

# Project Report

On

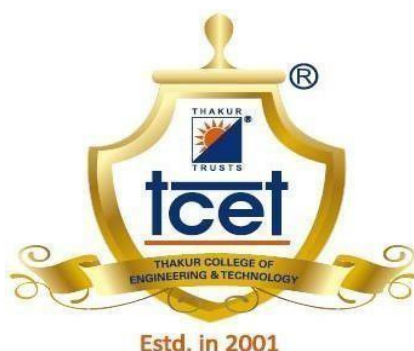
## DJANGO

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**

*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, Shyamnarayan Thakur Marg, Thakur Village, Kandivali (East), Mumbai - 400 101

Tel.: 022-6730 8000 / 8106 / 8107 Telefax: 022-2846 1890 • Email: [tcet@thakureducation.org](mailto:tcet@thakureducation.org) • Website: [www.tcetmumbai.in](http://www.tcetmumbai.in) [www.thakureducation.org](http://www.thakureducation.org)



*Lagdu 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(GoM)*

*Conferred Autonomous Status by University Grants Commission (UGC) for 10 years w.e.f. A.Y 2019-20*

*Amongst Top 200 Colleges in the Country, Ranked 193<sup>rd</sup> in NIRF India Ranking 2019 in Engineering College category*

*• ISO 9001:2015 Certified • Programmes Accredited by National Board of Accreditation (NBA), New Delhi*

*• Institute Accredited by National Assessment and Accreditation Council (NAAC), Bangalore*

## 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:



## 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:

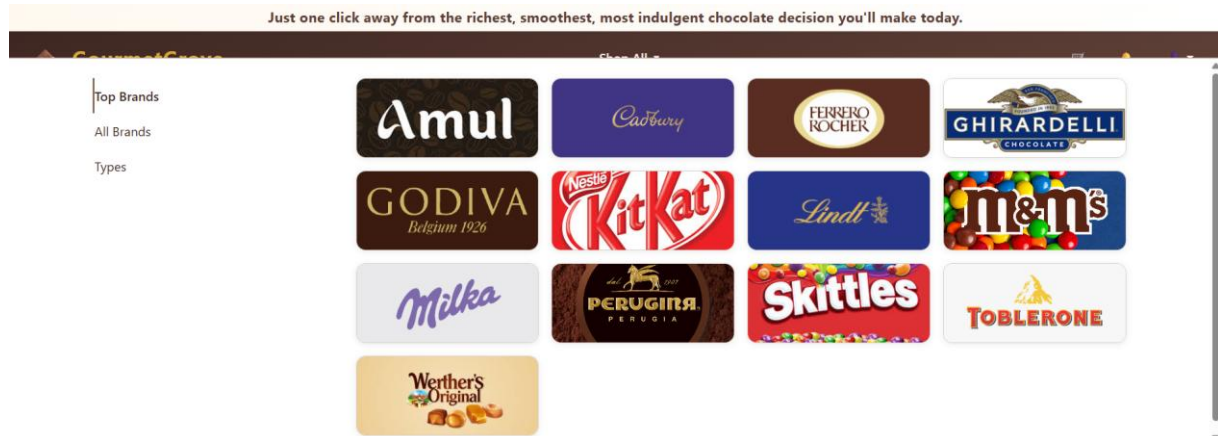
- Authentication: The User model is used to log in, log out, and register new users.
- Related Models: Connected to models like Review, and Note using ForeignKey.
- Personalization: Each user's reviews are stored and shown only to them.
- Security: Passwords are hashed securely by Django. Only authenticated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

### Model: Category



## Workings & Purpose:

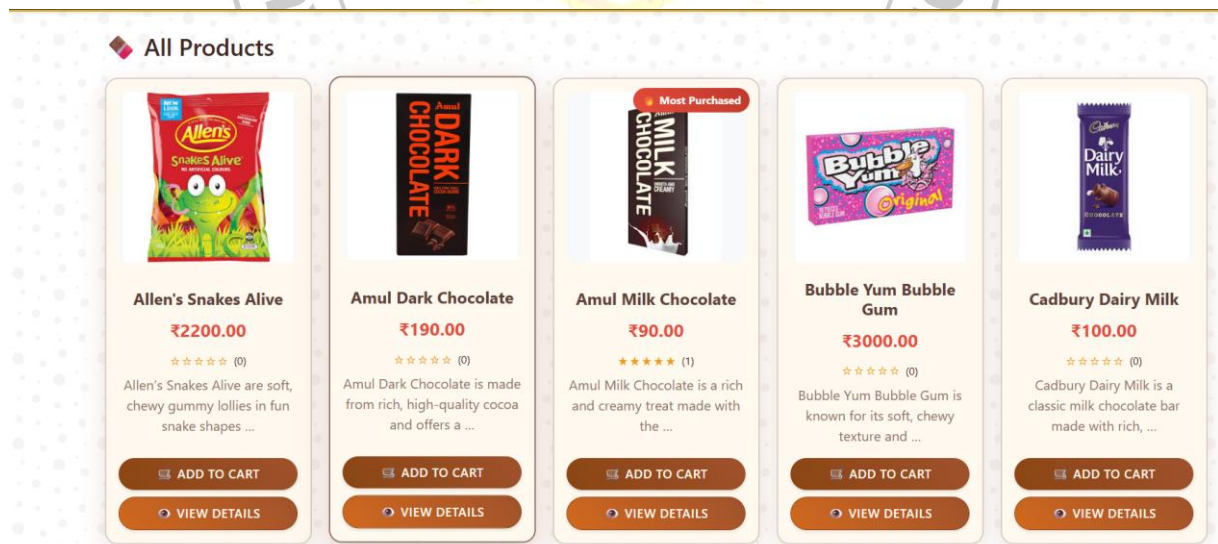
The Category model helps organize chocolate into their Company like "Ferrero Rocher", "Ghirardelli", or "Godiva". Each chocolate (Product) belongs to one category. This helps users filter and browse chocolates easily on the homepage.



