

KIDOLearn- A Kids Learning Application with AR

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Abstract -

KIDO Learn is an innovative educational application designed specifically for children, leveraging augmented reality (AR) technology to enhance the learning experience. The application offers interactive and immersive learning opportunities for children in various subjects, including mathematics, science, language arts, and more. By integrating AR features, KIDO Learn transforms traditional learning materials into dynamic and engaging 3D visuals, enabling children to explore concepts in a fun and interactive way. KIDO Learn also provides parents and educators with tools to track children's progress, customize learning experiences, and monitor usage. This paper presents the design, development, and evaluation of KIDO Learn, highlighting its effectiveness in promoting children's learning and engagement. The findings demonstrate the potential of AR technology in revolutionizing children's education and suggest future directions for research and development in this field.

Key Words: Interactive Learning, Augmented Reality, virtual world, real world, digital learning, Effective, Technology, Digital.

1. INTRODUCTION

In our app, children can embark on educational adventures where they interact with virtual objects, characters, and environments overlaid onto the real world. Whether it's exploring the depths of the ocean, traveling back in time to ancient civilizations, or discovering the wonders of space, our app transforms learning into an exciting journey of discovery. With intuitive controls and user-friendly interfaces, children can navigate through lessons, quizzes, and activities with ease. The app promotes active learning and fosters curiosity by allowing children to manipulate objects, conduct experiments, and solve puzzles in a virtual environment.

1.1 Literature Survey

The literature survey on Kidolearn - a learning app using AR - begins with an introduction to the application's purpose and target audience. The primary aim of this study is to provide comprehensive information and guidance to users, particularly parents and educators, who are

unfamiliar with augmented reality technology and its application in children's education. The app facilitates interactive learning experiences for kids, encompassing various subjects and activities such as virtual tours, educational games, and immersive storytelling.

Furthermore, the project emphasizes the importance of user-friendly design and intuitive navigation within the app interface, ensuring ease of access and engagement for children. Notably, the graphical user interface is tailored to cater to the specific needs and preferences of young learners, allowing them to explore educational content seamlessly. The app's functionality extends to real-time monitoring of learning progress and performance metrics, enabling parents and educators to track children's engagement and proficiency effectively.

Future developments for Kidolearn may include enhanced content complexity and depth, offering users a deeper understanding of various educational concepts and subjects. Potential expansions may involve incorporating advanced AR technologies to provide immersive learning experiences and interactive simulations. By continually evolving and adapting to the needs of its users, Kidolearn aims to revolutionize children's education through innovative technology and engaging content.

Introduction to Kidolearn's purpose and target audience. Emphasis on user-friendly design and intuitive navigation. Real-time monitoring of learning progress and performance metrics. Potential future developments for enhanced content and immersive experiences.

