
	S J P N Trust's		CSE
	<b>Hirasugar Institute of Technology, Nidasoshi</b>		ACADEMICS
	<i>Inculcating Values, Promoting Prosperity</i> Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi.		Mini-Project
	<b>Accredited at 'A' Grade by NAAC</b> <b>Programmes Accredited by NBA: CSE, ECE, EEE &amp; ME.</b>		2020-21(Odd)

Date: 12-06-2021

## CGV LABORATORY WITH MINI-PROJECT (18CSL67) PROJECT SYNOPSIS

<b>Batch No:-</b>		
<b>Student Name</b>	<b>USN</b>	<b>Signature</b>
Girish G. Hiremath	2HN18CS008	
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<b>Name of the Project Guide:-</b>	Prof. S.G.Gollagi	
<b>Project Title:-</b>	Simulation of LRU using OpenGL	
<b>Abstract</b>		
<p>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.</p>		
<b>DISCRIPTION :-</b>		
<p>In operating systems that use paging for memory management, page replacement algorithm are needed to decide which page needed to be replaced when new page comes in. Whenever a new page is referred and not present in memory, page fault occurs and Operating System replaces one of the existing pages with newly needed page. Different page replacement algorithms suggest different ways to decide which page to replace. The target for all algorithms is to reduce number of page faults.</p> <p>In Least Recently Used (LRU) algorithm is a Greedy algorithm where the page to be replaced is least recently used. The idea is based on locality of reference, the least recently used page is not likely. To implement an LRU cache we use two data structures: a hashmap and a doubly linked list.</p>		
<b>Advantages :</b>		
<b>Technologies Used:-</b>	Code blocks, Freeglut-MinGW	
	Language used - C	
<b>Guide Remark:-</b>		
<b>Guide Name:-</b>	Prof. S.G.Gollagi	

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