**Healthcare Portal - Complete Documentation (Until This Point)**

**1. Project Setup & Structure**

**1.1 Directory Structure**

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healthcare\_portal/

├── assets/

│ ├── css/

│ │ ├── main.css

│ │ ├── admin.css

│ │ ├── doctor.css

│ │ └── patient.css

│ ├── js/

│ │ ├── main.js

│ │ ├── admin\_dashboard.js

│ │ ├── doctor\_dashboard.js

│ │ └── patient\_dashboard.js

│ └── images/

│ ├── default-avatar.jpg

│ └── profiles/

├── config/

│ └── database.php

├── includes/

│ ├── header.php

│ ├── footer.php

│ ├── auth\_check.php

│ └── functions.php

├── api/

│ └── notifications.php

├── admin/

├── doctor/

│ └── dashboard.php

├── patient/

├── index.php

└── login.php

**2. Database Schema**

**2.1 Tables**

sql

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-- Users Table

CREATE TABLE users (

id INT AUTO\_INCREMENT PRIMARY KEY,

username VARCHAR(50) UNIQUE NOT NULL,

password VARCHAR(255) NOT NULL,

email VARCHAR(100) UNIQUE NOT NULL,

role ENUM('admin','doctor','patient') NOT NULL,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

-- Doctors Table

CREATE TABLE doctors (

user\_id INT PRIMARY KEY,

specialization VARCHAR(100),

FOREIGN KEY (user\_id) REFERENCES users(id)

);

-- Notifications Table

CREATE TABLE notifications (

id INT AUTO\_INCREMENT PRIMARY KEY,

user\_id INT NOT NULL,

type ENUM('appointment','prescription','system') NOT NULL,

message TEXT NOT NULL,

is\_read BOOLEAN DEFAULT 0,

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (user\_id) REFERENCES users(id)

);

**3. Key Implementations So Far**

**3.1 Fixed Issues**

| **Issue** | **File** | **Solution** |
| --- | --- | --- |
| htmlspecialchars() NULL warning | header.php | Added ?? 'default' fallback |
| Sidebar active states | doctor\_dashboard.js | URL-based highlighting |
| Notification polling | notifications.php | Fetch API with 30s refresh |
| Profile dropdown | main.js | Click-outside detection |

**3.2 Session Initialization (login.php)**

php

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// After successful login

$\_SESSION = [

'user\_id' => $user['id'],

'username' => $user['username'] ?? null,

'first\_name' => $user['first\_name'] ?? '',

'last\_name' => $user['last\_name'] ?? '',

'role' => $user['role']

];

// Doctor-specific data

if ($\_SESSION['role'] === 'doctor') {

$\_SESSION['specialization'] = $doctorData['specialization'] ?? null;

}

**4. Code Snippets**

**4.1 Safe Echo Helper (functions.php)**

php

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function safeEcho($value, $default = '') {

return htmlspecialchars($value ?? $default, ENT\_QUOTES, 'UTF-8');

}

**4.2 Notifications API (api/notifications.php)**

php

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<?php

require\_once \_\_DIR\_\_.'/../config/database.php';

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

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

$stmt = $pdo->prepare("SELECT COUNT(\*) FROM notifications WHERE user\_id = ? AND is\_read = 0");

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

echo json\_encode(['count' => $stmt->fetchColumn()]);

}

**4.3 Profile Dropdown (header.php)**

php

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<div class="user-profile">

<div class="profile-trigger">

<img src="<?= !empty($\_SESSION['user\_id'])

? '/assets/images/profiles/'.(int)$\_SESSION['user\_id'].'.jpg'

: '/assets/images/default-avatar.jpg' ?>" alt="Profile">

<span>

<strong><?= safeEcho($\_SESSION['first\_name'], 'User') ?></strong>

<?php if($\_SESSION['role'] === 'doctor'): ?>

<small><?= safeEcho($\_SESSION['specialization'], 'General Practitioner') ?></small>

<?php endif; ?>

</span>

</div>

</div>

**5. Pending Tasks**

**5.1 High Priority**

| **Task** | **File** | **Status** |
| --- | --- | --- |
| Real-time appointment alerts | doctor\_dashboard.js | Not started |
| Prescription form validation | doctor/prescriptions.php | In progress |
| Mobile sidebar overlay | main.css | Needs testing |

**5.2 Backlog**

* + Patient medical records upload
  + Billing integration
  + Audit logging

**6. How to Resume Development**

* 1. **Restore Session Handling**  
     Ensure session\_start() is called in header.php.
  2. **Test Notifications**  
     Manually insert a test notification:

sql

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INSERT INTO notifications (user\_id, type, message)

VALUES (2, 'appointment', 'Test alert');

* 1. **Verify Fixes**  
     Check:
     + /doctor/dashboard.php for NULL warnings
     + Mobile menu toggle
     + Profile dropdown click behavior

**7. Emergency Recovery**

If the system crashes:

* 1. **Restore Database**

bash

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mysql -u root -p healthcare\_portal < backup.sql

* 1. **Rollback Code**

bash

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git checkout main -- includes/header.php assets/js/main.js