

Department of Electrical and Computer Engineering
North South University



Senior Design Project

E-learning App with Augmented Reality

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Faculty Advisor:

Dr. Shazzad Hosain

Associate Professor

ECE Department

Spring, 2019

DECLARATION

This is to certify that this Project is our original work. No part of this work has been submitted elsewhere partially or fully for the award of any other degree or diploma. Any material reproduced in this project has been properly acknowledged.

Students' names & Signatures

1. Md Nazmus Shakib

2. Safin Mahmud

3. Polash Chakrabarty

4. Abdullah All Noman Abir

APPROVAL

We, **Md Nazmus Shakib (ID-1511336042)**, **Safin Mahmud (ID-1510903042)**, **Polash Chakrabarty (ID- 1520579042)** and **Abdullah All Noman Abir (ID-1521047042)**, members of CSE 499 (Senior Design) from the Electrical and Computer Engineering department of **North South University**; have worked on the project titled “**E-learning App with Augmented Reality**” under the supervision of Dr. Shazzad Hosain as a partial fulfillment of the requirement for the degree of Bachelors of Science in Engineering and has been accepted as satisfactory.

Supervisor’s Signature

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Dr. Shazzad Hosain

Associate Professor

Department of Electrical & Computer Engineering

North South University

Dhaka, Bangladesh.

Chairman’s Signature

.....

Dr. Kazi Mohammad Abdus Salam

Professor & Chairman

Department of Electrical & Computer Engineering

North South University

Dhaka, Bangladesh.

ACKNOWLEDGEMENT

By the grace of the Almighty we have completed our senior design capstone project entitled “E-learning application with Augmented Reality”.

Foremost, we would like to express our sincere gratitude to our advisor Dr. Shazzad Hosain for his continuous support in our capstone project progress throughout the whole 499A and 499B, for his patience, motivation, enthusiasm, and immense knowledge. His guidance helped us in all the time of research, writing and completing of this project.

Our sincere thanks also goes to North South University, Dhaka, Bangladesh for providing an opportunity in our curriculum which enabled us to have an industrial level experience as part of our academics.

Last but not the least, we would like to thank our family as their inspiration and guidance kept us focused and motivated.

Abstract

Smartphone has become a great tool for teaching kids. As kids nowadays spend a lot of time on a smartphone. Preschool education is considered pivotal for a child's development. Mobile learning is a new way to access learning content. Mobile learning is very popular among preschool kids. Because it really motivates kids to learn if they can use mobile phones or tablets. That's why we have developed a marker-based AR application, which will help children to learn or study the basics of Alphabets with fun. While using our app, kids will learn interactively with the help of Augmented Reality. Our app will help the parents teach their kids without much effort.