VISVESVARAYA TECHNOLOGICAL UNIVERSITY



A MINI PROJECT REPORT on

CENTRE OF GRAVITY DOLL

Submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Engineering in Computer Science & Engineering

Ву

CHIRAG RAVINDRA[1BG11CS027]
Under the guidance of

Prof. Surabhi Narayan

Associate Professor CS&E Department BNM Institute of Technology



Vidyaya Amrutham Ashnuthe
Vidyaya Amrutham Ashnuthe

Department of Computer Science & Engineering

B. N. M. Institute of Technology

12th Main, 27th Cross, Banashankari II Stage, Bangalore 560 070.

Pb. N. M. Institute of Technology

12th Main,27th cross, Banshankari II Stage, Bangalore - 560070Department of Computer Science & Engineering





Certified that the mini project entitled **Centre of Gravity Doll** carried out by **Mr. Chirag Ravindra** USN[1BG11CS027] bona fide student of **B.N.M Institute of Technology** in partial fulfilment for the award of **Bachelor of Engineering** in **Computer Science & Engineering** of the **Visvesvaraya Technological University**, Belgaum during the year 2014. The mini project report has been approved as it satisfies the academic requirements in respect of mini project work prescribed for the said degree.

Prof. Surabhi Narayan Associate Professor CS&E Dept

Name of the Examiners

Dr.B.G.PrasadProfessor and HOD
CS & E Dept

Signature with date

1.

2.

Acknowledgement

I take this opportunity to whole-heartedly express my gratitude and respect to each and everyone who has guided and helped me complete my project successfully and in time.

First of all, I am thankful to The Director, **Prof. T. J. Ramamurthy** and Principal, **Dr. M. S. Suresh**, B.N.M.I.T Bangalore for providing me an opportunity to work on a project in this institution.

I am thankful to **Dr. B. G. Prasad**, H.O.D Dept. Of Computer Science B.N.M.I.T, for his support and encouragement throughout the project.

I am very thankful to **Dr. Kavitha C and Prof. Surabhi Narayan**for helping me understand the subject Computer Graphics and OpenGL and thus helping me complete the project.

I am also thankful to my **CG lab lecturers Mrs. Ranjana, Mr Prashanth J and Mrs. Shince Thomas,** faculty Dept. Of Computer Science, B.N.M.I.T Bangalore.

I am thankful to **my parents** for their moral support and encouragement throughout the project.

I would like to thanks my senior **Vishwas** for his guidance and support throughout the project.

Lastly, I would like to thank my class-mates, friends, well-wishers, teaching and non-teaching faculty of Dept. Of Computer Science, B.N.M.I.T for their friendly co-operation and support.

Abstract

A stack is a basic data structure that can be logically thought as linear structure represented by a real physical stack or pile, a structure where insertion and deletion of items takes place at one end called top of the stack. The basic concept can be illustrated by thinking of your data set as a stack of plates or books where you can only take the top item off the stack in order to remove things from it. This structure is used all throughout programming.

The basic implementation of a stack is also called a LIFO (Last In First Out) to demonstrate the way it accesses data, since as we will see there are various variations of stack implementations.

There are basically three operations that can be performed on stacks. They are 1) inserting an item into a stack (push). 2) deleting an item from the stack (pop). 3) displaying the contents of the stack(pip).

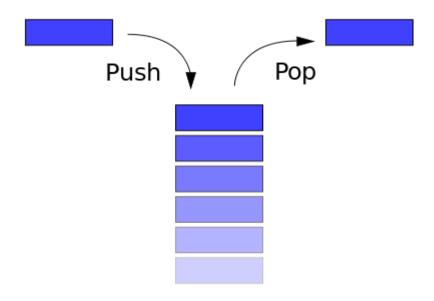


Table of Contents

<u>Topic</u>	<u>Page</u>		
1. Introduction2. Requirements3. Implementation	1		
		4. Results & Snapshots	19
		5. Conclusions & Further Enhancements	22
6. Bibliography	23		