Database Schema for Sellix:

Tables:

• **users**: Central user management table with authentication details and personal information

- Contains admin flag to identify administrative users
- Stores password hashes securely, not plain text
- Enforces unique usernames and emails

• **sellers**: Represents merchant accounts linked to users

- Each seller has a customizable shop with name, description, and branding
- Commission rate tracks platform fees (default 5%)
- One user can have one seller account (one-to-one relationship)

• **categories**: Hierarchical product categorization system

- Self-referencing parent_id allows for nested category structure
- Categories can have subcategories (parent-child relationship)

• **products**: Core product catalog

- Each product belongs to one seller and one category
- Includes inventory management (stock_quantity)
- Supports regular and discounted pricing
- Uses indexes for optimized searching

• **product_images**: Stores multiple images per product

- Allows flagging a primary product image

• **reviews**: Customer product feedback system

- Rating constraint ensures values between 1-5
- Links both to products and users

• **orders**: Customer purchase records

- Tracks payment and delivery status with enum types
- Stores total purchase amount and shipping details

• **order_items**: Individual products within an order

- Links to the specific seller for each item
- Stores price at time of purchase (important for historical accuracy)

- **cart**: Shopping cart functionality

  - Prevents duplicate products with unique constraint
  - Temporary storage before order creation

- **pages**: Custom content pages for seller shops

  Allows sellers to create informational pages

  Uses slugs for private URLs

reviews

PK	id INT AUTO_INCREMENT
	product_id INT NOT NULL
	user_id INT NOT NULL
	rating INT NOT NULL CHECK (rating BETWEEN 1 A
	comment TEXT
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (product_id) REFERENCES products
	FOREIGN KEY (user_id) REFERENCES users(id) O

categories

PK	id INT AUTO_INCREMENT
	name VARCHAR(50) NOT NULL
	description TEXT
	parent_id INT DEFAULT NULL
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (parent_id) REFERENCES categorie

users

PK	id INT AUTO_INCREMENT
	username VARCHAR(50) NOT NULL
	email VARCHAR(100) NOT NULL
	password_hash VARCHAR(255) NOT
	first_name VARCHAR(50)
	last_name VARCHAR(50)
	address TEXT
	phone VARCHAR(20)
	is_admin BOOLEAN DEFAULT FALSE
	is_verified BOOLEAN DEFAULT FALS
	created_at TIMESTAMP DEFAULT CU
	updated_at TIMESTAMP DEFAULT C
	UNIQUE (username)
	UNIQUE (email)

sellers

PK	id INT AUTO_INCREMENT
	user_id INT NOT NULL
	shop_name VARCHAR(100) NOT NULL
	shop_description TEXT
	logo_url VARCHAR(255)
	banner_url VARCHAR(255)
	theme_color VARCHAR(7) DEFAULT '#ffffff'
	is_verified BOOLEAN DEFAULT FALSE
	commission_rate DECIMAL(5,2) DEFAULT 5.00
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	updated_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (user_id) REFERENCES users(id) O

products

PK	id INT AUTO_INCREMENT
	seller_id INT NOT NULL
	category_id INT
	name VARCHAR(100) NOT NULL
	description TEXT
	price DECIMAL(10,2) NOT NULL
	discount_price DECIMAL(10,2)
	stock_quantity INT DEFAULT 0
	barcode VARCHAR(50)
	sku VARCHAR(50)
	is_active BOOLEAN DEFAULT TRUE
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	updated_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (seller_id) REFERENCES sellers(id)
	FOREIGN KEY (category_id) REFERENCES catego
	INDEX (name)
	INDEX (price)

product_images

PK	id INT AUTO_INCREMENT
	product_id INT NOT NULL
	image_url VARCHAR(255) NOT NULL
	is_primary BOOLEAN DEFAULT FALSE
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (product_id) REFERENCES products

pages

PK	id INT AUTO_INCREMENT
	seller_id INT NOT NULL
	title VARCHAR(100) NOT NULL
	content TEXT
	slug VARCHAR(100) NOT NULL
	is_active BOOLEAN DEFAULT TRUE
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	updated_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (seller_id) REFERENCES sellers(id)
	UNIQUE KEY (seller_id, slug)

orders

PK	id INT AUTO_INCREMENT
	user_id INT NOT NULL
	total_amount DECIMAL(10,2) NOT NULL
	shipping_address TEXT NOT NULL
	order_status ENUM('pending', 'processing', 'shipped'
	payment_status ENUM('pending', 'paid', 'failed', 'refur
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	updated_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (user_id) REFERENCES users(id) O

order_items

PK	id INT AUTO_INCREMENT
	order_id INT NOT NULL
	product_id INT NOT NULL
	seller_id INT NOT NULL
	quantity INT NOT NULL
	price DECIMAL(10,2) NOT NULL
	subtotal DECIMAL(10,2) NOT NULL
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (order_id) REFERENCES orders(id)
	FOREIGN KEY (product_id) REFERENCES products
	FOREIGN KEY (seller_id) REFERENCES sellers(id)

cart

PK	id INT AUTO_INCREMENT
	user_id INT NOT NULL
	product_id INT NOT NULL
	quantity INT NOT NULL DEFAULT 1
	created_at TIMESTAMP DEFAULT CURRENT_TIME
	updated_at TIMESTAMP DEFAULT CURRENT_TIME
	FOREIGN KEY (user_id) REFERENCES users(id) O
	FOREIGN KEY (product_id) REFERENCES products
	UNIQUE KEY (user_id, product_id)