1) Authentication Using Laravel Sanctum (Token Based Authentication)

1) Install necessary packages:

composer require laravel/sanctum (if not already installed)
php artisan vendor:publish --provider="Laravel\Sanctum\SanctumServiceProvider"
php artisan migrate

2) Inside api.php

```
use App\Http\Controllers\API\AuthController;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Route;

Route::post('/register', [AuthController::class, 'register']);
Route::post('/login', [AuthController::class, 'login']);
Route::post('/send-reset-password-email', [AuthController::class, 'sendPasswordResetLink']);
Route::post('/reset-password/{token}', [AuthController::class, 'resetPassword']);
Route::middleware(['auth:sanctum'])->group(function () {
    Route::post('/logout', [AuthController::class, 'logout']);
    Route::post('/change-password', [AuthController::class, 'changePassword']);
    Route::get('/user', [AuthController::class, 'user']);
});
```

3) Create API/AuthController:

```
namespace App\Http\Controllers\API;

use App\Http\Controllers\Controller;
use App\Mail\PasswordResetMail;
use Illuminate\Http\Request;
use App\Models\User;
use Carbon\Carbon;
use Illuminate\Support\Facades\Hash;
use Illuminate\Support\Facades\Auth;
use Illuminate\Support\Facades\Auth;
use Illuminate\Support\Facades\Mail;
use Illuminate\Support\Facades\Mail;
use Illuminate\Support\Facades\Password;
use Illuminate\Support\Facades\Password;
use Illuminate\Support\Facades\Password;
use Illuminate\Support\Facades\DB;
```

```
class AuthController extends Controller
    // Register
   public function register(Request $request)
    {
        try {
            $validatedData = $request->validate([
                'name' => 'required|string|max:255',
                'email' => 'required|string|email|max:255|unique:users',
                'password' => 'required|string|min:8|confirmed',
            ]);
            $user = User::create([
                'name' => $validatedData['name'],
                'email' => $validatedData['email'],
                'password' => Hash::make($validatedData['password']),
            ]);
            //verify email through email
            event(new Registered($user));
            $token = $user->createToken('auth_token')->plainTextToken;
            return response()->json([
                'message' => 'User registered successfully. Please verify your
email.',
                'access_token' => $token,
                'token_type' => 'Bearer',
            ], 201);
        } catch (ValidationException $e) {
            return response()->json([
                'message' => 'Validation failed',
                'errors' => $e->errors(),
            ], 422);
   public function login(Request $request)
        try {
            $validatedData = $request->validate([
                'email' => 'required|string|email',
                'password' => 'required|string',
```

```
]);
            $user = User::where('email', $validatedData['email'])->first();
            if (!$user || !Hash::check($validatedData['password'], $user-
>password)) {
                throw ValidationException::withMessages([
                    'email' => ['The provided credentials are incorrect.'],
                ]);
            // verify email before email
            if (!$user->hasVerifiedEmail()) {
                return response()->json([
                    'message' => 'Please verify your email first'
                ], 403);
            $token = $user->createToken('auth token')->plainTextToken;
            return response()->json([
                'access_token' => $token,
                'token_type' => 'Bearer',
                'user' => $user,
            ]);
        } catch (ValidationException $e) {
            return response()->json([
                'message' => 'Validation failed',
                'errors' => $e->errors(),
            ], 422);
    }
    // Change Password
    public function changePassword(Request $request)
        try {
            $validatedData = $request->validate([
                'current_password' => 'required|string',
                'new_password' => 'required|string|min:8|confirmed',
            ]);
            $user = Auth::user();
```

```
if (!Hash::check($validatedData['current_password'], $user-
>password)) {
                throw ValidationException::withMessages([
                    'current password' => ['Current password is incorrect'],
                ]);
            $user->update([
                'password' => Hash::make($validatedData['new password'])
            ]);
            // Revoke all tokens
            $user->tokens()->delete();
            $token = $user->createToken('auth_token')->plainTextToken;
            return response()->json([
                'message' => 'Password changed successfully',
                'access token' => $token,
                'token type' => 'Bearer',
            ]);
        } catch (ValidationException $e) {
            return response()->json([
                'message' => 'Validation failed',
                'errors' => $e->errors(),
            ], 422);
    }
   public function logout(Request $request)
       $request->user()->currentAccessToken()->delete();
        return response()->json([
            'message' => 'Logged out successfully'
       ]);
    }
   // Send Password Reset Link
   public function sendPasswordResetLink(Request $request)
        try {
           // Validate the request
```

```
$request->validate([
                'email' => 'required|email|exists:users,email',
            ]);
            $email = $request->email;
            // Generate a secure token
            $token = Str::random(60);
            // Save token to password resets table
            DB::table('password_reset_tokens')->updateOrInsert(
                ['email' => $email],
                    'email' => $email,
                    'token' => $token, // Store raw token, not hashed
                    'created at' => now(),
            );
            // Send the email using a Mailable class
            Mail::to($email)->send(new PasswordResetMail($token, $email));
            return response()->json([
                'message' => 'Password reset link sent to your email',
            ], 200);
        } catch (ValidationException $e) {
            return response()->json([
                'message' => 'Validation failed',
                'errors' => $e->errors(),
                'status' => 'failed',
            ], 422);
        } catch (\Exception $e) {
            return response()->json([
                'message' => 'Failed to send password reset link',
                'error' => $e->getMessage(), // In production, you might want to
hide detailed errors
                'status' => 'failed',
            ], 500);
       }
    // Reset Password
   public function resetPassword(Request $request, $token)
```

```
try {
            // Clean up expired tokens (2 minutes expiration)
           DB::table('password reset tokens')
                ->where('created_at', '<=', Carbon::now()->subMinutes(2))
                ->delete();
            // Validate the request
            $request->validate([
                'password' => 'required confirmed min:8', // Added min length for
security
           ]);
           // Find the reset token
            $passwordReset = DB::table('password_reset_tokens')
                ->where('token', $token)
                ->first();
           if (!$passwordReset) {
               return response()->json([
                    'message' => 'Token is invalid or expired',
                    'status' => 'failed'
                ], 404);
           // Update user's password
           $user = User::where('email', $passwordReset->email)->first();
           if (!$user) {
               return response()->json([
                    'message' => 'User not found',
                    'status' => 'failed'
                ], 404);
           $user->password = Hash::make($request->password);
            $user->save();
           // Delete the used token
            DB::table('password_reset_tokens')
                ->where('email', $user->email)
                ->delete();
            return response()->json([
                'message' => 'Password reset successfully',
                'status' => 'success'
```

