AR SYSTEM CONFIGURATION

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Abstract: *India with its huge population has become the potential market for all the products starting from electronic items to Luxurious items. The invasion of e-commerce has given the liberty on various aspects to choose one from many, and the liberty to not choose, without even visiting physically and always easily accessible. However, Traditional e-commerce cannot give information on a minute scale to the consumers or the customers. The idea presented in this paper displays how augmented reality can be used to collect and provide information in an interactive way. This Paper focuses on preparing a system configuration Information Provision system using Augmented reality, which can be implemented in any of the products.*

Keywords: Current AR, VR, eCommerce, User Interactive systems

1. INTRODUCTION

The Augmented Reality (AR) is a live, immediate or roundabout, perspective on a physical, genuine condition whose components are expanded by PC produced tangible info, such as, sound, video, designs or GPS information. Increased Reality is a method that engages customers to work together with their physical environmental factors through the overlay of cutting edge information. While being examined for a significant length of time, even more starting late, Augmented Reality moved out of the assessment labs and into the field. While most of the applications are used inconsistently and for one explicit task simply, present and future circumstances will give a relentless and multi-reason customer experience. Therefore, in this paper, we display the possibility of Unavoidable Augmented Reality, proposing to give such an experience by recognizing the customer's present setting and altering the AR structure considering the developing necessities and prerequisites. We present scientific classification for Pervasive Augmented Reality and setting mindful Augmented Reality, which characterizes setting sources and setting targets significant for actualizing such a setting mindful, ceaseless Augmented Reality experience.

We further sum up existing methodologies that contribute towards Pervasive Augmented Reality. Based on scientific categorization and overview, we distinguish challenges for future exploration bearings in Inescapable Augmented Reality. There are a couple of shopping applications accessible in the market including eBay, Amazon. Such applications have basic functionalities like showing appraisals, surveys, item subtleties, reclamation of coupons, posting item deals, and so on. Our application has a selective element of item recovery by catching the item through the camera.

2. EXISTING SYSTEM

1. Mall Assistant:

In several large retail stores, such as malls, sport, or food stores, the customer often feels lost due to the difficulty in finding a product. Although these large stores usually have visual signs to guide customers toward specific products, sometimes these signs are also hard to find and are not updated. In this paper, we propose a system that jointly combines deep learning and augmented reality techniques to provide the customer with useful information. Customers can use their mobile devices to take a picture of the area where they are located within the store. The combination of deep learning systems together with augmented reality techniques shows promising results toward improving user experience in retail/commerce applications: branding, advanced visualization, personalization, enhanced customer experience, etc.

2. Product finder Utilizing Augmented Reality:

One can see the points of interest of the item to be bought by examining the picture of the item or the genuine item itself. The application would get the proper points of interest giving out the item name, cost, depiction, size, styles, and accessibility. It likewise shows the surveys from the past clients of the items, their rating, and furthermore their criticism in light of which the clients can buy it on the web or request for store pickup.

3. Store locator:

The user can experience Augmented Reality by just holding the mobile and pressing store finder button which would display the details of various nearby stores/malls available for shopping. It shows the 3D view of the environment having the nearby store details with the help of the data fetched from the GPS. It also has the capability to demonstrate the store details in a 3D view on the map.

4. Tourist Hotspots Using Augmented Reality:

Local tourist boards can generate a local map or 3D virtual objects showing the nearby key tourist spots like shopping malls, stores, attractions, and services. This helps in improving the economy by encouraging spending. This feature will be very useful and will be welcomed by a lot of tourists.

3. IMPLEMENTATION

The proposed system has a software component, which includes Unity Development Tool and Vuforia is a software development kit(SDK) that permits the improvement of AR applications for cell phones, being perfect with the latest gadgets. In terms of usefulness, it's conceivable to feature that Vuforia utilizes non-obvious characteristic markers, that is, isn't important to build up a particular marker and bridle it to the item to be recognized by the framework, not at all like what's seen in applications created utilizing AR toolbox.

The main objective of this research is reducing the time of the user in order to provide the best technological experience in the market by using Unity and Android studio as the technological stack and implementing the best way possible to display the configuration of the system by just scanning its QR Code. The QR code, which will be scanned using the developed Mobile application, which reads the data in the QR code and replica the system in real-world interactive experience way, the image will be displayed using persistence of light i.e LED reflections using Unity, which enables the user to interact with the system for information. It will also provide you details of the product in all dimensions and moreover it can be done in just one click even if the system is switched off. The user's time will reduce and he will not have to manually search for system configuration.

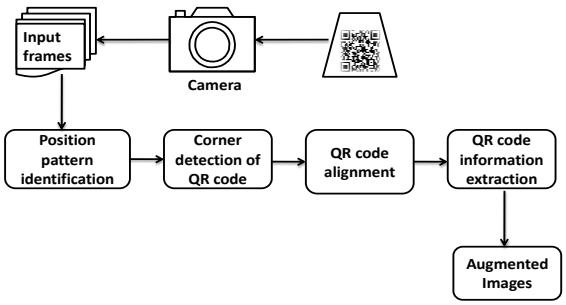

Fig. 1: Basic Block Diagram of Prototype

4. EXPERIMENTAL RESULT AND DISCUSSION

In order to evaluate the idea into real-time, a prototype was developed and subjected for a series of tests and evaluations, and the results were analyzed. The application is tested with various sceneries and the collected databases of results were utilized to increase the accuracy of the system. The run time and the implementation of marker less designs are being planned as the future scope of the work.

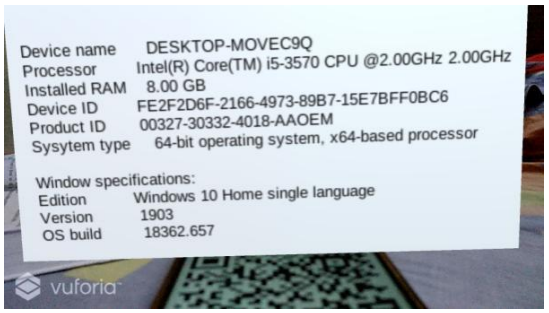

Fig. 2: Output

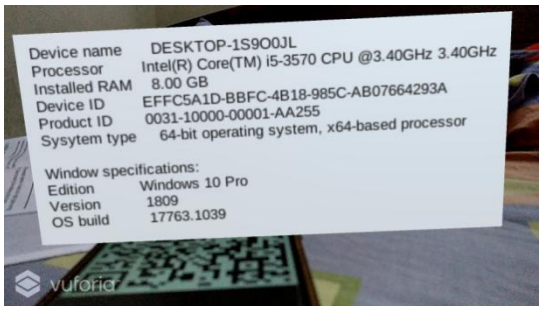

Fig. 3: Output

5. CONCLUSION

In this paper, the application, which provides the innovative in-office, system configuration/ manual reading experience for the users, is presented. Since there is a rapid growth in the technologies in shopping, eCommerce and since the consumers are demanding experiences in all their day to day life, Augmented reality-based and Virtual reality-based projects and innovations will have huge impact on the market. This application can make us be more productive and knowledgeable with simple steps.

6. REFERENCES

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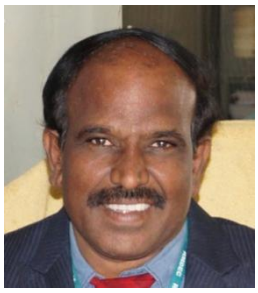
AUTHORS PROFILE



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