```php
<?php
// Bot configuration
$botToken = $_ENV['BOT_TOKEN'] ?? 'YOUR_BOT_TOKEN_HERE';
define('BOT_TOKEN', $botToken);
define('API_URL', 'https://api.telegram.org/bot' . BOT_TOKEN . '/');
define('USERS_FILE', 'users.json');
define('ERROR_LOG', 'error.log');

// NEET Study Plan Data
$neetStudyPlan = [
    'physics' => [
        'title' => '📚 Physics Syllabus',
        'content' => "🔬 <b>Physics NEET Syllabus:</b>\n\n• Physical World &
Measurement\n• Kinematics\n• Laws of Motion\n• Work, Energy & Power\n• Motion of
System of Particles\n• Gravitation\n• Properties of Bulk Matter\n• Thermodynamics\n•
Behavior of Perfect Gas\n• Oscillations & Waves\n• Electrostatics\n• Current Electricity\n•
Magnetic Effects of Current\n• Electromagnetic Induction\n• Electromagnetic Waves\n•
Optics\n• Dual Nature of Matter\n• Atoms & Nuclei\n• Electronic Devices"
    ],

    'chemistry' => [
        'title' => '🧪 Chemistry Syllabus',
        'content' => "⚗️ <b>Chemistry NEET Syllabus:</b>\n\n• Some Basic Concepts of
Chemistry\n• Structure of Atom\n• Classification of Elements\n• Chemical Bonding\n• States
of Matter\n• Thermodynamics\n• Equilibrium\n• Redox Reactions\n• Hydrogen\n• s-Block
Elements\n• p-Block Elements\n• Organic Chemistry\n• Hydrocarbons\n• Environmental
Chemistry\n• Solid State\n• Solutions\n• Electrochemistry\n• Chemical Kinetics\n• Surface
Chemistry\n• General Principles\n• Isolation of Elements\n• Coordination Compounds\n•
Haloalkanes & Haloarenes\n• Alcohols, Phenols & Ethers\n• Aldehydes, Ketones &
Carboxylic Acids\n• Organic Compounds Containing Nitrogen\n• Biomolecules\n•
Polymers\n• Chemistry in Everyday Life"
    ],

    'biology' => [
        'title' => '🌿 Biology Syllabus',
        'content' => "🔬 <b>Biology NEET Syllabus:</b>\n\n• Diversity in Living World\n•
Structural Organization in Animals & Plants\n• Cell Structure and Function\n• Plant
Physiology\n• Human Physiology\n• Reproduction\n• Genetics and Evolution\n• Biology and
Human Welfare\n• Biotechnology and Its Applications\n• Ecology and Environment"
    ],

    'study_tips' => [
        'title' => '💡 NEET Study Tips',
        'content' => "🎯 <b>NEET Preparation Tips:</b>\n\n• Create a realistic timetable\n•
Focus on NCERT books\n• Practice previous year papers\n• Take regular mock tests\n•
Revise regularly\n• Stay healthy & manage stress\n• Focus on weak areas\n• Join study
groups\n• Use mnemonics for memorization\n• Stay updated with syllabus changes"
    ],
```

```php
    'timetable' => [
        'title' => '⏰ Daily Study Plan',
        'content' => "📅 <b>Daily Study Schedule:</b>\n\n🕐 6:00 AM - Wake up &
exercise\n🕐 8:00 AM - Physics (3 hours)\n🕐 12:00 PM - Chemistry (3 hours)\n🕐 4:00 PM
- Biology (3 hours)\n🕐 8:00 PM - Revision (2 hours)\n🕐 10:00 PM - Relax & sleep\n\n•
Take 15 min breaks every 2 hours\n• Sunday - Full revision & mock tests"
    ]
];

// Ensure files exist and have proper permissions
initializeFiles();

function initializeFiles() {
    if (!file_exists(USERS_FILE)) {
        file_put_contents(USERS_FILE, json_encode([]));
    }

    if (!file_exists(ERROR_LOG)) {
        file_put_contents(ERROR_LOG, '');
    }

    // Set permissions
    chmod(USERS_FILE, 0664);
    chmod(ERROR_LOG, 0664);
}

function logError($error) {
    $timestamp = date('Y-m-d H:i:s');
    $message = "[$timestamp] ERROR: $error\n";
    file_put_contents(ERROR_LOG, $message, FILE_APPEND | LOCK_EX);
}

function sendMessage($chatId, $text, $replyMarkup = null) {
    $data = [
        'chat_id' => $chatId,
        'text' => $text,
        'parse_mode' => 'HTML'
    ];

    if ($replyMarkup) {
        $data['reply_markup'] = $replyMarkup;
    }

    return makeRequest('sendMessage', $data);
}

function makeRequest($method, $data = []) {
```

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    $url = API_URL . $method;

    $options = [
        'http' => [
            'header' => "Content-type: application/x-www-form-urlencoded\r\n",
            'method' => 'POST',
            'content' => http_build_query($data),
            'timeout' => 10
        ]
    ];

    $context = stream_context_create($options);
    $result = file_get_contents($url, false, $context);

    if ($result === false) {
        logError("Failed to make request to: $method");
        return false;
    }

    return json_decode($result, true);
}

function loadUsers() {
    if (!file_exists(USERS_FILE)) {
        return [];
    }

    $content = file_get_contents(USERS_FILE);
    if ($content === false) {
        logError("Failed to read users file");
        return [];
    }

    $users = json_decode($content, true);
    return is_array($users) ? $users : [];
}

function saveUser($userId, $userData) {
    $users = loadUsers();

