doctors {

int user\_id PK,FK

varchar(100) specialization

text qualifications

varchar(20) contact\_number

}

patients {

int user\_id PK,FK

date date\_of\_birth

enum('male','female','other') gender

text address

varchar(10) blood\_type

}

appointments {

int id PK

int patient\_id FK

int doctor\_id FK

date appointment\_date

time appointment\_time

enum('scheduled','completed','cancelled','no\_show') status

text reason

text notes

datetime created\_at

}

prescriptions {

int id PK

int appointment\_id FK

int patient\_id FK

int doctor\_id FK

date prescription\_date

text medication

text dosage

text instructions

}

medical\_records {

int id PK

int patient\_id FK

date record\_date

varchar(100) record\_type

text description

varchar(255) file\_path

int created\_by FK

datetime created\_at

}

```

## Setup Instructions

### 1. Environment Configuration

```bash

# Required software

- WAMP/XAMPP/MAMP

- PHP 7.4+

- MySQL 5.7+

- Web browser

# Clone repository (if applicable)

git clone [repository\_url]

```

### 2. Database Setup

```sql

-- Create database

CREATE DATABASE healthcare\_portal;

-- Import schema (from provided SQL file)

USE healthcare\_portal;

SOURCE schema.sql;

-- Test user credentials

INSERT INTO users (username, password, email, role, first\_name, last\_name) VALUES

('admin', '$2y$10$...', 'admin@example.com', 'admin', 'System', 'Admin'),

('dr\_smith', '$2y$10$...', 'doctor@example.com', 'doctor', 'John', 'Smith'),

('patient1', '$2y$10$...', 'patient@example.com', 'patient', 'Jane', 'Doe');

```

### 3. Configuration Files

`config/database.php`:

```php

<?php

$host = 'localhost';

$dbname = 'healthcare\_portal';

$username = 'root';

$password = '';

try {

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

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

} catch (PDOException $e) {

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

}

?>

```

## Current Development Status

### Completed Features

- [X] User authentication system

- [X] Admin dashboard framework

- [X] Doctor appointment interface

- [X] Patient profile management

- [X] Responsive design implementation

### In Progress

- [ ] Prescription module

- [ ] Medical records upload

- [ ] Appointment reminders

- [ ] Billing integration

### Known Issues

| Issue | Location | Status |

|-------|----------|--------|

| fetchColumn() error | doctor/dashboard.php | Resolved |

| Session timeout | includes/auth\_check.php | Pending |

| Mobile menu toggle | assets/js/main.js | Testing |

## Getting Back to Development

### 1. Recent Changes

```diff

# Last modifications (git style)

+ Fixed fetchColumn() error in doctor dashboard

+ Added error handling for database queries

- Removed deprecated sidebar implementation

! Updated patient registration form validation

```

### 2. Where to Continue

1. \*\*Priority Tasks\*\*:

- Complete prescription module (`doctor/create\_prescription.php`)

- Implement file upload for medical records

- Add email notification system

2. \*\*Pending Code Reviews\*\*:

- Patient appointment booking flow

- Admin report generation

### 3. Development Workflow

```bash

# Typical workflow

1. Start WAMP/XAMPP services

2. Navigate to http://localhost/healthcare\_portal

3. Use test credentials to access appropriate dashboard

4. Implement features following MVC pattern:

- Create database queries in model files

- Update controller logic

- Enhance views with new components

```

## Troubleshooting Guide

### Common Errors

1. \*\*Database Connection Issues\*\*:

- Verify credentials in `config/database.php`

- Check MySQL service is running

- Test connection using:

```php

print\_r($pdo->query("SELECT 1")->fetch());

```

2. \*\*Session Problems\*\*:

- Ensure `session\_start()` is called before output

- Verify file permissions in `/tmp` (PHP session directory)

3. \*\*AJAX Requests Failing\*\*:

- Check browser console for errors

- Verify endpoints return proper JSON:

```php

header('Content-Type: application/json');

echo json\_encode($data);

```

## Test Cases

### Authentication Tests

| Test Case | Expected Result |

|-----------|-----------------|

| Admin login | Redirect to admin dashboard |

| Doctor login | Show doctor interface |

| Invalid credentials | Show error message |

### Appointment Flow

```gherkin

Feature: Appointment Scheduling

Scenario: Patient books appointment

Given I am logged in as a patient

When I select an available time slot

And provide appointment reason

Then the appointment should appear in my dashboard

And the doctor should see it in their schedule

```

## Documentation Assets

1. \*\*Visual References\*\*:

- [Wireframes](link\_to\_wireframes)

- [ER Diagram](link\_to\_erd)

- [UI Mockups](link\_to\_mockups)

2. \*\*API Documentation\*\*:

```markdown

### GET /api/appointments

Returns list of appointments for current user

Parameters:

- `status` (optional): Filter by status

Response:

```json

{

"data": [

{

"id": 1,

"patient": "Jane Doe",

"date": "2023-06-15",

"time": "14:30:00"

}

]

}

```

```

This documentation provides everything needed to resume development. For any additional context, refer to:

- Project roadmap in `ROADMAP.md`

- Change log in `CHANGELOG.md`

- Open issues in GitHub repository