

Routes

<?php

```
use CodeIgniter\Router\RouteCollection;
```

```
/**
```

```
 * @var RouteCollection $routes
```

```
 */
```

```
$routes->get('/', 'Home::index');
```

```
$routes->get('/products', 'ProductController::api_index');
```

```
$routes->get('/products/create_view', 'ProductController::create_view');
```

```
$routes->post('/products/create', 'ProductController::api_create');
```

```
$routes->get('/products/edit/(:num)', 'ProductController::api_edit/$1');
```

```
$routes->post('/products/update/(:num)', 'ProductController::api_update/$1');
```

```
$routes->get('/products/delete/(:num)', 'ProductController::api_delete/$1');
```

```
// Login routes
```

```
$routes->get('/login', 'LoginController::index');
```

```
$routes->post('/login', 'LoginController::authenticate');
```

```
$routes->get('/logout', 'LoginController::logout');
```

```
$routes->get('/signup', 'LoginController::signup');
```

```
$routes->post('/signup/register', 'LoginController::register');
```

```
// API Routes
```

```
$routes->group('api', function($routes) {
```

```
    $routes->get('products', 'api\APIProductController::index');
```

```
    $routes->post('products/create', 'api\APIProductController::create');
```

```
    $routes->get('products/getproduct/(:num)', 'api\APIProductController::getproduct/$1');
```

```
    $routes->put('products/update/(:num)', 'api\APIProductController::update/$1');
```

```
    $routes->delete('products/delete/(:num)', 'api\APIProductController::delete/$1');
```

```
});
```

ProductController

<?php

```
namespace App\Controllers;
class ProductController extends BaseController
{
    public function api_index()
    {
        $client = \Config\Services::curlrequest();
        $response = $client->request('GET', 'http://localhost/bsit3d-ci-4/public/api/products');
        $data = json_decode($response->getBody(), true);
        return view('product_view', $data);
    }
    // create view
    public function create_view()
    {
        return view('create_product');
    }
    public function api_create()
    {
        $data = [
            'product_name' => $this->request->getPost('product_name'),
            'description' => $this->request->getPost('description'),
            'price' => $this->request->getPost('price')
        ];
        /* use the api create method in apicontroller
        * http://localhost/bsit3d-ci-4/public/api/products/create
        * with POST method
        */
        $client = \Config\Services::curlrequest();
        $response = $client->request('POST', 'http://localhost/bsit3d-ci-4/public/api/products/create', [
            'form_params' => $data
        ]);
        if ($response->getStatusCode() == 201) {
            // Successfully created via API
            return redirect()->to('/products');
        } else {
            // Handle error
            throw new \Exception('Failed to create product via API');
        }
    }
    public function api_edit($id)
    {
        /* use the api index method in apicontroller
        * http://localhost/bsit3d-ci-4/public/api/products/getproduct
        * with GET method
        */
        $client = \Config\Services::curlrequest();
        $response = $client->request('GET', "http://localhost/bsit3d-ci-4/public/api/products/getproduct/{$id}");

        $data['product'] = json_decode($response->getBody(), true);
        return view('edit_product', $data);
    }
}
```

```

}
public function api_update($id)
{
    $data = [
        'product_name' => $this->request->getPost('product_name'),
        'description' => $this->request->getPost('description'),
        'price' => $this->request->getPost('price')
    ];
    /* use the api update method in apicontroller
    * http://localhost/bsit3d-ci-4/public/api/products/update/11
    * with PUT method
    */
    $client = \Config\Services::curlrequest();
    $response = $client->request('PUT', "http://localhost/bsit3d-ci-4/public/api/products/update/{ $id}", [
        'form_params' => $data
    ]);
    if ($response->getStatusCode() == 200) {
        // Successfully updated via API
        return redirect()->to('/products');
    } else {
        // Handle error
        throw new \Exception('Failed to update product via API');
    }
}

public function api_delete($id)
{
    //dd('test api delete');
    /* use the api delete method in apicontroller
    * http://localhost/bsit3d-ci-4/public/api/products/delete/11
    * with DELETE method
    */
    $client = \Config\Services::curlrequest();
    $response = $client->request('DELETE', "http://localhost/bsit3d-ci-4/public/api/products/delete/{ $id}");
    // dd($response->getBody());
    if ($response->getStatusCode() == 200) {
        // Successfully deleted via API
        return redirect()->to('/products');
    } else {
        // Handle error
        throw new \Exception('Failed to delete product via API');
    }
}
}