4) Php artisan make:mail PasswordResetMail

```
<?php
namespace App\Mail;
use Illuminate\Bus\Queueable;
use Illuminate\Mail\Mailable;
use Illuminate\Queue\SerializesModels;

class PasswordResetMail extends Mailable
{
    use Queueable, SerializesModels;

    public $token;
    public $token;
    public $email;

    /**
    * Create a new message instance.
    *
          * @param string $token</pre>
```

```
* @param string $email
    * @return void
   public function __construct($token, $email)
       $this->token = $token;
       $this->email = $email;
     * Build the message.
    * @return $this
   public function build()
       $frontendUrl = env('FRONTEND_URL', 'http://localhost:3000'); // Fallback
to localhost:3000 if not set
       return $this->subject('Reset Your Password')
            ->view('emails.reset')
            ->with([
                'token' => $this->token,
                'email' => $this->email,
                'frontendUrl' => $frontendUrl,
            ]);
```

5) Inside .env

```
MAIL_MAILER=smtp
MAIL_HOST=smtp.gmail.com
MAIL_PORT=465
MAIL_USERNAME=freelencerunittesting@gmail.com
MAIL_PASSWORD=aqcdacybfhqsyvsc
MAIL_ENCRYPTION=tls
MAIL_FROM_ADDRESS="freelencerunittesting@gmail.com"
MAIL_FROM_NAME="${APP_NAME}"
```

6) Inside views/emails/reset.blade.php

```
<!DOCTYPE html>
<html lang="en">
```

```
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Reset Your Password</title>
<style>
   body {
        font-family: Arial, sans-serif;
        margin: 0;
        padding: 0;
        background-color: #f4f4f4;
    .container {
        max-width: 600px;
        margin: 50px auto;
        background-color: #ffffff;
        padding: 20px;
        border-radius: 8px;
        box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
   h1 {
        color: #333333;
        font-size: 24px;
   p {
        color: #666666;
        line-height: 1.6;
    .button {
        display: inline-block;
        padding: 12px 24px;
        background-color: #007bff;
        color: #ffffff;
        text-decoration: none;
        border-radius: 4px;
        font-weight: bold;
    .button:hover {
        background-color: #0056b3;
```

```
hr {
           border: 0;
           border-top: 1px solid #eeeeee;
           margin: 20px 0;
       .footer {
           margin-top: 20px;
           font-size: 12px;
           color: #999999;
           text-align: center;
   </style>
</head>
<body>
   <div class="container">
       <h1>Reset Your Password</h1>
       Hello,
       We received a request to reset your password. Click the button below
to reset it. This link is valid for 60
           minutes.
           <a href="{{ $frontendUrl }}/reset-password?token={{ $token</pre>
}}&email={{ urlencode($email) }}"
               class="button">
               Reset Password
           </a>
       If you did not request a password reset, please ignore this email or
contact support if you have concerns.
       <div class="footer">
           © {{ date('Y') }} {{ env('APP_NAME') }}. All rights
reserved.
       </div>
   </div>
</body>
</html>
```

7) Inside .env

FRONTEND_URL=http://localhost:3000
SESSION_DOMAIN=localhost
SANCTUM_STATEFUL_DOMAINS=localhost:3000

Setup VueJs with Vuetify:

1) Install below necessary packages:

```
npm create vite@latest
npm install
npm install vue-router@4
npm install pinia
npm install axios
```

Clear App. Vue and delete HelloWorld. vue and delete files inside assets. Create src/router/index.js

2) Inside vite.config.js

```
// inside vite.config.js
import { defineConfig } from 'vite'
import vue from '@vitejs/plugin-vue'
import path from 'path'

// https://vite.dev/config/
export default defineConfig({
   plugins: [vue()],
   server: {
     port: 3000, // Sets the development server to run on port 3000
   },
   resolve: {
     alias: {
        '@': path.resolve(__dirname, './src') // '@' will point to the src
directory
     }
   }
})
```

3) Setup Vuetify:

```
npm install vuetify@latest
```

Inside src/plugins/vuetify.js

```
// src/plugins/vuetify.js
import { createVuetify } from 'vuetify';
import 'vuetify/styles'; // Import Vuetify styles
// Optional: Import components and directives if you want to use them explicitly
import * as components from 'vuetify/components';
import * as directives from 'vuetify/directives';
const vuetify = createVuetify({
    components,
    directives,
});
export default vuetify
```

Now to use mdi icon:

Now, you can use icon and vuetify.