## **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.



## 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

## 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



**Username:** Ramsha

**Phone:** 730197563

**Email:** ramsha181007@gmail.com

**Birth Date:** Oct 18, 2007

**Date Joined:** Jul 20, 2025

**Last Login:** Oct 31, 2025 17:35

EDIT PROFILE

### Delivery Addresses

Default

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

DELETE

+ ADD ANOTHER ADDRESS

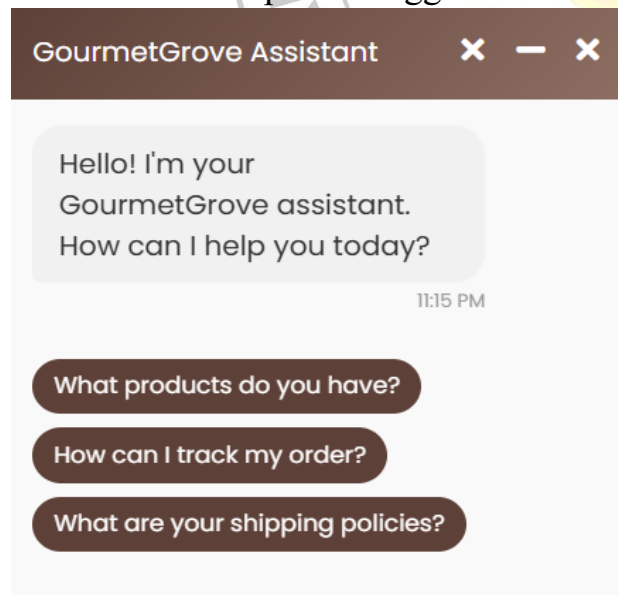
## 2. Chatbot App

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.



Type your message...





### 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).

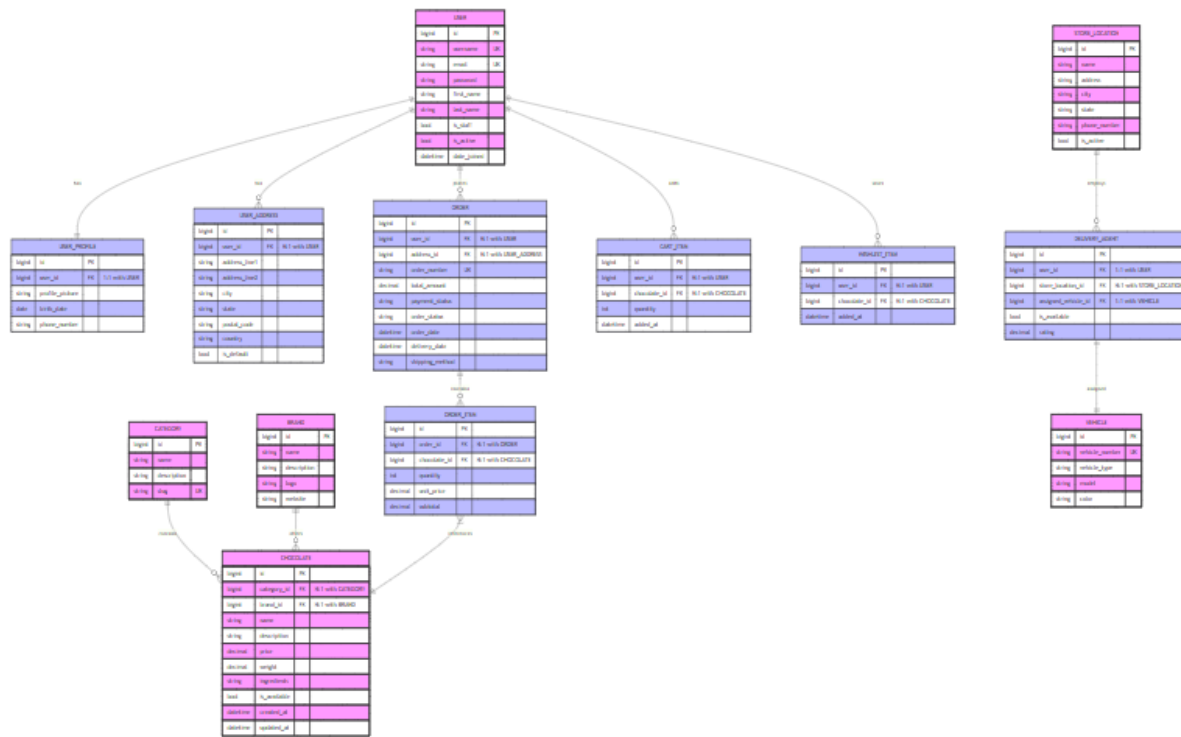
#### Model: Inventory



### 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				

