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DEPARTMENT OF TECHNICAL EDUCATION

GOVERNMENT ENGINEERING COLLEGE

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

A

Project report

on

"Touch Screen Based Digital Slate for Next Generation Elementary School Children"

[KSCST sponsored under 37th series 2013-2014]

Submitted in the partial fulfillment for the award of

Bachelor of Engineering

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2013-2014

ABSTRACT

"Save paper, save trees" is a hot agenda in today's world. This project presents an ingenuous approach to achieve the motto, by proposing a software-only design. It describes the financial and social significance of this model underlining its implementation. The project also briefs about the underlying hardware selected for the design implementation. The hardware utilizes ARM processor and is quite portable. Throughout the project, optimization (power, memory etc.) has been primarily focused yielding to a recommendable solution. Design and construction of the touch screen based digital slate is done for the elementary school children. It helps the teachers as well as the parents to monitor the progress of the children, they can also access the learning speed, discipline and grasping power of the children by viewing the total number of times the student has his practice and time taken to write an alphabet correctly etc through the memory card which is used in this device. Touch screens provide fast access to any and all types of digital media, with no text bound interface getting in the way. Faster input can mean better service. Using a touch interface can effectively increase operator accuracy, reduce training time, and improve overall operational efficiencies, thus keeping costs down, a properly designed touch interface can improve each operator's accuracy. Touch screens are practical in automation, which has become even simpler with touch screen technology. Children's are familiar with the icon system appreciate touch screens that make automation systems user friendly.

Another objective of this project is to develop a home automation system with a touch screen based control panel. As technology is advancing so houses are also getting smarter. Modern houses are gradually shifting from conventional switches to centralized control system, involving touch screen switches. Presently, conventional wall switches located in different parts of the house makes it difficult for the user to go near them to operate. Even more it becomes more difficult for the elderly or physically handicapped people to do so. Remote controlled home automation system provides a simpler solution with touch screen technology. Touch screen control panels are also designed for commercial, industrial and medical systems.