4) Default routing in src/router/index.js (Basic Routing)

```
path: "/auth",
        name: "Auth",
        component: () => import("@/layouts/AuthLayout.vue"),
        children: [
                path: "/login",
                name: "Login",
                component: () => import("@/views/auth/Login.vue"),
            },
        ],
        path: "/admin",
        name: "Admin",
        component: () => import("@/layouts/BackendLayout.vue"),
        children: [
                path: "home",
                name: "Dashboard",
                component: () => import("@/views/backend/Home.vue"),
            },
        ],
    },
1;
const router = createRouter({
    history: createWebHistory(),
    routes,
});
export default router;
```

5) Inside src/main.js

```
// src/main.js
// Import Vue's createApp function
import { createApp } from 'vue'
// Import the main App component
import App from './App.vue'
// Import global Axios configuration
import './axios'
// Import Pinia (State Management)
import { createPinia } from 'pinia'
// Import Vue Router (Routing)
import router from './router'
```

```
// Import Vuetify configuration
import vuetify from './plugins/vuetify'
import '@mdi/font/css/materialdesignicons.css';
// Create an instance of Pinia
const pinia = createPinia();
// Create a Vue application instance
const app = createApp(App);
// Use Pinia for state management
app.use(pinia);
// Use Vue Router for handling routes
app.use(router);
// Use Vuetify for UI components
app.use(vuetify);
// Mount the app to the DOM
app.mount('#app');
```

6) Inside App.vue:

```
<script setup>
import { ref } from 'vue';
import { useRouter } from 'vue-router';
const isLoading = ref(false);
const router = useRouter();
// Show loader when navigation starts
router.beforeEach((to, from, next) => {
    isLoading.value = true;
    next();
});
// Hide loader when navigation is done
router.afterEach(() => {
    setTimeout(() => {
        isLoading.value = false;
    }, 500); // Small delay for smoother transition
});
</script>
<template>
    <main>
        <!-- Page Loader -->
        <v-overlay v-model="isLoading" class="loader-overlay" :scrim="false">
            <v-progress-circular indeterminate size="64" color="primary" />
```

7) Inside FrontendLayout.vue ,BackendLayout.vue and AuthLayout.vue:

Login(without verification email) and Logout in vuejs:

1) In axios.js

```
// src/axios.js
import axios from 'axios'
const instance = axios.create({
    baseURL: 'http://localhost:8000/api',
    headers: {
        Accept: 'application/json',
    },
})
instance.interceptors.request.use((config) => {
    const token = localStorage.getItem('token')
    if (token) {
        config.headers.Authorization = `Bearer ${token}`
    return config
instance.interceptors.response.use(
    (response) => response,
    (error) => {
        if (error.response && error.response.status === 401) {
            localStorage.removeItem('token')
            window.location.href = '/login'
        return Promise.reject(error)
export default instance
```

2) Inside stores/auth.js

```
// src/stores/auth.js
import { ref, computed } from 'vue'
import { defineStore } from 'pinia'
import axios from '@/axios'
import router from '@/router'
/**
```

```
export const useAuthStore = defineStore('auth', () => {
    // Reactive state
    const user = ref(null)
    const token = ref(localStorage.getItem('token') |  null)
   // Computed property to check if user is authenticated
    const isAuthenticated = computed(() => !!token.value)
     * Handles user login.
     * @param {Object} credentials - User login credentials (email, password).
    const login = async (credentials) => {
        try {
            const response = await axios.post('/login', credentials)
            // Store token in state and localStorage
            token.value = response.data.access token
            localStorage.setItem('token', token.value)
            // Fetch authenticated user data
            await fetchUser()
            // Redirect to admin dashboard after successful login
            router.push('/admin/home')
        } catch (error) {
            // Throw the backend validation or error message to the caller
            throw error.response?.data || { message: 'Login failed. Please try
again.' }
     * Fetches the authenticated user data from backend.
    const fetchUser = async () => {
        try {
            const response = await axios.get('/user', {
                headers: {
                    Authorization: `Bearer ${token.value}`,
                },
            })
            user.value = response.data
```

```
} catch (error) {
        // If token is invalid or expired, force logout
        logout()
 * Logs the user out, clears local state and storage.
const logout = async () => {
    try {
        await axios.post('/logout', {}, {
            headers: {
                Authorization: `Bearer ${token.value}`,
            },
        })
    } catch (error) {
        // Even if logout request fails, proceed with clearing state
        console.warn('Logout request failed, but continuing.')
        // Clear state and redirect to login page
        token.value = null
        user.value = null
        localStorage.removeItem('token')
        router.push('/login')
return {
   user,
    token,
    isAuthenticated,
    login,
    logout,
    fetchUser,
```

3) Inside index.js

```
// src/router/index.js
import { createRouter, createWebHistory } from 'vue-router'
import { useAuthStore } from '@/stores/auth'
```

```
Routes
const routes = [
        path: '/',
        name: 'Frontend',
        component: () => import('@/layouts/FrontendLayout.vue'),
        children: [
                path: '',
                name: 'Home',
                component: () => import('@/views/frontend/Home.vue'),
            },
        ],
        path: '/auth',
        name: 'Auth',
        component: () => import('@/layouts/AuthLayout.vue'),
        children: [
                path: '/login',
                name: 'Login',
                component: () => import('@/views/auth/Login.vue'),
            },
        path: '/admin',
        name: 'Admin',
        component: () => import('@/layouts/BackendLayout.vue'),
        meta: { requiresAuth: true }, // ☜ Protected route
        children: [
                path: 'home',
                name: 'Dashboard',
                component: () => import('@/views/backend/Home.vue'),
            },
       ],
    },
const router = createRouter({
   history: createWebHistory(),
   routes,
```

```
})

// Global navigation guard
router.beforeEach(async (to, from, next) => {
    const auth = useAuthStore()

    // Check if the route needs auth
    if (to.meta.requiresAuth && !auth.isAuthenticated) {
        return next('/login')
    }

    // Prevent access to login page if already authenticated
    if (to.path === '/login' && auth.isAuthenticated) {
        return next('/admin/home')
    }

    return next()
})

export default router
```

