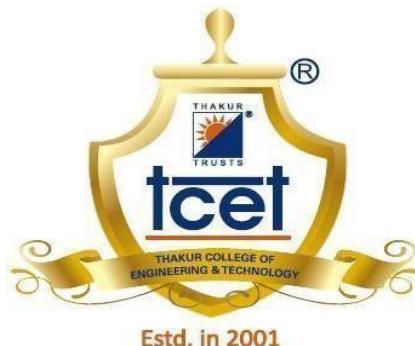


Project Report
On
DJANGO

by
Imaz Shaikh
T.Y B.Voc (Artificial Intelligence and Data Science)
Roll No: 13



Choice Based Credit Grading System with Holistic Student Development
(CBCGS-H 2023)

Bachelor of Vocation (2024-25)

Department of Skill Development & Vocational Studies

1 *Zagdu Singh Charitable Trust's (Regd.)*
THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai

Approved by All India Council for Technical Education(AICTE) and Government of Maharashtra

Tel:

A - Block, Thakur Educational Campus, Shyamnaranayen Thakur Marg, Thakur Village, Kandivali (East), Mumbai - 400 101

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CERTIFICATE

This is to certify that Mr./Ms. _____ student of BVOC, Thakur College of Engineering and Technology, Mumbai. They have satisfactorily completed the requirements of Project on Web Development-II as prescribed by **Thakur College of Engineering and Technology (An Autonomous College affiliated to University of Mumbai)**.

Signature: -----

Name: Subject Faculty In-charge

Thakur College of Engineering and Technology, Kandivali (East) Mumbai.

Date:

Place:

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Aim: The Gourmet Groove Project Report

1. Project Overview

The Gourmet Groove is a monolithic Django web application for an online chocolate store. Users can discover chocolates by category and brand, view detailed product pages, add items to wishlist and cart, apply coupons (including special event offers like birthdays), place orders, write reviews, and manage addresses. Admins manage products, brands, vendors, store locations, stock bins, orders, shipments, delivery agents, and coupons. The UI uses Django Templates with a responsive theme and local media storage.

High-level capabilities:

- **Browse & search** chocolates by 'Category' and 'Brand' with images and tags.
- **Product details:** images, description, price, rating, reviews, and "new/trending" signals.
- **Wishlist & Cart:** quick toggles, quantity updates, cart share links.
- **Checkout & Orders:** address selection, invoice generation, delivery status.
- **Coupons & Offers:** generic and contextual rules (e.g., birthday, first purchase, time-based).
- **Reviews & Ratings:** one review per user/order; automatic average rating updates.
- **Delivery & Logistics:** shipments, 3P partners, last-mile delivery assignments.
- **Inventory & Locations:** physical store locations, storage bins, and per-bin quantities.

2. Core Technologies

- **Backend:** Django (Python)
- **Database:** SQLite (development)
- **Auth:** Django built-in authentication (Signup/Login/Logout)
- **Templates/Static:** Django Templates, app `static/` and global assets
- **Media:** Django `MEDIA_URL`/`MEDIA_ROOT` for images and downloads
- **i18n:** Locale directories present (`locale/`) for future translations

3. Features Implemented

Catalog & Products ('store')

- Models: 'Category', 'Brand', 'Chocolate'
- Fields: name, description, price, tags, image, brand, category, rating, sales, created_at
- Behaviors: 'Chocolate.update_rating()', 'is_trending()', 'is_new()'

Cart & Orders ('store')

- Models: 'CartItem', 'Order'
- Order: invoice number generation, delivery status, subtotal/total calculation
- Addressing: 'UserAddress' with default selection and enforcement
- Cart sharing: 'CartShare' with expiring tokens

Wishlist & Reviews ('store')

- Models: 'WishlistItem' (unique per user/chocolate), 'Review' (unique per user/chocolate/order)
- Product rating auto-updates after reviews

Coupons & Offers ('store')

- Models: 'Coupon', 'CouponUsage', 'BirthdayOffer'
- Rules supported: percentage/fixed discount, min order, max discount, usage limit/time window
- Example codes handled in logic: 'SWEETBIRTHDAY', 'WELCOME10', 'FREESHIP', 'CHOCOLATEISLIFE', 'MIDNIGHTMUNCH'

Notifications & Returns ('store')

- Models: 'ReturnRequest' (rich reason choices, statuses), 'Notification' (read/unread, return-linked)

User Profiles & Addresses ('store')

- Models: 'UserProfile' (picture, DOB, phone; birthday checks), 'UserAddress' (default address enforcement)

Vendors ('vendor')

- Models: 'Vendor', 'VendorStore', 'VendorProduct', 'Brand'

- Map vendors to chocolates and optional brand; maintain vendor stores

Stock & Location (`stock_and_location/``)

