

# REAL-TIME OPEN BOARD

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## ABSTRACT

The need of the Digitization has driven all, but the student workforce the most. To conquer the need of the hour we need the Optimized version of the traditional board that is a digital Open Board with real time sharing with all the magnificent tools acquired by teachers to deliver the content better as well as the students to adhere the concept in a much efficient manner to be fully understandable in every aspect.

## INTRODUCTION

The project “Real-Rime Open Board” Is a software or a tool which is used to deliver instruction in a variety of ways that may be categorized based on three modalities of learning. The first modality is Visual Learning. Visual Learning through the use of Open- Board can range from the use of text and pictures. The second and Third Modality of learning is Auditory Learning and Tactile Learning. The Project comprises of basic open board functionalities such as writing, erasing, downloading the canvas, adding notes(with minimizing it , closing it ,dragging it around on thepage), uploading the image(features same as of notes), undo and redo actions. Added real- time drawing functionalities using Socket.io by connecting to server using express.js. This project is aimed at developing an application entitled “Real-Time Open Board” Using HTML, CSS, JavaScript etc.

It is a tool which is mainly designed for the teachers through which they can teach the students in a very effective and interactive way. The tool possesses comprises functionalities such as writing , erasing, downloading the canvas, adding notes(with minimizing it , closing it ,dragging it around on the page), uploading the image(features same as of notes), undo and redo actions This tool is a free and open source interactive whiteboard software compatible with any projector and pointing device which is designed primarily for use in schools..

## TECHNOLOGY

There five technologies used in the portal:

**HTML:** HTML is the markup language used to create web pages. It is commonly used by web developers to create their web pages. HTML is the markup language that is used to structure a website's content. It can be structured in various ways, such as a list of bulleted points or a series of paragraphs. HTML elements are composed of several types of HTML nodes. HTML is used to create pages on the world wide web. Each page contains a set of predefined HTML tags. HTML is used to create web pages. Each page has its own set of tags and is used to connect to other pages.

**CSS:** CSS stands for cascading Style Sheets. It describes the styling of web pages which include font, layout, background colours and makes our web page presentable to the user. It is easy to learn and understand. It saves a lot of time and can control the presentation of multiple pages at once.

**Java Script:** JavaScript is a scripting language that allows developers to implement various features on web pages. Java Script was first introduced in 1995 Netscape. Its general-purpose core has since been embedded in various web browsers. Java Script is a programming language that enables developers to create interactive web pages with minimal code. It is commonly used as part of web pages. Java Script is the third layer of web technologies, and it is used to create interactive and dynamic web content.

## METHODOLOGY

In this study, both quantitative and qualitative approaches will be used. The design phase of the system was studied by reviewing documents and researching existing systems for making our web application user friendly.

### 1. SYSTEM DESIGN

This Platform includes the design of landing screen which provides the way for users to access the various tools menu that they want. Every tool has its own functionality and is easily accessible to all users. After selection of a tool user can also select the width and color of the tool according to his/her own needs and start working. User can save their work into their systems just by clicking on the downloading buttons which was present on the top of the web page and also check the downloads of the system for checking that the work has been saved or not or the user can also upload his/her previous work from the system.

## 2. USER

User is the main focus of the system being developed, because user plays a essential role in the institution. User can open use the open board to have fun while learning. User can use the various tools such as pencil, notes, color enhancification on pen, redo, undo operation on the go.

## RESULT

Any person can access this application anytime from anywhere. You can easily access this application. With the help of user friendly interface user can easily understand the working of the web application.

## CONCLUSION

Based on the literature survey, following are the salient conclusions:

- Whiteboards were used slightly more often in mathematics teaching than in the teaching of reading/language arts, and they were generally used a little less for classroom management than for either mathematics or language artsteaching.
- Explore possible differences in frequency of use of interactive whiteboards between high achieving whiteboard classes and other classes using the technology, teachers whose average student scores were higher than the mean for all whiteboard classes on standardized tests of mathematics and reading were identified.
- The application adds an advantage to the teachers teaching methodology and the student's concept adaptiveness.
- Finally, it adds up to the institutional growth as well as the concept enhancement for a particular topic..
- The system has proved to be significantly useful for the end-user as it meets all the requirement of the user as well as fulfil the entire criterion that judge the quality and success of the system.
- The proposed system after evaluation has been found to successfully guarantee the booking and checking at the real- time environment to the end- user and hence has solved the problem what was expected.

## REFERENCES

1. [https://www.researchgate.net/publication/262325234\\_A\\_study\\_of\\_whiteboard\\_to\\_improve\\_teaching\\_as\\_an\\_example\\_of\\_primary\\_school\\_Development](https://www.researchgate.net/publication/262325234_A_study_of_whiteboard_to_improve_teaching_as_an_example_of_primary_school_Development), 2011
2. Armstrong, V. and Currna, S., Developing a Collaborative Model of Research Using Digital Video, Paper presented at the Computers and Learning (CAL) '05 Virtual Learning Conference, Bristol, 4-6 April, 2005.
3. Liu Guijun, The establishment and application of the future of the classroom - to teach in English with whiteboard as an example, Institute of Information Engineering, National Chung Cheng University, a master's thesis, 2007.
4. Davis, F.D., Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, MIS Quarterly, Vol. 13, No.3, 1989,