4) Inside Login.vue

```
<!-- src/views/auth/Login.vue -->
<script setup>
import { ref } from 'vue'
import { useAuthStore } from '@/stores/auth'
const auth = useAuthStore()
const form = ref({
   email: '',
   password: '',
})
const loading = ref(false)
const errors = ref({
   email: null,
   password: null,
   general: null,
})
const handleLogin = async () => {
    errors.value = { email: null, password: null, general: null }
    loading.value = true
```

```
try {
        await auth.login(form.value)
    } catch (err) {
        const e = err.errors || {}
        errors.value.email = e.email?.[0] || null
        errors.value.password = e.password?.[0] || null
        errors.value.general = err.message || 'Login failed'
    } finally {
        loading.value = false
</script>
<template>
    <v-container class="d-flex align-center justify-center" style="height:</pre>
100vh">
        <v-card class="pa-6" min-width="400">
            <v-card-title class="text-h5">Login</v-card-title>
            <v-form @submit.prevent="handleLogin" ref="formRef">
                <v-text-field v-model="form.email" label="Email" :error-</pre>
messages="errors.email" type="email" required />
                <v-text-field v-model="form.password" label="Password" :error-</pre>
messages="errors.password" type="password"
                    required />
                <v-btn type="submit" color="primary" :loading="loading"</pre>
block>Login</v-btn>
                <v-alert v-if="errors.general" type="error" class="mt-4" dense>
                    {{ errors.general }}
                </v-alert>
            </v-form>
        </v-card>
    </v-container>
</template>
```

5) Logout:

```
<script setup>
import { useAuthStore } from "@/stores/auth"

// Access the authentication store
const authStore = useAuthStore();

// Methods
const logout = () => {
```

Login(with email verification):

1) Inside user model

```
use Illuminate\Contracts\Auth\MustVerifyEmail;

class User extends Authenticatable implements MustVerifyEmail
{
```

