A REPORT

ON

**To enable persistent access of shared notes**

**SWECHA CONFERENCE SYSTEM**

BY

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**INTRODUCTION**

BIGBLUEBUTTON

BigBlueButton is an open-source web conferencing system for online learning. As it is under an open-source license we have the full accces BigBlueButton’s source code. This helps us to install, customize, develop, scale, and integrate it into different products and services.

BigBluebutton provides real-time sharing of audio, video, presentation, and screen – along with collaboration tools such as chat, whiteboard, shared notes, polling, and breakout rooms. It also provides the feature of recording the meetings for future use. The main purpose of BigBlueButton is for online learning.

BigBlueButton is an HTML5-based web application. It can run directly in the browser without installing it. It also provides mobile support.

The same HTML5 client runs across desktop, laptop, chromebook, iOS, and Android devices. This enables a single code base to enhance, localize, and innovate without the multiple code bases.

SHARED NOTES

‘Shared notes’ is a very important and unique feature of BigblueButton. Shared notes enable all the users in a meeting to contribute to a common text-based file. We can also use the formatting options and export the shared notes later.

A few limitations of the shared notes are as follows:

1. Shared Notes are not captured in the recording processing.
2. All users must open their Shared Notes pad individually.
3. Shared Notes contributions are anonymous.

WHY OUR PROJECT IS IMPORTANT?

* The main issue facing by the client on which we are working is as follows:

If the agenda of the meeting might not complete in a single meeting, it may be needed to take breaks in-between or meet over regular intervals to complete the agenda. Downloading shared notes and struggling to re-arrange the markdown is a hectic process.

**OBJECTIVES**

* Problem Statement:

To enable persistent access of shared notes.

* Our goal is to save shared notes before closing the meeting and restore the shared notes from previous meeting when the room is re-opened.
* We are working towards some suggested solutions which are as follows:

1. Create a pad object inside the session object with all the required properties.
2. Modifying the ‘ttl’ property of Etherpad session

**WORK PERFORMED IN THE PROJECT**

1. Learning Git:

**Git** is a version control system used for tracking changes in computer files. It is generally used for source code management in software development.

• Git is used to tracking changes in the source code

• The distributed version control tool is used for source code management

• It allows multiple developers to work together

• It supports non-linear development through its thousands of parallel branches

2. Reading the BigBlueButton documentation:

For starting our project, we needed to learn about the architecture of the BigBlueButton. It consisted of different softwares and languages used in the frontend and backend components. BigBlueButton is built upon a solid foundation of underlying components, including NginX, FreeSWITCH, Kurento, Redis, Node.js, React.js, and others.

3. Resource gathering from the project repository

We were provided with the GitHub repository of the BigBlueButton, so we looked into it and gathered some files related to ‘shared notes’ and ‘etherpad’. We read about the issue related to our project which was already open for discussion. We also came across some suggestion –

‘An API call can be added to give the shared notes some text. BigBlueButton is not previous/next meeting aware. We would need Greenlight or similar to know that a meeting is a continuation of another and then handle this shared notes content injection.’

4. Learning JavaScript and asynchronous JavaScript

As the entire shared notes repository is coded in JavaScript our team decided to learn/brush up JavaScript. Moreover, the codes used asynchronous JavaScript which made it an important to learn so that we can comfortably understand and make necessary changes in the code.

5. Installing BigBlueButton and further division of work

Our initiative coordinator suggested us to install the BigBlueButton on our respective devices. BigBlueButton is only available on Linux so we had to dual boot our laptops or install it using virtual box. This will help us to work on the backend part of the project.

Further we are working on the design and workflow based on Use cases, we also have to make a fireframework using penpot and come up with the flowchart for the workflow of the project.