
Backend Assignment: Wishlist with Collections

Objective

Build a backend system to manage wishlists with collections. Users should be able to:

1. Create collections (folders) within their wishlists.
2. Add, update, and delete items within these collections.
3. Retrieve collections and their associated items.

APIs to Implement

1. Create, Get, Update & Delete collections
2. Add, Get & Delete Items in the collections
3. Get All Wishlist Items

Key Considerations

1. **Collections Hierarchy:**
 - Each wishlist can have multiple collections.
 - Each collection can have multiple items.
2. **Relational Structure:**
 - **Wishlists** → **Collections** → **Items**.
 - Ensure the foreign key relationships between these entities.

Assignment Tasks

1. **Tech Stack**
 - **Node.js**
 - Install dependencies: **express**, **sequelize**, **mysql2**,
 - Sequelize
 2. **Implement the APIs**

Use Sequelize models to manage wishlists, collections, and items. Ensure proper relationship mapping between these entities.
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Submission

Submit the following:

1. GitHub Repository Link
 2. Postman Collection
 3. Deployment URL (API Base URL)
 4. Loom Video Link
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Database Schema:

```
CREATE TABLE `wish_list` (  
  `id` int unsigned NOT NULL AUTO_INCREMENT,  
  `user_id` int unsigned NOT NULL,  
  `product_id` int unsigned NOT NULL,  
  `collection` varchar(191) COLLATE utf8mb3_unicode_ci NOT NULL,  
  `created_at` datetime NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  PRIMARY KEY (`id`),  
  UNIQUE KEY `product_id` (`product_id`),  
  KEY `user_id` (`user_id`),  
  CONSTRAINT `wish_list_ibfk_1` FOREIGN KEY (`user_id`) REFERENCES `users`  
  (`id`) ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
```

```
CREATE TABLE `users` (  
  `id` int unsigned NOT NULL AUTO_INCREMENT,  
  `role_id` int unsigned NOT NULL,  
  `name` varchar(191) COLLATE utf8mb3_unicode_ci NOT NULL,  
  `email` varchar(191) COLLATE utf8mb3_unicode_ci DEFAULT NULL,  
  `email_verify_token` varchar(255) COLLATE utf8mb3_unicode_ci DEFAULT NULL,  
  `is_email` tinyint(1) NOT NULL DEFAULT '0',
```

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`is_phone` tinyint(1) NOT NULL DEFAULT '0',
`phone` varchar(20) COLLATE utf8mb3_unicode_ci DEFAULT NULL,
`otp` varchar(6) COLLATE utf8mb3_unicode_ci DEFAULT NULL,
`password` varchar(191) COLLATE utf8mb3_unicode_ci DEFAULT NULL,
`is_active` tinyint(1) DEFAULT '0',
`status` tinyint NOT NULL DEFAULT '0',
`referral_code` varchar(20) COLLATE utf8mb3_unicode_ci DEFAULT NULL,
`phone_verified_at` timestamp NULL DEFAULT NULL,
`email_verified_at` timestamp NULL DEFAULT NULL,
`remember_token` varchar(100) COLLATE utf8mb3_unicode_ci DEFAULT NULL,
`reset_token` varchar(200) COLLATE utf8mb3_unicode_ci DEFAULT NULL,
`reset_token_expiry` bigint DEFAULT NULL,
`created_at` timestamp NULL DEFAULT NULL,
`updated_at` timestamp NULL DEFAULT NULL,
PRIMARY KEY (`id`),
UNIQUE KEY `id` (`id`),
KEY `fk_users_roles_idx` (`role_id`),
CONSTRAINT `fk_users_roles` FOREIGN KEY (`role_id`) REFERENCES `user_roles`
(`id`)
) ENGINE=InnoDB AUTO_INCREMENT=92 DEFAULT CHARSET=utf8mb3
COLLATE=utf8mb3_unicode_ci;
CREATE TABLE `products` (
  `id` int NOT NULL AUTO_INCREMENT,
  `user_id` int NOT NULL,
  `item_id` int NOT NULL,
  `product_name` varchar(255) COLLATE utf8mb4_general_ci NOT NULL,
  `brand_id` int DEFAULT NULL,
  `packed_weight` decimal(10,2) DEFAULT NULL,
  `package_length` decimal(10,2) DEFAULT NULL,
  `package_breadth` decimal(10,2) DEFAULT NULL,
  `package_height` decimal(10,2) DEFAULT NULL,
  `volumetric_weight` decimal(10,2) DEFAULT NULL,
  `chargeable_weight` decimal(10,2) DEFAULT NULL,
  `is_made_in_india` tinyint(1) DEFAULT '0',
  `is_hand_made` tinyint(1) DEFAULT '0',
  `is_cash_on_delivery` tinyint(1) DEFAULT '0',
  `is_customizable_product` tinyint(1) DEFAULT '0',
  `delivery_by` tinyint(1) DEFAULT '1' COMMENT '1- Shipping by IndiaZona, 0-
Shipping by Vendor',
  `return_policy_id` tinyint(1) DEFAULT NULL,
  `exchange_policy_id` tinyint(1) DEFAULT NULL,
  `hsn_code_id` int DEFAULT NULL,

```

```

`gst` decimal(5,2) DEFAULT NULL,
`tag_price` decimal(10,2) DEFAULT NULL,
`iz_commission` decimal(5,2) DEFAULT NULL,
`no_return_discount` double(8,2) DEFAULT '0.00',
`insurance_premium` tinyint(1) DEFAULT '0',
`variant_type` tinyint(1) DEFAULT '0',
`minimum_purchase_quantity` int DEFAULT '1',
`low_stock_quantity_warning` int DEFAULT '0',
`product_description` text COLLATE utf8mb4_general_ci,
`product_specification` text COLLATE utf8mb4_general_ci,
`thumbnail_image_url` varchar(255) COLLATE utf8mb4_general_ci DEFAULT NULL,
`pdf_specification_url` varchar(255) COLLATE utf8mb4_general_ci DEFAULT NULL,
`video_url` varchar(255) COLLATE utf8mb4_general_ci DEFAULT NULL,
`is_active` tinyint(1) DEFAULT '1',
`created_on` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP,
`updated_on` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE
CURRENT_TIMESTAMP,
PRIMARY KEY (`id`),
UNIQUE KEY `user_id` (`user_id`),
KEY `hsn_code_id` (`hsn_code_id`),
KEY `brand_id` (`brand_id`),
CONSTRAINT `products_ibfk_1` FOREIGN KEY (`hsn_code_id`) REFERENCES
`hsn_codes` (`id`),
CONSTRAINT `products_ibfk_2` FOREIGN KEY (`brand_id`) REFERENCES
`brands` (`id`) ON DELETE SET NULL ON UPDATE CASCADE
) ENGINE=InnoDB AUTO_INCREMENT=14 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_general_ci;

```