2) Inside AuthController:

```
<?php
namespace App\Http\Controllers\API;
use App\Http\Controllers\Controller;
use App\Mail\PasswordResetMail;
use Illuminate\Http\Request;
use App\Models\User;
use Carbon\Carbon;
use Illuminate\Support\Facades\Hash;
use Illuminate\Support\Facades\Auth;
use Illuminate\Support\Facades\Mail;
use Illuminate\Support\Str;
use Illuminate\Validation\ValidationException;
use Illuminate\Support\Facades\DB;
use App\Mail\EmailVerificationMail;
class AuthController extends Controller
     public function register(Request $request)
    {
        try {
            // Validate incoming request data
            $validatedData = $request->validate([
                'name' => 'required|string|max:255',
                'email' => 'required|string|email|max:255|unique:users',
                'password' => 'required|string|min:8|confirmed',
            ]);
            // Create new user
            $user = User::create([
                'name' => $validatedData['name'],
                'email' => $validatedData['email'],
                'password' => Hash::make($validatedData['password']),
```

```
'verification_token' => Str::random(60), // Always generate token
            ]);
            // Send email verification link (always for new users)
            Mail::to($user->email)->send(new EmailVerificationMail($user));
            // Generate auth token
            $token = $user->createToken('auth token')->plainTextToken;
            // Return success response
            return response()->json([
                'message' => 'User registered successfully. Please verify your
email.',
                'access_token' => $token,
                'token_type' => 'Bearer',
            ], 201);
        } catch (ValidationException $e) {
            // Return validation errors
            return response()->json([
                'message' => 'Validation failed',
                'errors' => $e->errors(),
            ], 422);
    // Login
    public function login(Request $request)
        try {
            $validatedData = $request->validate([
                'email' => 'required|string|email',
                'password' => 'required|string',
            ]);
            $user = User::where('email', $validatedData['email'])->first();
            if (!$user || !Hash::check($validatedData['password'], $user-
>password)) {
                throw ValidationException::withMessages([
                    'email' => ['The provided credentials are incorrect.'],
                ]);
            if (!$user->hasVerifiedEmail()) {
```

```
// Generate new token if needed and send verification email
            if (!$user->verification token) {
                $user->verification_token = Str::random(60);
                $user->save();
            Mail::to($user->email)->send(new EmailVerificationMail($user));
            return response()->json([
                'message' => 'email not verified',
            ], 403);
        $token = $user->createToken('auth_token')->plainTextToken;
        return response()->json([
            'access_token' => $token,
            'token type' => 'Bearer',
            'user' => $user,
        ]);
    } catch (ValidationException $e) {
        return response()->json([
            'message' => 'Validation failed',
            'errors' => $e->errors(),
        ], 422);
// Verify Email
public function verifyEmail($token)
    try {
        $user = User::where('verification_token', $token)->first();
        if (!$user) {
            return response()->json([
                'message' => 'Verification link has expired or is invalid.',
                'status' => 'expired',
            ], 410); // 410 Gone for expired resources
        }
        if ($user->hasVerifiedEmail()) {
            return response()->json([
                'message' => 'Email already verified.',
                'status' => 'already_verified',
            ], 200);
```

```
$user->email verified at = now();
        $user->verification_token = null; // Clear token after use
        $user->save();
        $authToken = $user->createToken('auth token')->plainTextToken;
        return response()->json([
            'message' => 'Email verified successfully.',
            'access_token' => $authToken,
            'token_type' => 'Bearer',
            'status' => 'success',
        ], 200);
    } catch (\Exception $e) {
        return response()->json([
            'message' => 'Failed to verify email.',
            'error' => $e->getMessage(),
            'status' => 'failed',
        ], 500);
// Resend Verification Email
public function resendVerificationEmail(Request $request)
    try {
        $request->validate([
            'email' => 'required|email|exists:users,email',
        1);
        $user = User::where('email', $request->email)->first();
        if ($user->hasVerifiedEmail()) {
            return response()->json([
                'message' => 'Email is already verified.',
                'status' => 'already verified',
            ], 200);
        // Generate new token
        $user->verification token = Str::random(60);
        $user->save();
        Mail::to($user->email)->send(new EmailVerificationMail($user));
```

```
return response()->json([
                'message' => 'A fresh verification link has been sent to your
email.',
                'status' => 'success',
            ], 200);
        } catch (ValidationException $e) {
            return response()->json([
                'message' => 'Validation failed',
                'errors' => $e->errors(),
                'status' => 'failed',
            ], 422);
        } catch (\Exception $e) {
            return response()->json([
                'message' => 'Failed to send verification email.',
                'error' => $e->getMessage(),
                'status' => 'failed',
            ], 500);
    // Change Password
   public function changePassword(Request $request)
        try {
            $validatedData = $request->validate([
                'current_password' => 'required|string',
                'new password' => 'required|string|min:8|confirmed',
            1);
            $user = Auth::user();
            if (!Hash::check($validatedData['current_password'], $user-
>password)) {
                throw ValidationException::withMessages([
                    'current password' => ['Current password is incorrect'],
                ]);
            $user->update([
                'password' => Hash::make($validatedData['new_password'])
            1);
            // Revoke all tokens
            $user->tokens()->delete();
            $token = $user->createToken('auth token')->plainTextToken;
            return response()->json([
                'message' => 'Password changed successfully',
                'access token' => $token,
```

```
'token_type' => 'Bearer',
        1);
    } catch (ValidationException $e) {
        return response()->json([
            'message' => 'Validation failed',
            'errors' => $e->errors(),
        ], 422);
}
public function logout(Request $request)
    $request->user()->currentAccessToken()->delete();
    return response()->json([
        'message' => 'Logged out successfully'
    ]);
// Send Password Reset Link
public function sendPasswordResetLink(Request $request)
    try {
        // Validate the request
        $request->validate([
            'email' => 'required|email|exists:users,email',
        ]);
        $email = $request->email;
        // Generate a secure token
        $token = Str::random(60);
        // Save token to password resets table
        DB::table('password reset tokens')->updateOrInsert(
            ['email' => $email],
                'email' => $email,
                'token' => $token, // Store raw token, not hashed
                'created_at' => now(),
        );
        // Send the email using a Mailable class
        Mail::to($email)->send(new PasswordResetMail($token, $email));
        return response()->json([
            'message' => 'Password reset link sent to your email',
            'status' => 'success',
        ], 200);
    } catch (ValidationException $e) {
        return response()->json([
```

```
'message' => 'Validation failed',
                'errors' => $e->errors(),
                'status' => 'failed',
            ], 422);
        } catch (\Exception $e) {
            return response()->json([
                'message' => 'Failed to send password reset link',
                'error' => $e->getMessage(), // In production, you might want to
hide detailed errors
                'status' => 'failed',
            ], 500);
    // Reset Password
    public function resetPassword(Request $request, $token)
        try {
            // Clean up expired tokens (2 minutes expiration)
            DB::table('password reset tokens')
                ->where('created_at', '<=', Carbon::now()->subMinutes(2))
                ->delete();
            // Validate the request
            $request->validate([
                'password' => 'required|confirmed|min:8', // Added min length for
security
            1);
            // Find the reset token
            $passwordReset = DB::table('password_reset_tokens')
                ->where('token', $token)
                ->first();
            if (!$passwordReset) {
                return response()->json([
                    'message' => 'Token is invalid or expired',
                    'status' => 'failed'
                ], 404);
            // Update user's password
            $user = User::where('email', $passwordReset->email)->first();
            if (!$user) {
                return response()->json([
                    'message' => 'User not found',
                    'status' => 'failed'
                ], 404);
            $user->password = Hash::make($request->password);
```

```
$user->save();
        // Delete the used token
        DB::table('password_reset_tokens')
            ->where('email', $user->email)
            ->delete();
        return response()->json([
            'message' => 'Password reset successfully',
            'status' => 'success'
        1, 200);
    } catch (ValidationException $e) {
        return response()->json([
            'message' => 'Validation failed',
            'errors' => $e->errors(),
            'status' => 'failed'
        ], 422);
    } catch (\Exception $e) {
        return response()->json([
            'message' => 'Failed to reset password',
            'status' => 'failed'
        ], 500);
// Get authenticated user
public function user(Request $request)
    return response()->json($request->user());
```

3) Make mail EmailVerificationMail.php:

```
<?php

namespace App\Mail;

use App\Models\User;
use Illuminate\Bus\Queueable;
use Illuminate\Mail\Mailable;
use Illuminate\Queue\SerializesModels;

class EmailVerificationMail extends Mailable
{
    use Queueable, SerializesModels;
}
</pre>
```

4) Inside views/emails/verify-email.blade.php

5) Inside users table:

```
$table->string('verification token')->nullable();
```

6) Inside api.php

```
<?php
```

```
use App\Http\Controllers\API\AuthController;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Route;
Route::post('/register', [AuthController::class, 'register']);
Route::post('/login', [AuthController::class, 'login']);
Route::post('/send-reset-password-email', [AuthController::class,
'sendPasswordResetLink']);
Route::post('/reset-password/{token}', [AuthController::class, 'resetPassword']);
// New routes for email verification
Route::get('/verify-email/{token}', [AuthController::class, 'verifyEmail']);
Route::post('/resend-verification-email', [AuthController::class,
'resendVerificationEmail']);
Route::middleware(['auth:sanctum'])->group(function () {
    Route::post('/logout', [AuthController::class, 'logout']);
    Route::post('/change-password', [AuthController::class, 'changePassword']);
    Route::get('/user', [AuthController::class, 'user']);
});
```

