PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the Project report **"Using AR/VR to Transform Life Experience"** being submitted by "K.Harshitha, P.ReshmaReddy, SaanjhMohanty, ShreyaDhatriGowda" bearing "20211CCS0015,20211CCS0070,20211CCS0155,20211CCS0181" in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.

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Using AR/VR to transform Travel Experience!

A PROJECT REPORT

Submitted by, CCS-39

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Under the guidance of,

Mr. Nihar Ranjan Nayak

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING, COMPUTER ENGINEERING, INFORMATION SCIENCE AND ENGINEERING Etc.

At

PRESIDENCY UNIVERSITY

BENGALURU

DECEMBER 2024

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **Using AR/VR to Transform Life experience** in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **MR. Nihar Ranjan Nayak, Assistant Professor, School of Computer Science Engineering & Information Science, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

K. Harshitha, 20211CCS0015
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ABSTRACT

Using AR/VR to transform Travel Experience!

Indoor Navigation system advice directions to the destination in the user's camera screen. QR codes shall be installed at all possible destinations in the building assuming any destination can be the starting point of the user.

Users must scan a QR code to select a destination. Google AR Core takes live feed from the user's camera and does simultaneous localization and mapping to update the user's location. Shortest path to the chosen destination is found using A* algorithm and the directions to the destination are shown in the user's camera screen using Augmented Reality.

We intend to make the front end as simple as possible so that the user can reach their destination by simply opening the camera where the directions are shown as animations in their surroundings.

Augmented Reality (AR) and Virtual Reality 5sdx (VR) are transformative technologies that bridge the gap between the physical and digital worlds, creating immersive experiences that enhance and redefine how we interact with our surroundings. AR overlays digital information onto the real world, enriching everyday activities like education, healthcare, and entertainment. VR, on the other hand, fully immerses users in a simulated environment, offering unparalleled opportunities for virtual exploration, learning and creativity.

These technologies have revolutionized fields such as healthcare, enabling virtual surgeries and therapy, education through interactive and engaging learning environments; and tourism, allowing users to explore distant places without physical travel. By breaking Spatial and temporal barriers AR/VR fosters inclusivity and accessibility, transforming ordinary experiences into extraordinary ones.

As AR/VR continues to evolve, its integration into daily life holds immense potential to reshape industries, enhance human interaction, and improve quality of life, marking a significant leap toward a more interconnected and immersive future.