- Models: 'StoreLocation', 'StorageLocation', 'StorageQuantity'
- Track quantities per-bin for each chocolate at a store

Logistics & Delivery (`logistic/``, `delivery/``)

- Logistics models: 'DeliveryEstimate', 'LogisticsPartner', 'ShipmentStatus', 'Shipment' (mark shipped/delivered)
- Delivery models: 'Vehicle', 'DeliveryAgent', 'DeliveryAssignment' (mark delivered)
- Integrations: 'Shipment' and 'DeliveryAssignment' both link to 'store.Order'

Admin Panel (`admin/`` registrations across apps)

- Admin interfaces to manage SKUs, orders, returns, shipments, agents, coupons, vendors

Django administration

Site administration

AUTHENTICATION AND AUTHORIZATION

Groups	+ Add	Change
Users	+ Add	Change

DELIVERY

Delivery Assignments	+ Add	Change
Delivery agents	+ Add	Change
Vehicles	+ Add	Change

LOGISTIC

Delivery Estimates	+ Add	Change
Logistics Partners	+ Add	Change
Shipment Statuses	+ Add	Change
Shipments	+ Add	Change

STOCK_AND_LOCATION		
Storage Locations	 Add	 Change
Storage Quantities	 Add	 Change
Store Locations	 Add	 Change
STORE		
Brands	 Add	 Change
Categorys	 Add	 Change
Chocolates	 Add	 Change
Coupon usages		 View
Coupons	 Add	 Change
Notifications	 Add	 Change
Orders	 Add	 Change
Return requests	 Add	 Change
VENDOR		
Brands	 Add	 Change
Vendor Products	 Add	 Change
Vendor stores	 Add	 Change
Vendors	 Add	 Change



4. Next Feature Implementations

Smart Recommendations

- Personalized suggestions using views, cart, wishlist, and order history
- Surfaces “Because you liked Dark Chocolate” and “Trending near you” sections

Social Logins

- Google/GitHub OAuth for faster signups and fewer password resets
- Increases conversion and reduces sign-in friction

Future items: payment gateway integration, order tracking page with live timeline, review moderation.)

1. Store App

The store app handles all the functionality in Gourmet Groove: Products, reviews, categories, user carts, and authentication views.

Model:User

Workings & Purpose:

- Authentication: The User model is used to log in, log out, and register new users.
- Related Models: Connected to models like Review, and Note using ForeignKey.
- Personalization: Each user's reviews are stored and shown only to them.
- Security: Passwords are hashed securely by Django. Only authenticated users can purchase chocolates.
- Admin Panel: Admins can manage users through Django Admin using this model.

Model: Category

Workings & Purpose:

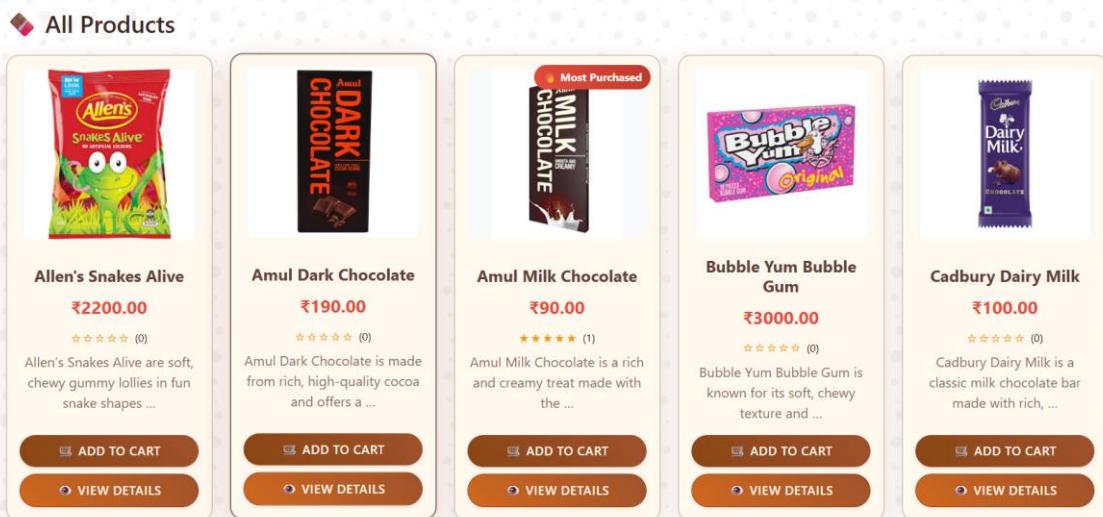
The Category model helps organize chocolate into their Company like "Ferrero Rocher", "Ghirardelli", or "Godiva". Each chocolate (Product) belongs to one category. This helps users filter and browse chocolates easily on the homepage.