7) Inside auth.js

```
// src/stores/auth.js
import { ref, computed } from 'vue'
import { defineStore } from 'pinia'
import axios from '@/axios'
import router from '@/router'
export const useAuthStore = defineStore('auth', () => {
    const user = ref(null)
    const token = ref(localStorage.getItem('token') |  null)
    const isAuthenticated = computed(() => !!token.value)
    // Login user and redirect
    const login = async (credentials) => {
        try {
            const response = await axios.post('/login', credentials);
            token.value = response.data.access token
            localStorage.setItem('token', token.value)
            await fetchUser()
            router.push('/admin/home')
        } catch (error) {
            // Handle unverified email
            if (error.response.data.message === 'email not verified') {
```

```
router.push({ path: '/email-verification', query: { email:
credentials.email } })
                return;
verification
            if (error.response?.status !== 403) {
                throw error.response?.data || { message: 'Login failed. Please
try again.' }
    // Fetch user data
    const fetchUser = async () => {
        try {
            const response = await axios.get('/user')
            user.value = response.data
        } catch (error) {
            logout()
        }
    // Logout user and clear state
    const logout = async () => {
        try {
            await axios.post('/logout')
        } catch (error) {
            console.warn('Logout request failed, but continuing.')
        } finally {
            token.value = null
            user.value = null
            localStorage.removeItem('token')
            router.push('/login')
        }
    // Resend verification email
    const resendVerification = async (email) => {
        try {
            const response = await axios.post('/resend-verification-email', {
email })
            return response.data
       } catch (error) {
```

```
throw error.response?.data || { message: 'Failed to resend

verification email.' }
    }
}

return {
    user,
    token,
    isAuthenticated,
    login,
    logout,
    fetchUser,
    resendVerification,
}
})
```

8) Inside index.js

```
// src/router/index.js
import { createRouter, createWebHistory } from 'vue-router'
import { useAuthStore } from '@/stores/auth'
const routes = [
        path: '/',
        name: 'Frontend',
        component: () => import('@/layouts/FrontendLayout.vue'),
        children: [
                path: '',
                name: 'Home',
                component: () => import('@/views/frontend/Home.vue'),
            },
        ],
        path: '/auth',
        name: 'Auth',
        component: () => import('@/layouts/AuthLayout.vue'),
        children: [
                path: '/login',
                name: 'Login',
                component: () => import('@/views/auth/Login.vue'),
```

```
path: '/email-verification',
                name: 'EmailVerification',
                component: () => import('@/views/auth/EmailVerification.vue'),
            },
                path: '/verify-email/:token',
                name: 'VerifyEmail',
                component: () => import('@/views/auth/VerifyEmail.vue'),
            },
        ],
        path: '/admin',
        name: 'Admin',
        component: () => import('@/layouts/BackendLayout.vue'),
        meta: { requiresAuth: true },
        children: [
                path: 'home',
                name: 'Dashboard',
                component: () => import('@/views/backend/Home.vue'),
            },
        ],
const router = createRouter({
    history: createWebHistory(),
    routes,
})
router.beforeEach(async (to, from, next) => {
    const auth = useAuthStore()
    if (to.meta.requiresAuth && !auth.isAuthenticated) {
        return next('/login')
    if (to.path === '/login' && auth.isAuthenticated) {
        return next('/admin/home')
    return next()
```

9) Inside EmailVerification.vue

```
<!-- src/views/auth/EmailVerification.vue -->
<script setup>
import { ref } from 'vue'
import { useAuthStore } from '@/stores/auth'
import { useRoute } from 'vue-router'
const auth = useAuthStore()
const route = useRoute()
const email = ref(route.query.email | '')
const loading = ref(false)
const message = ref('A fresh email verification link has been sent to you.')
const error = ref(null)
const resendVerification = async () => {
    if (!email.value) {
        error.value = 'Please provide your email address.'
        return
    loading.value = true
    error.value = null
    try {
        const response = await auth.resendVerification(email.value)
        message.value = response.message
    } catch (err) {
        error.value = err.message | | 'Failed to resend verification email.'
    } finally {
        loading.value = false
</script>
<template>
    <v-container class="d-flex align-center justify-center" style="height:</pre>
100vh">
       <v-card class="pa-6" min-width="400">
            <v-card-title class="text-h5">Email Verification</v-card-title>
            <v-card-text>
```

```
{{ message }}
                <v-text-field v-model="email" label="Email" type="email" :error-</pre>
messages="error" required />
            </v-card-text>
            <v-card-actions>
                <v-btn color="primary" :loading="loading" block</pre>
@click="resendVerification">
                    Resend Verification Link
                </v-btn>
            </v-card-actions>
            <v-alert v-if="error" type="error" class="mt-4" dense>
                {{ error }}
            </v-alert>
        </v-card>
    </v-container>
</template>
```

10) Inside VerifyEmail.vue

```
<!-- src/views/auth/VerifyEmail.vue -->
<script setup>
import { ref, onMounted } from 'vue'
import { useRoute, useRouter } from 'vue-router'
import axios from '@/axios'
import { useAuthStore } from '@/stores/auth'
const route = useRoute()
const router = useRouter()
const auth = useAuthStore()
const loading = ref(true)
const message = ref('')
const error = ref(null)
const verifyEmail = async () => {
    try {
        const response = await axios.get(`/verify-email/${route.params.token}`)
        message.value = response.data.message
        if (response.data.status === 'success') {
            auth.token = response.data.access token
            localStorage.setItem('token', auth.token)
            await auth.fetchUser()
            setTimeout(() => router.push('/admin/home'), 2000)
```

```
} catch (err) {
        error.value = err.response?.data?.message | | 'Failed to verify email.'
    } finally {
       loading.value = false
onMounted(() => {
   verifyEmail()
})
</script>
<template>
   <v-container class="d-flex align-center justify-center" style="height:</pre>
100vh">
       <v-card class="pa-6" min-width="400">
           <v-card-title class="text-h5">Email Verification</v-card-title>
            <v-card-text>
               <v-progress-circular v-if="loading" indeterminate color="primary"</pre>
class="mb-4" />
               {{ message }}
               <v-alert v-if="error" type="error" dense>
                   {{ error }}
               </v-alert>
           </v-card-text>
       </v-card>
    </v-container>
</template>
```

