# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-560014, Karnataka

CGV MINI PROJECT REPORT

ON

*"Bus Simulation"*

*"SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE CGV LAB*

**BACHELOR OF ENGINEERING**

IN

**COMPUTER SCIENCE & ENGINEERING**


**Submitted By**

**MAJMA ANJUM**

**(1SV20CS021)**

Under the guidance of

**Mr.Renukaradhya P.C** B.E., M.Tech.,

Assistant Professor, Dept. of CSE.


PRINCIPAL
SIET. TUMKUR.

SHRIDEVI EDUCATION


**Department of Computer Science and Engineering**

**SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**(Affiliated To Visvesvaraya Technological University)**

**Sira Road, Tumakuru – 572106, Karnataka.**


**2022-23**

Sri Shridevi Charitable Trust (R.)
SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY
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# CERTIFICATE

This is to certify that, Computer Graphics and Visualization Mini-Project of titled "Bus Simulation"has been successfully carried out by Majma Anjum[1SV20CS021], in partial fulfillment for the CGV Lab of **Bachelor of Engineering** in **Computer Science & Engineering** of the **Visvesvaraya Technological University, Belagavi** during the academic year **2022-23.** It is certified that all the corrections/suggestions indicated for internal assessments have been incorporated in the report. The Mini-Project report has been approved as it certifies the academic requirements in respect of Mini-Project work prescribed for the Bachelor of Engineering Degree.

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**Signature of Guide**

**Mr. Renukaradhya P.C** B.E., M.Tech.,

Assistant Professor,
Dept. of CSE,SIET,Tumakuru.

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4/7/23

**Signature of H.O.D**

**Dr. Basavesha D** M.Tech.,Phd,
Assoc Professor &HOD
Dept. of CSE.SIET, Tumakuru.

**Name of the Examiners**

1 .....

2 .....

**Signature with date**

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# DECLARATION

I, Majma Anjum [1SV20CS021], student of VI semester **B.E** in Computer Science & Engineering, at Shridevi Institute of Engineering & Technology, Tumakuru, hereby declare that, the Mini-Project work entitled **"Bus Simulation"**, embodies the report of our Mini-Project work carried out under the guidance of **Mr. Renukaradhya P.C. Assistant Professor, Department of CSE**, SIET, Tumakuru as partial fulfillment of requirements for the CGV Lab in **Bachelor of Engineering in Computer Science & Engineering of Visvesvaraya Technological University, Belagavi**, during the academic year **2022-23**. The Mini-Project has been approved as it satisfies the academic requirements in respect to the Mini-Project work.

Place: Tumakuru
Date: 04/07/23

Student Name & Signature
**MAJMA ANJUM**
**[1SV20CS021]**
Majma Anjum

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## ABSTRACT:

The aim of this project is to develop a real-time bus simulation system using computer graphics techniques. The project focuses on creating a visually immersive and interactive environment that accurately represents the operation and dynamics of a bus within a virtual city.The simulation will employ advanced computer graphics algorithms and physics-based modeling to realistically depict the behavior of a bus, including its movement, steering, acceleration, and braking. The virtual city environment will be designed to provide a realistic urban setting with various road types, traffic signals, pedestrian interactions, and other elements commonly encountered in real-world driving scenarios.

**Technology used**

Graphics Software: various software packages are available forcreating computer graphics, including 3D modeling and animation software,

**Computer Hardware**:

A powerful computer with a good graphics card and sufficientstorage capacity is required to run graphics software, C++ andpython languages are used in graphics.


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