Model: Product

Workings & Purpose:

- Represents each chocolate in your chocolate store.
- Displayed on homepage, detail pages, and used in carts.
- Allows each product (chocolate) to be wish listed by multiple users. Used in the heart icon logic to show in the wishlist.



A screenshot of a product listing page titled "All Products". The page displays five chocolate items in a grid format:

- Allen's Snakes Alive**: ₹2200.00. Rating: ★★★★☆ (0). Description: Allen's Snakes Alive are soft, chewy gummy lollies in fun snake shapes ...
- Amul Dark Chocolate**: ₹190.00. Rating: ★★★★☆ (0). Description: Amul Dark Chocolate is made from rich, high-quality cocoa and offers a ...
- Amul Milk Chocolate**: ₹90.00. Rating: ★★★★★ (1). Description: Amul Milk Chocolate is a rich and creamy treat made with the ...
- Bubble Yum Bubble Gum**: ₹3000.00. Rating: ★★★★☆ (0). Description: Bubble Yum Bubble Gum is known for its soft, chewy texture and ...
- Cadbury Dairy Milk**: ₹100.00. Rating: ★★★★☆ (0). Description: Cadbury Dairy Milk is a classic milk chocolate bar made with rich, ...

Each item card includes "ADD TO CART" and "VIEW DETAILS" buttons at the bottom.

Model: Review

Workings & Purpose:

- Stores user reviews on each chocolate with a star rating and optional comment.
- Displayed under the “Review” tab on the chocolate detail page.

All Reviews (1)

imaz Aug 06, 2025
★★★★★

A Very Good Chocolate

Model: Note

Workings & Purpose:

Allows users to write public reviews for any chocolate. Reviews appear in the “Reviews” tab on the chocolate detail page, visible to all users. Each review can include a rating and comments, and can only be edited or deleted by its author.

Customer Reviews

Write a Review

Rating:

★ ★ ★ ★ ★ ★

Comment (optional):

Share your experience with this product...

SUBMIT REVIEW

ISO 9001 : 2015 Certified
NBA and NAAC Accredited

Model: Profile

Workings & Purpose:

- Extends Django’s built-in User model to store additional role information.
- `user_type` determines if the user is an Admin or Customer
- Automatically created via Django signals when a new user registers.
- All superusers are automatically assigned ADMIN.
- Used in views and templates to restrict/allow features like Add Chocolate, Edit/Delete Product etc.



Ramsha's Profile

 **Profile Information**



EDIT PROFILE

Username: Ramsha

Email: ramsha181007@gmail.com

Date Joined: Jul 20, 2025

Phone: 730197563

Birth Date: Oct 18, 2007

Last Login: Oct 31, 2025 17:35

Delivery Addresses

Default

B-102 Amira Apartment
Mhada Malwani Malad West
Mumbai, Maharashtra 400095
India

DELETE

+ ADD ANOTHER ADDRESS

2. Chatbot App

The chatbot app handles automated user interaction inside The Gourmet Groove, like answering FAQs or helping users navigate the library.

Model: ChatSession

Workings & Purpose:

- Stores the chat history between a user and the chatbot.
 - Helps identify past conversations for personalization.
 - Tied to a specific logged-in user.

A screenshot of a mobile messaging application. The top bar is dark brown with the text "GourmetGrove Assistant" in white. To the right of the text are three icons: a white "X", a white minus sign, and a white "X" inside a circle. The main message area has a light gray background. A large, semi-transparent gray bubble contains the text: "Hello! I'm your GourmetGrove assistant. How can I help you today?". Below this bubble, the time "11:15 PM" is displayed. At the bottom of the screen are three dark brown rounded rectangular buttons, each containing a white question: "What products do you have?", "How can I track my order?", and "What are your shipping policies?".

3. Delivery App

The delivery app manages chocolate deliveries for orders.

Model: DeliveryAgent

Workings & Purpose:

- Registers delivery boys/drivers.
- Tied to Django user for login if needed.
- Lets admin assign deliveries to agents.

4. Logistics App

Handles **supply chain and stock management** in The Gourmet Groove.

5. Vendor App

The vendor app manages external vendors who supply chocolate.

Model: Vendor

Workings & Purpose:

- Links each vendor to a Django User account for authentication/ownership.
- Holds the vendor's profile info (name, logo, description, contact).
- Acts as the parent for products so they can be filtered by store/vendor.

Model: VendorProduct

Workings & Purpose:

- Creates a many-to-many bridge between vendors and products.
- Allows each vendor to upload/manage products from the store catalog.
- Helps display “Products by this vendor” in the vendor profile/storefront.

6. Warehouse App

The warehouse app stores details of chocolate **warehouses**.