11) Inside Login.vue

```
<!-- src/views/auth/Login.vue -->
<script setup>
import { ref } from 'vue'
import { useAuthStore } from '@/stores/auth'

const auth = useAuthStore()

const form = ref({
    email: '',
    password: '',
})

const loading = ref(false)
const errors = ref({
    email: null,
```

```
password: null,
    general: null,
})
const handleLogin = async () => {
    errors.value = { email: null, password: null, general: null }
    loading.value = true
    try {
        await auth.login(form.value)
    } catch (err) {
        const e = err.errors || {}
        errors.value.email = e.email?.[0] || null
        errors.value.password = e.password?.[0] || null
        errors.value.general = err.message | | 'Login failed'
    } finally {
        loading.value = false
</script>
<template>
    <v-container class="d-flex align-center justify-center" style="height:</pre>
100vh">
        <v-card class="pa-6" min-width="400">
            <v-card-title class="text-h5">Login</v-card-title>
            <v-form @submit.prevent="handleLogin" ref="formRef">
                <v-text-field v-model="form.email" label="Email" :error-</pre>
messages="errors.email" type="email" required />
                <v-text-field v-model="form.password" label="Password" :error-</pre>
messages="errors.password" type="password"
                    required />
                <v-btn type="submit" color="primary" :loading="loading" block>
                    Login
                </v-btn>
                <v-alert v-if="errors.general"</pre>
                     :type="errors.general === 'Please verify your email to
login.' ? 'info' : 'error'" class="mt-4"
                    dense>
                    {{ errors.general }}
                </v-alert>
            </v-form>
        </v-card>
    </v-container>
</template>
```

Register User:

1. Inside Register.vue

```
<!-- src/views/auth/Register.vue -->
<script setup>
import { ref } from 'vue'
import { useAuthStore } from '@/stores/auth'
const auth = useAuthStore()
// Form data for registration
const form = ref({
   name: '',
   email: '',
    password: '',
    password_confirmation: '',
const loading = ref(false)
const errors = ref({
   name: null,
   email: null,
    password: null,
    password_confirmation: null,
    general: null,
})
// Handle registration submission
const handleRegister = async () => {
    errors.value = { name: null, email: null, password: null,
password_confirmation: null, general: null }
    loading.value = true
    try {
        await auth.register(form.value)
        // Redirect to EmailVerification.vue happens in auth.js
    } catch (err) {
        const e = err.errors || {}
        errors.value.name = e.name?.[0] || null
        errors.value.email = e.email?.[0] || null
        errors.value.password = e.password?.[0] || null
        errors.value.password_confirmation = e.password_confirmation?.[0] || null
        errors.value.general = err.message || 'Registration failed'
    } finally {
        loading.value = false
```

```
</script>
<template>
    <v-container class="d-flex align-center justify-center" style="height:</pre>
100vh">
        <v-card class="pa-6" min-width="400">
            <v-card-title class="text-h5">Register</v-card-title>
            <v-form @submit.prevent="handleRegister" ref="formRef">
                 <v-text-field v-model="form.name" label="Name" :error-</pre>
messages="errors.name" required />
                 <v-text-field v-model="form.email" label="Email" :error-</pre>
messages="errors.email" type="email" required />
                <v-text-field v-model="form.password" label="Password" :error-</pre>
messages="errors.password" type="password"
                     required />
                <v-text-field v-model="form.password_confirmation" label="Confirm</pre>
Password"
                     :error-messages="errors.password confirmation"
type="password" required />
                 <v-btn type="submit" color="primary" :loading="loading" block>
                     Register
                 </v-btn>
                <v-alert v-if="errors.general" type="error" class="mt-4" dense>
                     {{ errors.general }}
                 </v-alert>
            </v-form>
        </v-card>
    </v-container>
</template>
```

2. Inside auth.js

```
throw error.response?.data || { message: 'Registration failed. Please
try again.' }
}
```

3. Inside index.js

```
path: '/register',
    name: 'Register',
    component: () => import('@/views/auth/Register.vue'),
},
```

```
router.beforeEach(async (to, from, next) => {
   const auth = useAuthStore()

   // List of auth-related route names to restrict for authenticated users
   const authRoutes = ['Login', 'EmailVerification', 'VerifyEmail', 'Register']

   // Redirect authenticated users away from auth routes
   if (auth.isAuthenticated && authRoutes.includes(to.name)) {
      return next('/admin/home')
   }

   // Protect admin routes for unauthenticated users
   if (to.meta.requiresAuth && !auth.isAuthenticated) {
      return next('/login')
   }

   return next() // Proceed to the requested route
})
```

Note: No need to change in backend logic.

