In 2020, the world was pushed into quarantine. This brought about a drastic change in the day to day lives of people all over the globe. Schools, colleges and other educational institutions were forced to use other methods of learning. Even though things are starting to go back to normal, E-learning is here to stay. And with it come a new category of problems and obstacles, ranging from taking attendance to preventing copying, to maintaining the attention of the students and a wide variety of others as well.

The effort is towards creating an application that makes e-learning, and learning in general fun, for both the teachers and the students.

As we have all been in the shoes of students who have droned off in classes, we can relate to what most of the students face during their online classes.

The classes are boring and monotonic.

The classes are too long.

Someone has unmuted and now everyone can hear what's going on at their house.

And from the teacher's perspective

The teacher can never be sure if the students understood the topic or not.

The students are hesitant to interact with the teachers, and often we just have one or two active students in a class. While the rest "may" be present.

Solution to these problems:

The proposal is to use an already existing open-source conference software that is already used for classes.

We've chosen "bigbluebutton"

https://bigbluebutton.com

For implementation of this project.

Since the base is open source, that makes the creation of the software much more easier and less time consuming.

The proposal is to use the Python Api which is already present for bigbluebutton.

The python script will record the students while their classes are going on.

It will send a few random minutes during the class of a few random students. Enough to neither be resource consuming, nor allowing the students to skip their classes.

The software will also have an added ‘quick mute button’ because it is quite common for students to accidently unmute themselves during class.

And a significant amount of time is spent in trying to mute the students. Moreover it ruins the concentration of most.

The teacher also has access to quick simple animations memes, emojis etc.

These make the class more relatable to the students. And the students themselves will be more willing to join the class.

A person may say that these features are childish, but ask yourself, would you not be attracted to a class taught this way rather than the standard alternative?

Making the content relatable also makes it easier for the students to remember.

The teacher can also adjust their own voice or their student's voice so that they can communicate effectively.

Psychology says that the attention span of an average human is around 15-20 minutes. While the classes generally go for an hour or 45 minutes.

The proposed app will also have a timer that will notify the teacher at intervals of twenty minutes after the classes have started so that they may take a break of 5 minutes and do something non-academic related. Something that breaks the ice between the teachers and students. Encouraging

Students to take part in class, and preventing the class from becoming monotonous.

This software would also log the names and ids of the students who log into class along with their login and logout time and save them which can be viewed by their teacher whenever required. Multiple formats (such as xml, or simple csv)can be used to store these logs.

The teacher will also have an option to privately call these students using the app itself, whenever required.

The app can be further modified in many ways, since it’s an open source software.

It can be made cross-platform, It can use artificial intelligence on the student’s side, to identify when the student is not being attentive in class and record that along with noting the time. If the time of non attentiveness of a student exceeds a certain amount of time, the teacher will be notified.

The available attachments(emojis, animations etc) can always be increased.

Since the product is planned to be free and open sourced. It can be used to teach anywhere, even by poor schools which are unable to afford the other premium alternatives.

The product being open sourced also means that it can be further modified to target a specific audience.

That is, it is possible for it to be further modified to have specialized features for let’s say Medical students which although will not be useful to other students, but will greatly help the medical students.