VISVESVARAYA TECHNOLOGICAL UNIVERSITY
"Jnana Sangama", Belagavi, Karnataka

A Report On

"Dancing Robot"

Submitted in partial fulfillment for Mini Project Report
In

"Computer Graphics And Visualization Laboratory (18CSL67)"

of

BACHELOR OF ENGINEERING

In

COMPUTER SCIENCE AND ENGINEERING

Submitted by

Priyanshu Nandan (1RF19CS063)
Roshan Ravi Kumar Shetti (1RF19CS043)

RV INSTITUTE OF TECHNOLOGY AND MANAGEMENT®
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Chaitanya Layout, JP Nagar 8th Phase, Kothanur, Bengaluru-56007

2021-22

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Department of Computer Science Engineering

CERTIFICATE

Certified that the mini project work titled **"Dancing Robot"** has been carried out by **Priyanshu Nandan (1RF19CS063) and Roshan Ravi Kumar Shetti (1RF19CS043)** are bonafied students of RV Institute of Technology and Management, Bengaluru in partial fulfillment for the award of degree of **Bachelor of Engineering** in **Computer Science and Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year **2021-2022**. It is certified that all corrections/suggestions indicated for the internal Assessment have been incorporated in the report. The mini project report has been approved as it satisfies the academic requirements prescribed by the institution.

Dr. Deepak N.A Associate Professor, Department of CSE, RVITM., Bengaluru –76	**Dr. Anitha J** Professor &Head, Department of CSE, RVITM., Bengaluru–76	**Dr. Jayapal R** Principal, RVITM., Bengaluru–76

External Viva

Name of the Examiners	**Signature with Date**
1._____	_____
2._____	_____

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DECLARATION

We, **Priyanshu Nandan (1RF19CS063) and Roshan Ravi Kumar Shetti (1RF19CS043)** students of Fifth Semester B.E., Computer Science and Engineering, RV Institute of Technology and Management, Bengaluru hereby declare that the mini project titled **"Dancing Robot"** has been carried out by us and submitted in partial fulfillment for the award of degree of **Bachelor of Engineering** in **Computer Science and Engineering** of **Visvesvaraya Technological University, Belagavi** during the academic year **2021 -2022**. We declare that matter embodied in this report has not been submitted to any other university or institution for the award of any other degree or diploma.

Place: Bengaluru
Date:

Signature

1. Priyanshu Nandan(1RF19CS063)

2. Roshan Ravi Kumar Shetti (1RF19CS043)

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Priyanshu Nandan(1RF19CS063)

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ABSTRACT

This OpenGL Mini Project showcases that graphics provides one of the most natural means of communicating with a computer, since our highly developed 2D pattern-recognition abilities allow us to perceive and process pictorial data rapidly and efficiently.

We are using the OpenGL library to implement the project. OpenGL has a lot of inbuilt functions which makes the drawing of any geometric objects quite easy.

This project aims at creating 3D Dancing robot. With the help of GLUquadriObj we create spherical and cylindrical structure and with the help of other basic OpenGL function like glRotatef, glTranslatef we assemble the objects into 3D robot.

Four different light sources are created at different locations and are triggered randomly to give a better look to the dance. Along with the above, the sound is implemented in the same program using the windows libraries.

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