    // Update or add user
    $users[$userId] = array_merge($users[$userId] ?? [], $userData);
    $users[$userId]['last_seen'] = date('Y-m-d H:i:s');

    $result = file_put_contents(USERS_FILE, json_encode($users, JSON_PRETTY_PRINT), LOCK_EX);

    if ($result === false) {
```

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        logError("Failed to save user data for ID: $userId");
        return false;
    }

    return true;
}

function getMainKeyboard() {
    return json_encode([
        'keyboard' => [
            ['📚 Physics', '🧪 Chemistry', '🌿 Biology'],
            ['💡 Study Tips', '⏰ Timetable', '📞 Contact'],
            ['ℹ️ About', '🆘 Help']
        ],
        'resize_keyboard' => true,
        'one_time_keyboard' => false
    ]);
}

function handleUpdate($update) {
    global $neetStudyPlan;

    if (!isset($update['message'])) {
        return;
    }

    $message = $update['message'];
    $chatId = $message['chat']['id'];
    $userId = $message['from']['id'];
    $firstName = $message['from']['first_name'] ?? 'Student';
    $text = $message['text'] ?? '';

    // Save user information
    saveUser($userId, [
        'first_name' => $firstName,
        'username' => $message['from']['username'] ?? '',
        'chat_id' => $chatId
    ]);

    // Handle commands and text messages
    switch ($text) {
        case '/start':
            $welcomeMessage = "🎉 <b>Welcome to NEET Mastery Plan, $firstName!</b> 🎉\n\n"
                . "I'm your personal NEET preparation assistant! 🤖\n\n"
                . "I'll help you with:\n"
                . "• Complete syllabus breakdown 📚\n"
                . "• Study tips & strategies 💡 \n"
```

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        . "• Daily study plans ⏰\n"
        . "• Subject-wise guidance 🔬\n\n"
        . "Use the buttons below to get started!";
    sendMessage($chatId, $welcomeMessage, getMainKeyboard());
    break;

case '/help':
case '🆘 Help':
    $helpMessage = "🤖 <b>NEET Mastery Plan - Help</b>\n\n"
        . "<b>Available Commands:</b>\n"
        . "/start - Start the bot\n"
        . "/help - Show this help message\n\n"
        . "<b>Interactive Buttons:</b>\n"
        . "📚 Physics - Physics syllabus\n"
        . "🧪 Chemistry - Chemistry syllabus\n"
        . "🌿 Biology - Biology syllabus\n"
        . "💡 Study Tips - Preparation strategies\n"
        . "⏰ Timetable - Daily study plan\n"
        . "📞 Contact - Get support\n"
        . "ℹ️ About - About this bot";
    sendMessage($chatId, $helpMessage, getMainKeyboard());
    break;

case '📚 Physics':
    sendMessage($chatId, $neetStudyPlan['physics']['content'], getMainKeyboard());
    break;

case '🧪 Chemistry':
    sendMessage($chatId, $neetStudyPlan['chemistry']['content'], getMainKeyboard());
    break;

case '🌿 Biology':
    sendMessage($chatId, $neetStudyPlan['biology']['content'], getMainKeyboard());
    break;

case '💡 Study Tips':
    sendMessage($chatId, $neetStudyPlan['study_tips']['content'], getMainKeyboard());
    break;

case '⏰ Timetable':
    sendMessage($chatId, $neetStudyPlan['timetable']['content'], getMainKeyboard());
    break;

case '📞 Contact':
    $contactMessage = "📞 <b>Contact & Support</b>\n\n"
        . "For queries and support:\n"
        . "• Email: support@neetmastery.com\n"
        . "• Website: www.neetmastery.com\n"
```

```php
            . "• YouTube: NEET Mastery Channel\n\n"
            . "Stay connected for updates! 📱 ";
        sendMessage($chatId, $contactMessage, getMainKeyboard());
        break;

    case 'ℹ️ About':
        $aboutMessage = "ℹ️ <b>About NEET Mastery Plan</b>\n\n"
            . "This bot is designed to help NEET aspirants with:\n"
            . "• Structured study material 📚\n"
            . "• Smart preparation strategies 🧠\n"
            . "• Time management tips ⏰\n"
            . "• Complete syllabus coverage ✅\n\n"
            . "Your success is our mission! 🎯";
        sendMessage($chatId, $aboutMessage, getMainKeyboard());
        break;

    default:
        if (!empty(trim($text))) {
            $response = "🤔 I didn't understand that.\n\n"
                . "Please use the buttons below or type /help for available commands.";
            sendMessage($chatId, $response, getMainKeyboard());
        }
        break;
    }
}

// Main execution
try {
    $input = file_get_contents('php://input');

    if ($input) {
        $update = json_decode($input, true);

        if ($update) {
            handleUpdate($update);
        } else {
            logError("Invalid JSON received: " . $input);
        }
    } else {
        // Health check response for Render.com
        if ($_SERVER['REQUEST_METHOD'] === 'GET') {
            header('Content-Type: application/json');
            echo json_encode([
                'status' => 'online',
                'bot' => 'NEET Mastery Plan',
                'timestamp' => date('c'),
                'message' => 'Bot is running successfully'
            ]);
```

```php
        }
    }
} catch (Exception $e) {
    logError("Unhandled exception: " . $e->getMessage());

    header('Content-Type: application/json');
    http_response_code(500);
    echo json_encode(['error' => 'Internal server error']);
}
?>
```