ABSTRACT

APPLICATION DEVELOPMENT OF VIRTUAL MIRROR EYEGLASSES USING AUGMENTED REALITY TECHNOLOGY

By

ZAID ARHAM

10107478

Nowadays the development of augmented reality technology is becoming very popular. This is because the use of augmented reality is very interesting and has been widely used in our lives. One example is the marketing strategy and introduction of products to consumers through a web-based virtual mirror eyeglasses application. Consumers usually difficult if want to try an eyeglasses product, they usually can only try when buying the glasses by directly visiting the optical store, so that way would be a huge waste of time for consumers, impractical, and also reducing the consumers interest in the product offered. This virtual glasses application is expected to attract the interest of consumers and introduce the products offered to consumers.

Virtual mirror eyeglasses is an application where consumers can virtually wear the glasses using the face detection techniques like being tried in front of a mirror. This virtual glasses application simulates the eyeglasses models so the user as if he was wearing eyeglasses in real-time. Face detection method used was haar cascade classifier. This method uses so many haar feature and organized in a cascade classifier. If each sub-image made it through all the filters then the image is detected as a face. Through this process the user's face can be detected.

The test results of virtual mirror eyeglasses application shows that this web-based application can be a means of support in the consumer interest because the utilization of technology that uses augmented reality and easiness they provide. With this application users is facilitated to try the glasses and can also save time because the use of this application can be via the web, so it can be used anytime and anywhere.

Keywords: Augmented Reality, virtual mirror eyeglasses, haar cascade classifier