

Voice Based Path Detection Mobile Assistant

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Abstract:

Current prelation in itinerant technology has incited the acceptance of Augmented Reality in mobile devices. This paper relies on the introduction of voice-based path detection by mobile Augmented Reality. This paper especially focuses on the key technology required to develop a mobile Augmented Reality application. Discussing the prevailing problems and a generic framework required for its development [6]. We establish the concept of voice guidance application which helps in path detection of any Zone where someone would want to navigate. It provides guidance while on the road an infinite venue. The augmentation of the very fact is that the present approach which has been implemented for extracting the information from the very fact and analyses with the stored information. Hence the proposed system comprises of AR Core designed by Google for application development using augmented reality [7].

Keywords: AR Core, mobile augmented reality, path detection, voice guidance.

I. INTRODUCTION

Augmented reality is the upcoming technology which composes objects which are not actually present i.e. virtual objects into the actual world i.e. reality. Augmented reality is the upcoming concept which is used in wide range of application in almost every possible field like medicine, gaming industry, cinema and various other fields. It's keenly developed to improvise the innovation and replicate the original work with the creative work and also make it easy for lay people.

The word augmented was originally originated from the word augment which means to include or improvising something. In AR the features which can be experienced by the user that is humans like the touch and sounds are included to provide more of natural feel.

Augmented Reality provides an improvised version of actual world by using the technology which allows superimposing digital data on a picture of anything which is seen through the device like mobile Phones.

Augmented reality is the term that defines scientific knowledge that extends through the physical world, by improvising it with new layers to the digital data onto them. In virtual reality the entire environment is artificially created based on the creative knowledge but AR is not like that, instead it is used in already existing world with some enhancement.

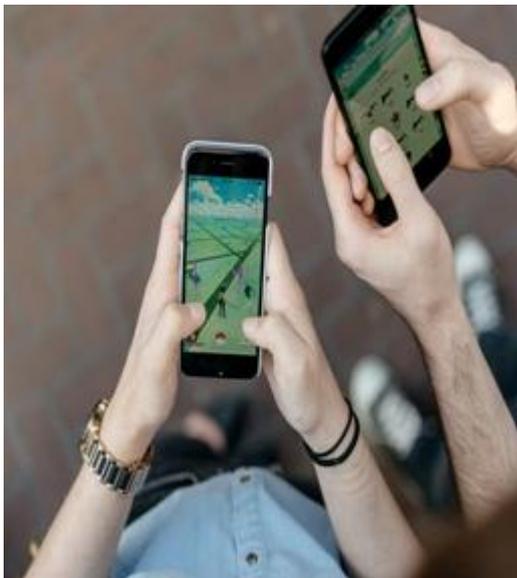
The outlook of the physical world with overlaid generated images from the computer which actually modifies the impression of the reality. The era of the introduction of the smartphones and internet, AR pulled in with its technology and nowadays it is mostly related to interaction between the physical worlds. 3D models are envisaged into the various industries to enhance the reality with computer generated images.

AR applications are supported with the devices which connect to digital animation and allow the concept of AR is able to be used in advanced version of smartphones. Augumentation is taking place in the real time like in various games which are introduced.

In navigation the AR is applied by using the improvising the GPS and to move from one point to another point. It is connected through the rearview camera of the Smartphone, users can see the route in the camera as a live monitoring of the route. Over the last 10 years mobile augmented reality (MAR) has been used in both the industrial and knowledge aspects. The depth of the virtual contents and their effects in the perspective of the user of the Smartphone to estimate the real world, by providing intense graphics that modify the actual view of the image.