Reset Password:

1. Auth.js

```
// Send password reset link
   const sendPasswordResetLink = async (email) => {
       try {
          const response = await axios.post('/send-reset-password-email', {
email })
          return response.data
       } catch (error) {
          }
   // Reset password
   const resetPassword = async (token, data) => {
       try {
          const response = await axios.post(`/reset-password/${token}`, data)
          return response.data
       } catch (error) {
          throw error.response?.data || { message: 'Failed to reset password' }
```

2. ForgetPassword.vue

```
countdown.value = 30
    timer = setInterval(() => {
       if (countdown.value > 0) {
            countdown.value--
        } else {
            clearInterval(timer)
            isButtonDisabled.value = false
    }, 1000)
// Send reset link and start countdown
const sendResetLink = async () => {
   if (!email.value) {
        error.value = 'Email is required'
        return
    loading.value = true
   message.value = ''
   error.value = null
   try {
        const response = await auth.sendPasswordResetLink(email.value)
        message.value = response.message // "Password reset link sent to your
email"
        startCountdown() // Start countdown after successful send
    } catch (err) {
        error.value = err.message || 'Failed to send reset link'
    } finally {
        loading.value = false
// Clean up timer on component unmount
onUnmounted(() => {
   if (timer) {
        clearInterval(timer)
</script>
<template>
   <v-container fluid class="d-flex align-center justify-center"</pre>
```

```
style="height: 100vh; background: linear-gradient(135deg, #e0eafc,
#cfdef3);">
        <v-card class="pa-8 elevation-10" min-width="400" max-width="450"</pre>
rounded="lg" color="white">
            <v-card-title class="text-h4 font-weight-bold primary--text text-</pre>
center">
                Forgot Password
            </v-card-title>
            <v-card-subtitle class="text-center mt-2 grey--text">
                 Enter your email to reset your password
            </v-card-subtitle>
            <v-form @submit.prevent="sendResetLink" class="mt-6">
                 <v-text-field v-model="email" label="Email" type="email" prepend-</pre>
inner-icon="mdi-email" outlined dense
                     color="primary" :error-messages="error" required />
                <v-btn type="submit" color="primary" :loading="loading"</pre>
:disabled="isButtonDisabled" block large rounded
                     elevation="2" class="mt-6">
                    {{ isButtonDisabled ? `Send Reset Link (${countdown}s)` :
 Send Reset Link' }}
                </v-btn>
                <v-alert v-if="message" type="success" class="mt-6" dense</pre>
outlined text>
                     {{ message }}
                 </v-alert>
                 <v-alert v-if="error" type="error" class="mt-6" dense outlined</pre>
text>
                     {{ error }}
                 </v-alert>
            </v-form>
            <router-link to="/login"</pre>
                class="text-decoration-none text-caption primary--text font-
weight-medium mt-4 d-block text-center">
                Back to Login
            </router-link>
        </v-card>
    </v-container>
</template>
<style scoped>
a:hover {
    text-decoration: underline;
</style>
```

3. ResetPassword.vue

```
<!-- src/views/auth/ResetPassword.vue -->
<script setup>
import { ref, onMounted } from 'vue'
import { useRoute, useRouter } from 'vue-router'
import { useAuthStore } from '@/stores/auth'
const route = useRoute()
const router = useRouter()
const auth = useAuthStore()
const form = ref({
    password: '',
    password_confirmation: '',
})
const email = ref('')
const token = ref('')
const loading = ref(false)
const message = ref('')
const error = ref(null)
onMounted(() => {
    email.value = route.query.email | ''
    token.value = route.query.token | ''
    if (!token.value | !email.value) {
        error.value = 'Invalid reset link'
})
const resetPassword = async () => {
    if (!token.value | !email.value) return
    loading.value = true
    message.value = ''
    error.value = null
    try {
        const response = await auth.resetPassword(token.value, form.value)
        message.value = response.message // "Password reset successfully"
        // Check email verification status
        await auth.fetchUser()
        if (auth.user?.email_verified_at) {
            setTimeout(() => router.push('/admin/home'), 2000) // Redirect after
```

```
} else {
            setTimeout(() => router.push({ path: '/auth/email-verification',
query: { email: email.value } }), 2000)
    } catch (err) {
        error.value = err.message | | 'Failed to reset password'
    } finally {
        loading.value = false
    }
</script>
<template>
    <v-container fluid class="d-flex align-center justify-center"</pre>
        style="height: 100vh; background: linear-gradient(135deg, #e0eafc,
#cfdef3);">
        <v-card class="pa-8 elevation-10" min-width="400" max-width="450"</pre>
rounded="lg" color="white">
            <v-card-title class="text-h4 font-weight-bold primary--text text-</pre>
center">
                Reset Password
            </v-card-title>
            <v-card-subtitle class="text-center mt-2 grey--text">
                Enter your new password
            </v-card-subtitle>
            <v-form @submit.prevent="resetPassword" class="mt-6">
                <v-text-field v-model="form.password" label="New Password"</pre>
type="password" prepend-inner-icon="mdi-lock"
                    outlined dense color="primary"
                     :error-messages="error && !form.password ? 'Password is
required' : null" required />
                <v-text-field v-model="form.password_confirmation" label="Confirm</pre>
Password" type="password"
                    prepend-inner-icon="mdi-lock-check" outlined dense
color="primary"
                    :error-messages="error && !form.password confirmation ?
'Confirmation is required' : null"
                     required />
                <v-btn type="submit" color="primary" :loading="loading" block</pre>
large rounded elevation="2" class="mt-6"
                     :disabled="!token || !email">
                     Reset Password
                </v-btn>
                <v-alert v-if="message" type="success" class="mt-6" dense</pre>
outlined text>
```

```
{{ message }}
                </v-alert>
                 <v-alert v-if="error" type="error" class="mt-6" dense outlined</pre>
text>
                     {{ error }}
                 </v-alert>
            </v-form>
            <router-link to="/auth/login"</pre>
                class="text-decoration-none text-caption primary--text font-
weight-medium mt-4 d-block text-center">
                Back to Login
            </router-link>
        </v-card>
    </v-container>
</template>
<style scoped>
a:hover {
    text-decoration: underline;
</style>
```

4. Inside index.js

```
{
    path: '/forgot-password',
    name: 'ForgotPassword',
    component: () => import('@/views/auth/ForgotPassword.vue'),
},
{
    path: '/reset-password',
    name: 'ResetPassword',
    component: () => import('@/views/auth/ResetPassword.vue'),
},
```

Note: No need to change in backend