2 Flow chart for System

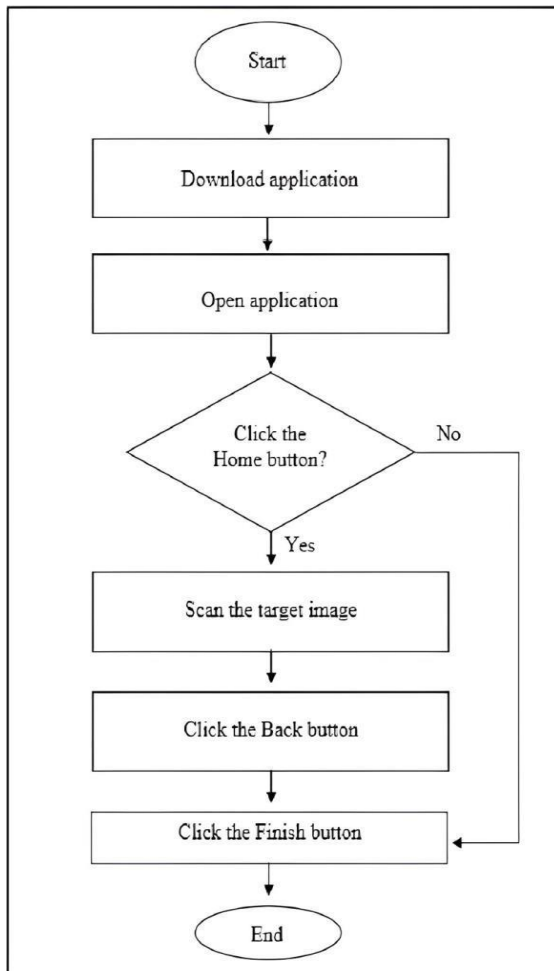


Fig. System Flow Chart

2.1 Related Work

KidoLearn, the innovative kids' learning app utilizing augmented reality (AR), features three primary buttons to enhance children's educational experience. The "LEARN" button provides access to a diverse array of interactive learning sections tailored to cater to different subjects and topics. These sections offer engaging content and activities, fostering curiosity and knowledge acquisition among young learners. Additionally, the "GET AR APP HERE" button enables users to seamlessly download the AR application, allowing them to experience immersive educational content and simulations in real-time. Moreover, the app offers the convenience of accessing supplementary learning materials in PDF format through the "GET PDF OF BOOK HERE" button, providing users with additional resources to support their educational journey.



Fig. Home Page



Fig. Learn Section

The "LEARN" section within the KidoLearn app offers an enriching educational experience for children, covering a diverse range of subjects and topics. From exploring the fascinating world of fruits and animals to delving into the realm of numbers, days, months, helpers, and seasons, this section provides interactive learning opportunities designed to engage young learners. Through vibrant visuals, engaging activities, and informative content, children can embark on an educational journey that sparks curiosity and fosters a deeper understanding of the world around them. Whether they're discovering the characteristics of different fruits, identifying animals and their habitats, or learning about the days of the week and months of the year, the "LEARN" section offers a comprehensive platform for holistic learning and exploration.



Fig. AR Image



Fig. Animals

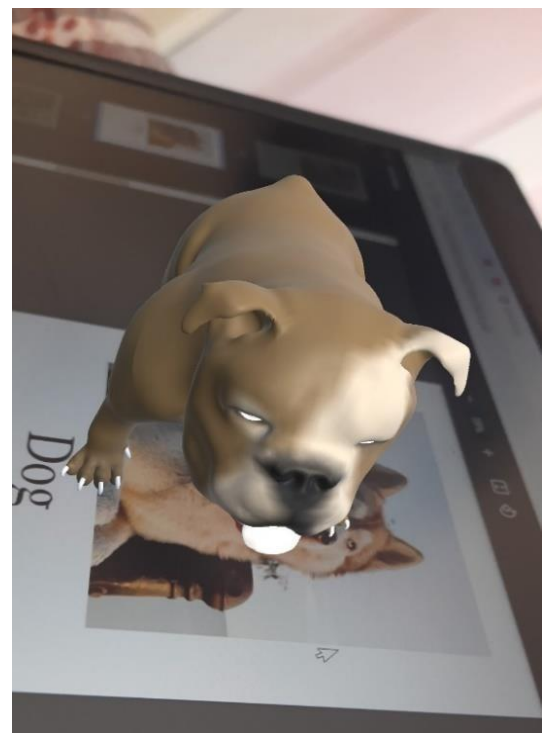


Fig. AR Image

3. CONCLUSION AND FUTURE SCOPE

In conclusion, the KidoLearn app harnesses the power of augmented reality to revolutionize children's learning experiences. By providing interactive and immersive educational content, it enhances engagement and fosters a deeper understanding of various subjects. Moving forward, the app has a promising future with potential expansions such as incorporating gamified learning modules, integrating advanced AR technologies, and collaborating with educators to further enhance the app's educational value, ensuring continued growth and impact in the realm of children's education.

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