Human-computer Interaction

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**Introduction**

With the advent of new technologies, we have significantly become dependent on equipment, computers, and other tools to undertake our daily tasks. For this reason, we find ourselves interacting with at least one type of interface in our everyday tasks. The primary purpose of an interface is to help and enable users to communicate and interact with a particular device or machine. The most common types of interface include a touch-sensitive interface, graphical user interface and the menu interface. An example of a device that utilizes a touch interface is our smartphones. In this essay, we shall analyze the essential features of the user interface in a specific organization.

**Description of the organization**

For this assignment, I chose Burger King, which is the second-largest fast-food restaurant chains in the world, with McDonald leading. Burger King is a business that deals with fast food consisting of primarily French fries, hamburgers, sandwiches, soft drinks, desserts and other fast food items. Burger King is a multinational enterprise with branches span across the world. While it is predominantly present in the United States of America, the business has been accepted in most of the other countries as well.

With the popularity of fast food items being increasingly common in major cities across the world, there is a need to ensure that the outlets have a fast and efficient system. The system should be able to track orders, money received, and capture the sales and the profit of the business at every branch. Developing a system that will be used by the waiters to capture the sales of the outlet is essential in ensuring that the business monitors its operations and progress. While most of the Burger King’s outlets are self-service, some waiters take the orders from the customers, post it in the system, give the customers the receipts and finally give the customers their orders either in the form of take-away or self-service.

**Uses of the data**

The interface that will be operated by the waiters will be used to capture the orders of the customers, which will then be followed by the receipt after payment. Capturing the number of orders placed in analyzing how the business is performing. The branch manager can take the data collected in a given period and assess how the business has performed in the given period. The number of orders represents the number of sales of the business, and this can be used to evaluate the profit that the business has been in the given period by subtracting the business’s expenses.

To ensure the security and integrity of the system, the user interface must have an authentication protocol, where the staff must log-on to the machine before operating. After logging in, the staff will be greeted by a user interface that is clean and straight forward. The UI screen design will entail a menu interface for easy navigation. The food items sold in the shop will be categorized into different categories depending on the type. When the staff selects the category, it will open up a menu highlighting the different items in the category that are being sold in the shop. The UI will also have a search bar, which allows the staff to manually type the name of the item, in case they are having difficulty to find the item through the menu.

**Requirements to ensure the UI captures data in multiple languages**

To ensure the user interface design captures data input in multiple languages, the UI will be designed in such a way that it reserves enough space in the UI to fit long texts by avoiding the use of many columns in the design. Texts such as the names of the items, combos, and even offers should be designed in a way the long texts can wrap to the next lines. Designing the UI in such a way that allows enough space for those messages that may take different amounts of space in a different language (Marcus & Wang, 2018).

One should also ensure that language direction is taken into consideration. With Burger King being an internationally recognized business that is opening branches across countries, it is crucial to design a user interface that takes into consideration language directions. One of the ways in which language direction can be implemented is through designing an interface that can be mirrored to allow for languages that are read from right to left. While texts can be easily mirrored, one should also consider how icons will look in a mirrored state. If the icons will have a different design when mirrored, it is vital to design another logo that befits the direction of the text. In some cases, it would require the assistance of a translator or a native speaker to help in translating the words, icons, and the entire interface to ensure everything is in order. In some cases, a shift from the menu-driven interface to a graphical user interface may be necessary for the right language direction to be implemented.

One should also consider the standard formats of units and measurements in different countries. Indicating the weight of the products in pounds in a country that usually uses kilograms can be confusing to the customer. It may also appear as unattractive to the potential customers, who may opt to go to their usual places of food. Imperial and metric measurement units should be implemented accurately and effectively, as per the country’s standard formats.

**Conclusion**

The user interface design is a very crucial component in any system. Companies that employ a secure and straightforward UI that is fast and accurate are likely to experience efficiency in their operations. When designing a UI that will be used in other countries or a different language, one should consider various features such as text direction, standard units of measurements, and space for the texts. Human-computer interaction engineers should ensure the UI is simple to learn, accurate, and responsive for an effective system.

References

Marcus, A., & Wang, W. (Eds.). (2018). *Design, User Experience, and Usability: Designing Interactions: 7th International Conference, DUXU 2018, Held as Part of HCI International 2018, Las Vegas, NV, USA, July 15-20, 2018, Proceedings* (Vol. 10919). Springer.