

Dataset Description

The Customer Support Ticket Dataset is a dataset that includes customer support tickets for various tech products. It consists of customer inquiries related to hardware issues, software bugs, network problems, account access, data loss, and other support topics. The dataset provides information about the customer, the product purchased, the ticket type, the ticket channel, the ticket status, and other relevant details.

Features Description:

- **Ticket ID:** A unique identifier for each ticket.
- **Customer Name:** The name of the customer who raised the ticket.
- **Customer Email:** The email address of the customer (Domain name - [@example.com](#) is intentional for user data privacy concern).
- **Customer Age:** The age of the customer.
- **Customer Gender:** The gender of the customer.
- **Product Purchased:** The tech product purchased by the customer.
- **Date of Purchase:** The date when the product was purchased.
- **Ticket Type:** The type of ticket (e.g., technical issue, billing inquiry, product inquiry).
- **Ticket Subject:** The subject/topic of the ticket.
- **Ticket Description:** The description of the customer's issue or inquiry.
- **Ticket Status:** The status of the ticket (e.g., open, closed, pending customer response).
- **Resolution:** The resolution or solution provided for closed tickets.
- **Ticket Priority:** The priority level assigned to the ticket (e.g., low, medium, high, critical).
- **Ticket Channel:** The channel through which the ticket was raised (e.g., email, phone, chat, social media).
- **First Response Time:** The time taken to provide the first response to the customer.
- **Time to Resolution:** The time taken to resolve the ticket.
- **Customer Satisfaction Rating:** The customer's satisfaction rating for closed tickets (on a scale of 1 to 5).

Task Description

Project Task	Dataset Application
Data Upload & Preprocessing	Load CSV with pandas; extract relevant fields: Ticket Description, Ticket Type, Priority, Dates, etc.
Chunking and Embedding	Chunk long ticket descriptions; create embeddings for semantic search with sentence-transformers or LLM API.
Sentiment & Intent Extraction	Use ticket priority and customer satisfaction as labels or for model fine-tuning; extract intents from ticket subject/description.
Suggested Replies	Use ticket type + issue text to prompt LLM for draft responses.
Vector DB Integration	Store embeddings of ticket texts; enable semantic search queries over past tickets.
Workflow & UI	Build interfaces to upload CSVs, show summaries (e.g., counts of ticket types), and chat to query or suggest replies.