ХАЛЫҚАРАЛЫҚ УНИВЕРСИТЕТІ

МЕЖДУНАРОДНЫЙ УНИВЕРСИТЕТ

INTERNATIONAL UNIVERSITY

Telegram Bot McDonalds

Python Programming course
Final project

Date: 25/12/23

Team

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Height Measurement (sm)

The idea of this project is Telegram bot that serves as a virtual assistant for fast food enthusiasts, allowing them to explore menus, do orders, and receive updates on promotions and discounts.

The goal of this project is to simplify the fast food ordering process for users by providing a quick and easy-to-use interface within the Telegram platform.

Activity diagram

1

/start 20:02

Добро пожаловать в McDonalds, Di! 20:02

Пожалуйста, выберите опцию ниже, чтобы продолжить 20:02

Нажмите чтобы увидеть наше меню

2

BigMac бургер 20:02

20:02

3

Два больших рубленых бифштекса из натуральной цельной говядины с двумя ломтиками сыра на карамелизованной булочке, заправленной горчицей, кетчупом, луком и двумя кусочками маринованного огурчика🍔 20:02

Цена: 2250 тг 20:02

Добавить в корзину

4

Начать заново

Проверить заказ

5

Добавить в корзину

Картошка фри (1) добавлено в корзину 22:21

Проверить заказ 22:22

6

Ваш заказ: 22:22

Картошка фри 22:22

Итог: 650 тг 22:22

Хотели бы вы завершить заказ? Отправьте ваше местоположение в текстовом виде: 22:22

Астана 22:22

Ваше местоположение сохранено. Спасибо за заказ! 22:22

Class diagram

```python
class SqliteCursor:
    def __init__(self, dbname):
        self.connection = sqlite3.connect(dbname)

    def __enter__(self):
        return self.connection.cursor()

    def __exit__(self, exc_type, exc_val, exc_tb):
        try:
            self.connection.commit()
        except sqlite3.Error as e:
            print(e)
            self.connection.rollback()
```

This class serves as a context manager to manage SQLite database connections and cursors. It is used with the with statement to ensure proper handling of database transactions.

The functions utilize the **SqliteCursor** class to manage database connections and cursors within a context manager. They execute various SQL queries to interact with the SQLite database.

Conclusion

- **During the project, the following tasks were completed:**

  1. Developed a functional Telegram bot that allows users to browse a fast food menu, do orders, and receive updates on their orders.
  2. Successfully integrated the bot with an SQLite database to store menu items, user carts, and order information.
  3. Implemented features such as adding items to the cart, calculating order summaries, and handling order statuses.

- **Challenges encountered:**

  1. Initially faced challenges in designing an effective database schema to store menu items, user information, and order details.
  2. Faced challenges in optimizing the user interface to ensure a seamless and intuitive ordering experience within the constraints of the Telegram platform.
  3. There were difficulties implementing the add to cart functionality.

- **Approaches used to resolve challenges:**

  1. Collected user feedback through testing phases to optimize the user interface for a more user-friendly and intuitive experience.
  2. Implemented messaging techniques to provide users with real-time updates on their orders, overcoming challenges related to the delay in Telegram's message delivery.
  3. Collaborated with team members to refine the database schema, ensuring that it accommodates the project's requirements for menu items, user data, and order information.

Thank you!