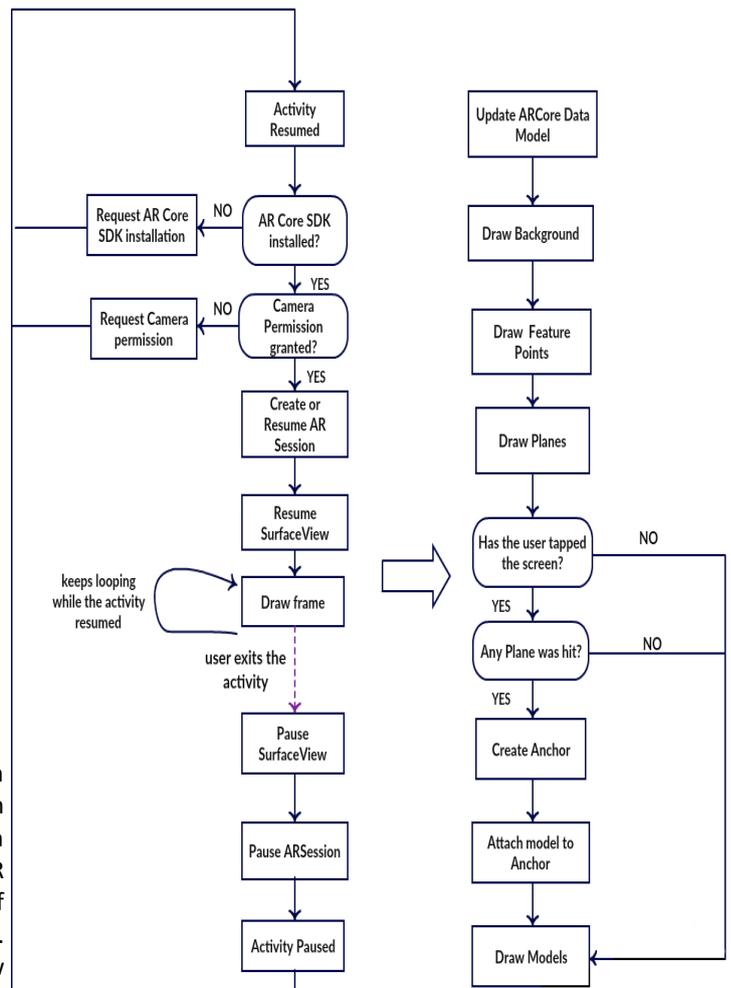
II. EXIXTING SYSTEM

In the beginning of the era many companies actually thought that augmented reality would take up the business sector by providing an application to allow the architects to see the emerging building architecture before actually developing the model based on entertainment [3]. But to surprise the gaming development based on entertainment around the mid 90's in Japan to improve the actual stream of the source. Pokemon being the combination of "pockets" and "monsters" in the world market. Pokemon being partly owned by Nintendo, which does gaming company, owe the copyrights to procedure the gaming in the mobile devices and smart phones including tablets. As in the game the developer designs to attack the character to make it interesting.



III. PROPOSED WORK

The proposed work is an android application which guides the user to reach out their destination with help of the voice guidance. The proposed application in android for smartphones is built with the support of AR Core for detecting the images [4]. In the account of operating the application, the rear-view camera is opened. It analyses the user’s current place using the rear-view camera and compares the input data with stored facts (images) that is inbuilt with the application system. After comparison, the user’s correct place is identified by the application and suggestions to the nearby places are made by using a drop-down box. Then the application directs the user to the place specified under voice guidance.



The proposed System of this application can be divided into three modules namely, data collection & data formation, augmented session and voice automated guidance.

Data Collection and Data formation:

Data is collected by capturing images around the zone. Once the images are captured it is uploaded to the application which is stored in the augmented database which is inbuilt in the AR Core used in the proposed system.

Augmented Session:

The session is created with the help of Google’s AR Core framework that is imported to the application. In Android Application it has to allow permission such as camera to capture the images which helps to identify the user’s current place detection of path [1].

Voice Automated Guidance:

The voice automated works with data provided by the developer based on the data collected regarding the location of the place and landmarks in any particular zone. It converts the input data from text to voice by using speakout () function.

IV. CONCLUSION

We work with augmented reality in smartphones which is an advanced technology in upcoming technological insights. This application includes the functioning of camera for enabling the desired feature of augmented technology. It helps lay people as well as higher degree people to find their way in and out any particular zone. It finds itself useful by being user friendly application as it gives voice-based guidance to the user. The execution of this system automatically starts when the user opens the application and the places are suggested as per the location [5]. Hence there is no difficulty in accessing the features of the application. And this system can be used anywhere in and around the zone for which the application is designed for.

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