

# **Bangalore University University Visvesvaraya College of Engineering**

**K.R Circle, Bengaluru-560001**



**FOR QUALITY AND EXCELLENCE IN  
HIGHER EDUCATION**

**Mini Project Report**

**On**

**“SNAKE 2D GAME”**

**Submitted by**

**VRUSHAB SHANDILYA**

**15GAEI6062**

**5<sup>th</sup> Semester ISE**

**Under the guidance of**

**Mrs. Bhavya M**

**Research Scholar**

**Dept. of CSE**

**UVCE, Bengaluru**

**Department of Computer Science and Engineering**

**Dec 2017**

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**University Visvesvaraya College of Engineering**  
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## CERTIFICATE

This is to certify that **UDDESHYA** of B.E. 5<sup>th</sup> semester, **Information Science and Engineering** bearing register number **15GAEI6056** has completed project on **"SNAKE 2D GAME"** in partial fulfillment of requirement of Computer Graphics Lab, **5<sup>th</sup> semester, Information Science and Engineering** prescribed by Bangalore University for academic year **2017-18**.

**Guide:**

**Chairperson:**

---

**Mrs. Bhavya M**  
Research Scholar  
Dept. of CSE  
UVCE

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**Dr. ARUNALATHA J S**  
Head of Department  
Dept. of CSE  
UVCE

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**Examiner 1**

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**Examiner 2**

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## CERTIFICATE

This is to certify that **UDDESHYA** and **VRUSHAB SHANDILYA** of B.E. 5<sup>th</sup> semester, **Information Science and Engineering** bearing register numbers **15GAEI6056** and **15GAEI6062** respectively have completed project on "**SNAKE 2D GAME**" in partial fulfillment of requirement of Computer Graphics Lab, **5<sup>th</sup> semester, Information Science and Engineering** prescribed by Bangalore University for academic year **2017-18**.

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## **ABSTRACT**

Ever since the inception of computers, we as users have developed and devised many uses for it through the means of software. One such use that has been predominantly the case is for recreation and entertainment. In the early 1970's, when the first game called Pong came out, developed by Atari, it was a massive commercial success and this set the ball rolling for the upcoming companies with their respective video game concepts. Video game companies and video games as a whole have been flourishing ever since then, fast forward to late 2017 where we are able to simulate Virtual Reality games with our smart phones. The video game industry is always open with opportunities and with a captivating audience, is a place to skyrocket your product if it proves worthy enough.

My approach with this project was to recreate the traditional snake game, launched in 1976, whilst using the vast graphics library of OpenGL through GLUT, demonstrating the concepts I have learned throughout the course of Computer Graphics. The game as a whole is simple and based on the concept of the original game, where the user moves around a line on a bordered plane, as it moves forward it leaves a trail behind resembling a snake and the player attempts to eat the 'fruit' or a dot here, by running into them with the head of the snake. Each fruit makes the snake longer, so controlling it gets progressively more difficult. Maneuverability is added with the direction keys. A menu screen is added as well with a high score feature. This project is a labor of love and is a stepping stone into the world of game development.

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## **ACKNOWLEDGEMENT**

We take this opportunity to thank our institution, **UNIVERSITY VISVESVARAYA COLLEGE OF ENGINEERING** for having given us the opportunity to carry out this project. we would like to thank **Dr. Venugopal K.R, Principal, UVCE**, for providing us all the facilities to work on this project. We are indebted to him for being our pillar of strength and inspiration. We wish to place our grateful thanks to **Dr. Arunalatha J S, Chairperson, Department of Computer Science and Engineering, UVCE**, who helped us to make our project a great success.

We are grateful to acknowledge **Mrs. Bhavya M, Research Scholar, Department of Computer Science and Engineering, UVCE**, for her valuable suggestions and relentless support which have sustained us throughout the course of the project.

We also thank the lab assistants **Babu, Srinivas** and **Harish** for their extensive support throughout the **CG laboratory**. We also thank our **parents** and **friends** for their help, encouragement and support.

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