

## Research/ Insights gained:

1. According to the store owner, the main thing in business is popularity. Their daily customers are those who live nearby. So, this bot can help in promoting his business.
2. He needs to track the sales which can help him make right decisions about pricing, offers and discount, and inventory management.
3. According to him, 40% of customers are fixed (those lives nearby) but it is difficult to retain the other 60%.
4. Sometimes it is difficult to manage a variety of products as per customer's demand.
5. On the other hand, customers expect the store to be easily accessible and offers a variety of products.
6. They expect the products sold in store to be of good quality and a return/refund policy for expired and defective products (if purchased).
7. According to the customers, the price of items should be reasonable. Even 5%-10% discount on total bill makes them happy.
8. Customers expect to have a range of payment options, including cash, card and UPI.
9. According to most of the customers, the most important aspect to build a loyal customer base is the behaviour of store owner, the staff and quality product.

## About:

The code is implemented using Python language with the help of telebot library to interact with the Telegram API. It defines several command handlers that allows user to view the inventory, add items to their cart, and place orders. The bot has a handler for user messages that checks if the message is an item from the inventory. If it is, the bot adds the item to the user's cart otherwise sends a try-again message.

It also provides information about daily offers and discounts. The handler for user messages, allows users to add items to their cart by sending the name of the item. When the user is ready to check-out, they can use the /checkout command, which calculates the total price of the items in the cart and generates a bill. Finally, the cart is cleared, and the user is informed that they can provide feedback using the /feedback command.

## Basic Features:

1. The **'start'** function sends a welcome message to the user.
2. The **'inventory'** function sends a message with a list of items available at the store along with the brand name, quantity, price, and remaining stock.
3. The **'order'** function helps the user to add items in the cart.
4. The **'checkout'** function generates the bill which contains items added in the cart, quantity of items added, price per-item, and the total price along with the order confirmation message.
5. The **'help'** function sends a message with a list of available commands user may use along with the contact information of the store.
6. Finally, the script starts the bot's polling process to receive updates.

## Other key features:

1. The **interactive description** of the bot helps in catching user's attention.
2. There is also a **'menu'** with the list of available commands, which user can refer to anytime during the conversation.
3. The **'offers'** function sends a message with a list of available offers. The list can be updated by the store owner on daily basis.
4. The **'feedback'** function takes the feedback of the user and sends it to the store owner along with user's first name and username.
5. While executing the **'checkout'** function the bot sends the information i.e.the bill generated to the store owner along with the first name and username of the customer which further can be used by the store owner to interact with the customer such as for asking delivery address, mode of shipment (pickup/delivery), and payment mode.

**Extra features we can add during further updates to enhance the functionality of bot:**

1. Order tracking: The ability for users to receive updates on the status of their order (e.g.confirmed, in progress, shipped, delivered).
2. Payment integration: A payment gateway to allow users to pay for their orders directly through the bot.
3. User database: Integrate the bot with a database that saves information about the customer as well as maintain a file for feedback provided.
4. Recommendation engine: Implement a recommendation engine that suggests products based on related product such as whenever a customer adds any soft-drink in the cart we can recommend some snacks.
5. Stock management: Implement a feature to automatically update the inventory count as users place orders, and notify admins when stock levels reach a certain threshold.
6. User engagement: Send occasional updates and offers to users to keep them engaged with the bot and encourage them to make more purchases.

**Sample Images:**