Model: Warehouse

Workings & Purpose:

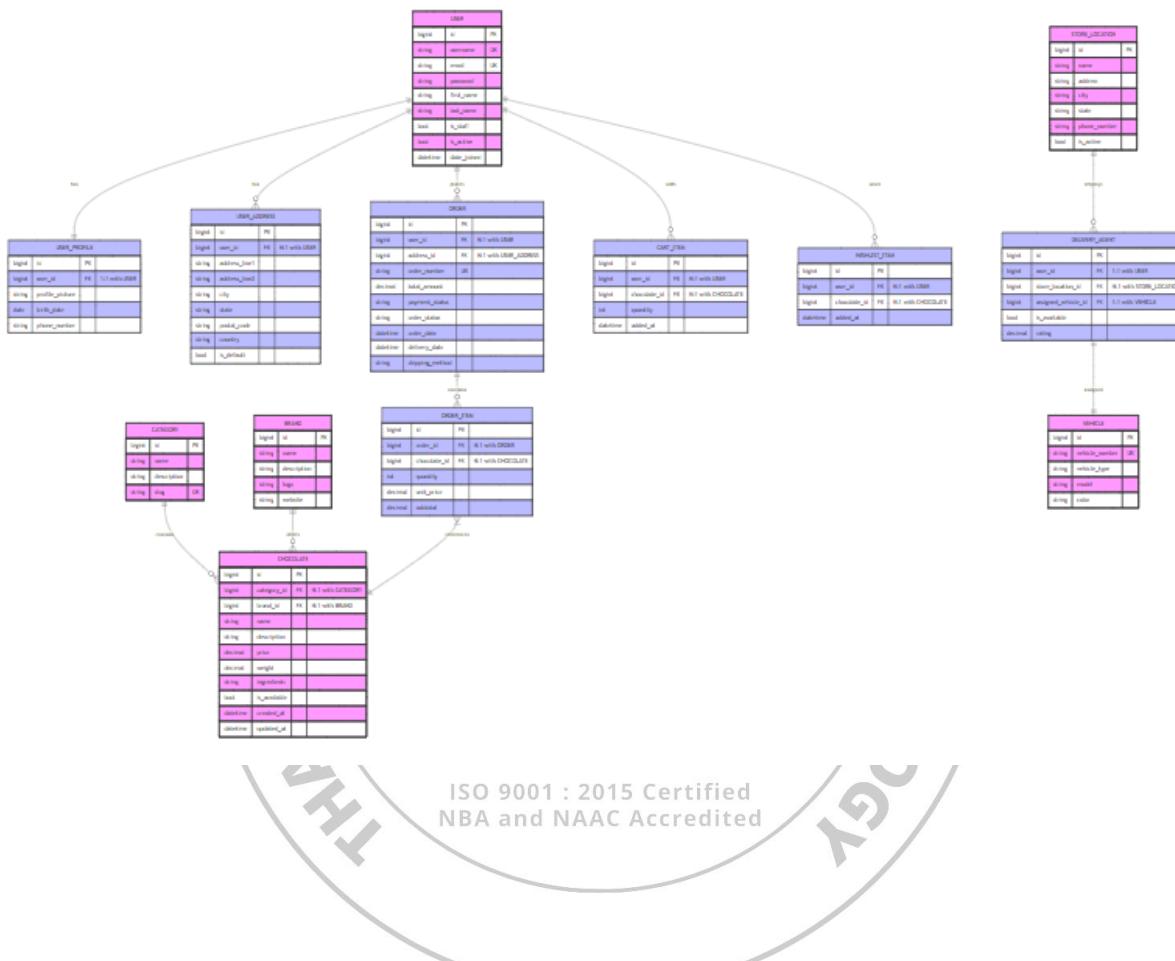
- Stores where inventory is kept.
- Useful if you have multiple warehouses.
- Each warehouse can be tied to a manager (user).

Model: Inventory

Workings & Purpose:

- Tracks how many units of each product are stored in each warehouse.
- Updates whenever stock is added/removed.
- Essential for order fulfilment and stock availability check.

8. ER DIAGRAM:



Conclusion: The Gourmet Groove delivers a complete chocolate e-commerce experience on Django, covering catalog management, carts, orders, coupons, returns, vendors, inventory by location, logistics, and last-mile delivery. The design leverages clear model relations (e.g., `store.Order` ↔ `logistic.Shipment` and `delivery.DeliveryAssignment`) and practical business rules (birthday/first-order coupons, default addresses, review-driven ratings). With the proposed roadmap for recommendations and social logins, the project is well-positioned for higher engagement, faster onboarding, and scalable growth.

For Faculty Use

Correction Parameters	Formative Assessment [40%]	Timely completion of Practical [40%]	Attendance / Learning Attitude [20%]	
Marks Obtained				

