**A**

**PROJECT REPORT**

**ON**

**“BEY-BATTLE SHOWDOWN:**

**AN AUGMENTED REALITY EXPERIENCE”**

**SUBMITTED TO**

**SHIVAJI UNIVERSITY, KOLHAPUR**

**IN THE PARTIAL FULFILLMENT OF REQUIREMENT FOR THE AWARD OF DEGREE BACHELOR OF ENGINEERING IN COMPUTER SCIENCE AND ENGINEERING**

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**UNDER THE GUIDANCE OF**

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING,**

**DKTE SOCIETY’S TEXTILE AND ENGINEERING INSTITUTE, ICHALKARANJI**

**(AN AUTONOMOUS INSTITUTE)**

**(A+ Grade Accreditation by NAAC)**

**(ISO 9001:2015 CERTIFIED)**

**2018-2019**

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**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**



**CERTIFICATE**

**THIS IS TO CERTIFY THAT, PROJECT WORK ENTITLED**

**“BEY-BATTLE SHOWDOWN:**

**AN AUGMENTED REALITY EXPERIENCE”**

**IS A BONAFIDE RECORD OF PROJECT WORK CARRIED OUT IN THIS COLLEGE BY**

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**DECLARATION**

We hereby declare that, the project work report entitled “**BEY-BATTLE SHOWDOWN: AN AUGMENTED REALITY EXPERIENCE.**” which is being submitted to D.K.T.E. Society’s Textile and Engineering Institute, Ichalkaranji, affiliated to Shivaji University, Kolhapur is in partial fulfilment of degree B.E.(CSE). It is a bona fide report of the work carried out by us. The material contained in this report has not been submitted to any university or institution for the award of any degree. Further, we declare that we have not violated any of the provisions under Copyright and Piracy / Cyber / IPR Act amended from time to time.

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**ABSTRACT**

Gaming ecosystem is constantly evolving. Creators and developers in the gaming industry are constantly developing new games, methods, technologies to capture the attention and imagination of gamers around the world. From Mario to Tetris to Halo and now Augmented Reality (AR) powered games like Pokémon Go; the bar just keeps going higher. AR games allow the gamer to fight aliens, catch whimsical creatures or save the kingdom- all in the real world.

The project proposes the use of the concept of Augmented Reality. It is an interactive experience of a real-world environment whereby the objects that reside in the real-world are "augmented" by computer-generated perceptual information, sometimes across multiple sensory modalities, including [visual](https://en.wikipedia.org/wiki/Visual), [auditory](https://en.wikipedia.org/wiki/Hearing), [haptic](https://en.wikipedia.org/wiki/Haptic_perception), [somatosensory](https://en.wikipedia.org/wiki/Somatosensory_system), and [olfactory](https://en.wikipedia.org/wiki/Olfactory). The overlaid sensory information can be constructive (i.e. additive to the natural environment) or destructive (i.e. masking of the natural environment) and is seamlessly interwoven with the physical world such that it is perceived as an [immersive](https://en.wikipedia.org/wiki/Immersion_(virtual_reality)) aspect of the real environment. In this way, augmented reality alters one’s ongoing perception of a real world environment, whereas [virtual reality](https://en.wikipedia.org/wiki/Virtual_reality) completely replaces the user's real world environment with a simulated one. Augmented reality is related to two largely synonymous terms: [mixed reality](https://en.wikipedia.org/wiki/Mixed_reality) and [computer-mediated reality](https://en.wikipedia.org/wiki/Computer-mediated_reality).

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