VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Machhe, Belgaum, Karnataka 590018

# A

MINI PROJECT REPORT

ON

# Simulation of LRU using OpenGL (18CSL67)

*A report submitted in partial fulfillment of the requirements for the Award of Degree of*

**BACHELOR OF ENGENREEING**

**In**

**COMPUTER SCIENCE AND ENGINEERING**

**By**

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**Under The Guidance of**

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINREEING**

**HIRASUGAR INSTITUTE OF TECHNOLOGY, NIDASOSHI-591236**

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2020-2021

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*CERTIFICATE*

This is to certify that the Mini project titled “Simulation of LRU using OpenGL” is the bonafide work carried out by **Girish G. Hiremath (2HN18CS008)** students **of B.E. Computer Science and Engineering of Hirasugar Institute of Technology, Nidasoshi affiliated to VTU, Belagavi**, during the academic year 2020-21, in partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in Computer Science and Engineering.

**Prof.S.G.Gollagi Prof S.V.Manjaragi**

Guide HOD

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Name of Examiners Signature

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This is to certify that the Mini project titled “Simulation of LRU using OpenGL” is the bonafide work carried out by **Geetanjali V. Patil (2HN18CS007)** students **of B.E. Computer Science and Engineering of Hirasugar Institute of Technology, Nidasoshi affiliated to VTU, Belagavi**, during the academic year 2020-21, in partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in Computer Science and Engineering.

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This is to certify that the Mini project titled “Simulation of LRU using OpenGL” is the bonafide work carried out by **Ashwini A. Dodabhangi (2HN18CS004)** students **of B.E. Computer Science and Engineering of Hirasugar Institute of Technology, Nidasoshi affiliated to VTU, Belagavi**, during the academic year 2020-21, in partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in Computer Science and Engineering.

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With sincere thanks,

We the project associates Girish G. Hiremath Geetanjali V. Patil Ashwini A. Dodabhangi

Abstract

In this project, we are developing a Graphics animation to demonstrate LRU Page Replacement Algorithm. A good approximation to the optimal algorithm is based on the observation that pages that have been heavily used in the last few instructions will probably be heavily used again in the next few. Conversely, pages that have not been used for ages will probably remain unused for a long time. This idea suggests a realizable algorithm: when a page fault occurs, throw out the page that has been unused for the longest time. This strategy is called LRU (Least Recently Used) paging.

**INDEX**

ChapterPage no

Chapter 1

Introduction 1

Chapter 2

System Analysis 2

2.1 Existing System 3

2.2 Proposed System 4 2.2.1 Aim of the Project 5

2.2.2 Project Modules 6

Chapter 3

Requirements Specification 7

3.1System Requirements 8

3.1.1 Hardware requirements 9

3.2.1 Software requirements 10

Chapter 4

System Design and System Implementation 11 4.1 Modular Description 12

Chapter 5

Sample Output 13

Chapter 6

Conclusion 14

Chapter 7

Bibliography 15