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Augmented Reality in E-Commerce

Bachelor of Science in Information Technology

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Certificate

This is certifying that the report of the final year project entitled “Augmented Reality in E-commerce”, submitted to the Department of Computer Science, Bahria University Islamabad Campus, in partial fulfillment for the award of the Bachelor of Science in Information Technology.

The project is carried out by Mr. Hamza Dar, Enrollment No. 01-235161-012 and Mr. Babar Ali, Enrollment 01-235161-005 under my supervision and guidance.

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Abstract

The fast evolution in computing power over the past couple of years helped to overcome the gap between technology and the traditional pen and paper approach. Designing and implementing an augmented reality application to provide enriched shopping experience is a conceptual understanding of computer science. In the augmented reality the information about the surrounding becomes interactive and digitally manipulated, it also has the potential to gather the tacit knowledge.

Unlike other technologies like virtual reality (VR) or Extended Reality (XR), Augmented reality creates totally artificial world, that augment the virtual objects into real world which means it overlays virtual objects onto the real world surrounding. The main objective of this project is to develop an Augmented Reality Application that utilizes the AR technique to augment the virtual 3D object into real world, 3D objects include furniture's and watches etc. when the application runs, user can view various product of furniture's and to investigate in real world, user starts the AR mode where user can place any type of furniture in the house where the actual product going to be placed and investigate it by moving around. We also provide the rotation and resizing technique so user can investigate the product better, also user drag the 3D object along the surface to change the position of the product.

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Acronyms and Abbreviations

UMP	Universal Windows Platform
SDK	Software Development Kit
API	Application programming interface
GUI	Graphical User Interface
AR	Augmented Reality
3D	Three-Dimensional
COM	Concurrent Odometry and Mapping
IDE	Integrated Development Environment
NNC	Nearest Neighbor Classification