

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
"Jnana Sangama", Belagavi-560014, Karnataka



CGV MINI PROJECT REPORT

ON

"CAR RACING SIMULATION"

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

**BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE & ENGINEERING**

Submitted By

SHRAVANA KUMARA T

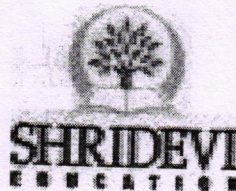
[1SV20CS045]

Under the guidance of

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

Associate Professor, Dept. of CSE.

M. Renukaradhya .P.C
**PRINCIPAL
S.I.E.T. TUMKUR.**



Department of Computer Science and Engineering

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated To Visvesvaraya Technological University)

Sira Road, Tumakuru – 572106, Karnataka.

2022-23

S. Renukaradhya .P.C



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

(Recognised by Govt. of Karnataka, Affiliated to VTU, Belagavi and Approved by AICTE, New Delhi)

Sira Road, Tumakuru - 572 106. Karnataka.

Phone: 0816-2212629 | Fax: 0816-2212628 | Email: info@shrideviengineering.org | Web: http://www.shrideviengineering.org



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that, Computer Graphics and Visualization Mini-Project of entitled "CAR RACING SIMULATION" has been successfully carried out by SHRAVANA KUMARA T [ISV20CS045], 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.

N. Renukaradhya P. C.
PRINCIPAL
SIET, TUMKUR

Basavesha D - 5/7/23

Signature of H.O.D

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

Name of the Examiners

1. *Hasim*

2. *Renukaradhya P. C*

Signature with date

Basavesha D

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DECLARATION

I, SHRAVANA KUMARA T [1SV20CS045], 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 "CAR RACING 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: 05/10/23

Student Name & Signature

SHRAVANA KUMARA T

[1SV20CS045]

PRINCIPAL
S.I.E. TUMKUR.

ABSTRACT:

In this mini project, we propose the development of a Car Racing Model as part of a Computer Graphics and Visualization (CGV) project. The objective of this model is to create a realistic and immersive racing experience for users. The Car Racing Model will be built using advanced computer graphics techniques and algorithms to simulate the physics and dynamics of racing cars. The model will incorporate realistic rendering of the race tracks, cars, and environments.

Furthermore, the Car Racing Model will include features to make the gameplay engaging and competitive. This may include the implementation of artificial intelligence opponents that exhibit realistic racing behaviors, challenging the user's driving skills. The model will also incorporate a scoring system, lap timings, and leaderboards to encourage competition among users. The Car Racing Model for CGV Mini Project aims to provide an immersive and realistic car racing experience for users. It serves as a platform for exploring the intricacies of computer graphics and visualization.

Future scope:

- Ø It is the basic model of Car simulation
- Ø It will be used in the fields of animation.
- Ø In future this program can be improved by using of new opengl functions.

Technology used

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

Computer Hardware:

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

N. Srinivas Kumar
PRINCIPAL
SLET. TUMKUR.