



**Department of Electrical and Computer Engineering
North South University**

**Senior Design Project
Zero-Code Advergame Platform**

Ahnaf Rahat	ID# 1912685042
Nusrat Jahan Riya	ID# 1912490642
Nishat Maharin Bushra	ID# 1912903642

Faculty Advisor:
Dr. Mohammad Monirujjaman Khan
Associate Professor
ECE Department

Summer, 2023

LETTER OF TRANSMITTAL

November, 2023

To

Dr. Rajesh Palit
Chairman,
Department of Electrical and Computer Engineering
North South University, Dhaka

Subject: **Submission of Capstone Project Report on “Zero-Code Advergame Platform”**

Dear Sir,

With due respect, we would like to submit our **Capstone Project Report on “Zero-Code Advergame Platform”** as a part of our BSc program. This report consists of all the important information and details we will need to build a fully automated Advergame platform. This project helped us to grow experience on how to develop a fully functional game developing platform from scratch. We tried our best to meet all the dimensions that were required in this report.

We will be highly obliged if you kindly receive this report and provide your valuable judgment. It would be our immense pleasure if you find this report useful and informative to have an apparent perspective on the issue.

Sincerely Yours,

.....

Nusrat Jahan Riya
ECE Department
North South University, Bangladesh

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Ahnaf Rahat
ECE Department
North South University, Bangladesh

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Nishat Maharin Bushra
ECE Department
North South University, Bangladesh

APPROVAL

Ahnaf Rahat (ID# 191268504), Nusrat Jahan Riya (ID# 1912490642), and Nishat Maharin Bushra (ID# 1912903642) from Electrical and Computer Engineering Department of North South University, have worked on the Senior Design Project titled “**Zero-Code Advergame Platform**” under the supervision of Dr. Mohammad Monirujjaman Khan 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. Mohammad Monirujjaman Khan

Associate Professor

Department of Electrical and Computer Engineering

North South University

Dhaka, Bangladesh.

Chairman’s Signature

.....

Dr. Rajesh Palit

Professor

Department of Electrical and Computer Engineering

North South University

Dhaka, Bangladesh.

DECLARATION

This is to declare 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. All project related information will remain confidential and shall not be disclosed without the formal consent of the project supervisor. Relevant previous works presented in this report have been properly acknowledged and cited. The plagiarism policy, as stated by the supervisor, has been maintained.

Students' names & Signatures

1. Ahnaf Rahat

2. Nusrat Jahan Riya

3. Nishat Maharin Bushra

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ABSTRACT

Zero-Code Advergame Platform

The Zero-Code Advergame Platform is a web application where we can automatically develop fully functional advergames. This project's specialty is that users do not require any prior programming knowledge. We have completed all the core functionalities of a web application. Currently, we have an efficient front-end interface, the essential APIs, an integrated database, a user authentication system, and exceptional features, and among them, "Game Builder" is the most significant one. To build this, we have used Django and JavaScript. We have used the Model-View-ViewModel (MVVM) to promote a transparent separation of concerns, reduce dependencies among components, and enable a more modular and testable application, ultimately leading to a smoother and more efficient development process. We have connected the backend with the front end through API endpoints. APIs provide a systemized way for different software tools to interact with each other, defining regulations to follow while exchanging data. Now, end users can register and access the website securely, and all the listed games are visible and playable. This platform is built specifically for consumers who prefer a hassle-free development environment. To meet this target, we have used React JS and JavaScript to make the user experience easier. In a web application, we must have the flexibility to add new features, and that's why we have used the Django Rest framework to build this platform. A fully working, sustainable platform with the motto of helping users get the best-developed advertising. It will create enthusiasm for consumers to try this new strategy on their entrepreneurial journey. The Zero-Code Advergame Platform will bring countless benefits and great impacts to their journey without getting ripped off.