ABSTRACT

Human anatomy is said to be the study of the structure and part of the human body. Students learning anatomy have a better understanding of how different human body parts are connected and gives a good foundation for more specialized studies. With the growth in technology, medical students and practitioners are always looking for ways to make use of new technologies in their education. Making use of new technology attract students and place them in forefront of technology. Anatomy is been taught traditionally by dissecting cadaver to give students better apprehension of the human anatomy, this method has many drawbacks. Students cannot easily access and study a cadaver whenever they want. Access to such material (cadaver) is usually controlled and regulated strictly. There are also ethical issues with the use of human bodies (cadaver). Students also reported their experience of anxiety or nausea when participating in such sessions. Augmented Reality can help counter these drawbacks by using computer-aided graphics to overlay an additional layer of information to improve understanding and/or interaction with the physical environment. Augmented Reality is defined as a real-time indirect or direct view of a real world environment that has been augmented by adding virtual computer generated information to it. In this project, Augmented Reality (AR) technology is used to create an interactive learning system, which helps students to study the 3D anatomical structure of the human digestive system. The digestive system also known as gastrointestinal tract (GI) is responsible for the breakdown and absorption of foods and liquids that is required to sustain life. The GI tract starts with the mouth and continues to the oesophagus, stomach, small intestine, large intestine, and terminates at the anus. This project provide students with the knowledge of the basic parts of the digestive system and their functions. Students also get the chance to play quiz game to examine their understanding of the digestive system.