```

LoginController

```
<?php
namespace App\Controllers;

use CodeIgniter\Controller;
use App\Models\UserModel;

class LoginController extends Controller
{
    public function index()
    {
        return view('login');
    }

    public function authenticate()
    {
        $session = session();
        $model = new UserModel();

        $username = $this->request->getPost('username');
        $password = $this->request->getPost('password');

        $user = $model->where('username', $username)->first();

        if ($user && password_verify($password, $user['password'])) {
            $session->set([
                'user_id' => $user['id'],
                'username' => $user['username'],
                'logged_in' => true
            ]);
            return redirect()->to('/products');
        } else {
            $session->setFlashdata('error', 'Invalid username or password');
            return redirect()->to('/login');
        }
    }

    public function logout()
    {
        session()->destroy();
        return redirect()->to('/login');
    }

    public function signup()
    {
        return view('signup');
    }

    public function register()
    {
        $session = session();
        $model = new UserModel();
    }
}
```

```
$username = $this->request->getPost('username');
$password = $this->request->getPost('password');
$email = $this->request->getPost('email');
$confirmPassword = $this->request->getPost('confirm_password');

if ($password !== $confirmPassword) {
    $session->setFlashdata('error', 'Passwords do not match');
    return redirect()->to('/signup');
}

if ($model->where('username', $username)->first()) {
    $session->setFlashdata('error', 'Username already exists');
    return redirect()->to('/signup');
}

$data = [
    'username' => $username,
    'email' => $email,
    'password' => password_hash($password, PASSWORD_DEFAULT)
];

$model->insert($data);

$session->setFlashdata('success', 'Registration successful. Please login. ');
return redirect()->to('/login');
}
}
```

APIProductController

```
<?php
```

```
namespace App\Controllers\Api;
```

```
use App\Controllers\BaseController;
```

```
use App\Models\ProductModel;
```

```
use CodeIgniter\API\ResponseTrait;
```

```
use CodeIgniter\HTTP\IncomingRequest;
```

```
class APIProductController extends BaseController
```

```
{
```

```
    use ResponseTrait;
```

```
    protected $request;
```

```
    public function __construct()
```

```
    {
```

```
        $this->request = \Config\Services::request();
```

```
    }
```

```
    public function index()
```

```
    {
```

```
        $model = new ProductModel();
```

```
        $data['products'] = $model->findAll();
```

```
        return $this->respond($data);
```

```
    }
```

```
    public function getproduct($id = null)
```

```
    {
```

```
        $model = new ProductModel();
```

```
        $data = $model->find($id);
```

```
        if ($data) {
```

```
            return $this->respond($data);
```

```
        } else {
```

```
            return $this->failNotFound('Product not found');
```

```
        }
```

```
    }
```

```
    public function create()
```

```
    {
```

```
        $model = new ProductModel();
```

```
        // Get the input data
```

```
        $data = [
```

```
            'product_name' => $this->request->getPost('product_name'),
```

```
            'description' => $this->request->getPost('description'),
```

```
            'price' => $this->request->getPost('price')
```

```
        ];
```

```
        $id = $model->createProduct($data);
```

```
        if ($id) {
```

```
            $response = [
```

```
                'status' => 201,
```

```
                'error' => null,
```

```
                'messages' => [
```

```
                    'success' => 'Product created successfully'
```

```

    ]
  ];
  return $this->respondCreated($response);
} else {
  return $this->fail($model->errors());
}
}
public function update($id = null)
{
  $model = new ProductModel();
  $data = $this->request->getRawInput();
  $updated = $model->update($id, $data);
  if ($updated) {
    $response = [
      'status' => 200,
      'error' => null,
      'messages' => [
        'success' => 'Product updated successfully'
      ]
    ];
    return $this->respond($response);
  } else {
    return $this->fail($model->errors());
  }
}
public function delete($id = null)
{
  $model = new ProductModel();
  $data = $model->find($id);
  if ($data) {
    $model->delete($id);
    $response = [
      'status' => 200,
      'error' => null,
      'messages' => [
        'success' => 'Product deleted successfully'
      ]
    ];
    return $this->respondDeleted($response);
  } else {
    return $this->failNotFound('Product not found');
  }
}
}

```

ProductModel

```
<?php
```

```
namespace App\Models;
```

```
use CodeIgniter\Model;
```

```
class ProductModel extends Model
```

```
{
```

```
    protected $table = 'products';
```

```
    protected $primaryKey = 'id';
```

```
    protected $allowedFields = ['product_name', 'description', 'price'];
```

```
    // Create
```

```
    public function createProduct($data)
```

```
    {
```

```
        return $this->insert($data);
```

```
    }
```

```
    // Read
```

```
    public function getProduct($id)
```

```
    {
```

```
        return $this->find($id);
```

```
    }
```

```
    // Update
```

```
    public function updateProduct($id, $data)
```

```
    {
```

```
        return $this->update($id, $data);
```

```
    }
```

```
    // Delete
```

```
    public function deleteProduct($id)
```

```
    {
```

```
        return $this->delete($id);
```

```
    }
```

```
}
```


UserModel

```
<?php
```

```
namespace App\Models;  
use CodeIgniter\Model;
```

```
class UserModel extends Model  
{  
    protected $table      = 'users';  
    protected $primaryKey = 'id';  
  
    protected $allowedFields = [  
        'username',  
        'email',  
        'password',  
        'created_at',  
        'updated_at'  
    ];  
  
    protected $useTimestamps = true;  
    protected $createdField  = 'created_at';  
    protected $updatedField  = 'updated_at';  
  
    protected $returnType     = 'array';  
    protected $useSoftDeletes = false;  
  
    // Add custom methods if needed  
}
```