FUTURE INSTITUTE OF ENGINEERING & MANAGEMENT

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

PROJECT ON VIRTUAL DRUM SET USING WEB APPLICATION

GROUP NUMBER 16

NAME OF STUDENTS

1. Alekhya Naskar

Class Roll no.: 18CSE026

MAKAUT Roll no.: 14800118132

MAKAUT Registration no.: 181480110010

Batch: 2018-2022

2. Alfraz Ahmed

Class Roll no.: 18CSE056

MAKAUT Roll no.: 14800118132

MAKAUT Registration no.: 181480110011

Batch: 2018-2022

3. Sanmoy Hore

Class Roll no.: 18CSE060

MAKAUT Roll no.: 14800118060

MAKAUT Registration no.: 181480110011

Batch: 2018-2022

4. Souvik Mondal

Class Roll no.: 18CSE054

MAKAUT Roll no.: 14800118039

MAKAUT Registration no.: 181480110103

Batch: 2018-2022

UNDER THE MENTORSHIP OF

SIR NATARAJ GANGOPADHYAY

TABLE OF CONTENTS

1. Introduction
2. Feasibility Study
3. Methodology/ Planning of Work
4. Facilities Required for Proposed Work
5. Bibliography

STUDENT SIGNATURES

Alfraz Ahmed Souvik Mondal Alekhya Naskar Sanmoy Hore

MENTOR’S SIGNATURE

**INTRODUCTION**

Virtua Drum is a web application that allows one to play drums on their various devices with an internet connection. We all must have seen a drum kit in some live concert or YouTube video of our favourite band or drummer. It is a collection of percussion instruments like drums, cymbals and other percussion instruments, this application brings the experience of playing from the convenience of your room. This application removes the absolute compulsion of having a drum set around the user and enables them to experiment and practice drums irrespective of their time and location, with internet being as readily available as it is.

The main concepts presented in the project are DOM, click and press events along with CSS. The way this website would work is that we will have a number of buttons on our web app that will represent various instruments in a typical drum set and when you click on any of those buttons then you’ll get the corresponding sound of the drum. And in addition, you can also use the keys on the keyboard to have the sound effect. The objective of this project is to give people the ease of practicing the art of playing a drum set without actually having a drum set.

**FEASIBILTY STUDY**

The feasibility study is an evaluation and analysis of the potential of a proposed project which is based on extensive investigation and research to support the process of decision making. Depending on the results of the initial investigation the survey is now expanded to a more detailed feasibility study.

**Technical Feasibility:**

Current technologies like HTML, CSS and JavaScript are sufficient in making the project. HTML will be used to give the structure of the web app while CSS takes care of the layout and presentation. JavaScript will provide the functionality.

The technical team is capable of developing with the technologies that are mentioned above with some training required.

**Operation Feasibility:**

Users can use the system with no additional training. All users are capable of opening a website.

**Market Research:**

This application will be useful for a specific group of people.

**Alternate Feasibility:**

A mobile app would provide more convenience

**METHDOLOGY OF WORK**

1. Research on percussion instruments to find various popular and most played instruments that are easy enough to use while interests people.
2. Make the sounds of the researched instruments in a way that it sounds good, in a suitable format for a website.
3. Find images of the instruments that are being implemented.
4. Make a keyboard configuration that is intuitive to understand.
5. Implement the website structure.

**FACILITIES REQUIRED**

1. HTML
2. CSS
3. JavaScript
4. JQuery
5. Bootstrap
6. Code editor like Visual Studio Code

**BIBLIOGRAPHY**

1. HTML Documentation

Link: https://developer.mozilla.org/en-US/docs/Web/HTML

1. CSS Documentation

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1. JavaScript Documentation

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1. JQuery Documentation

Link: https://developer.mozilla.org/en-US/docs/Glossary/jQuery

1. Bootstrap Documentation

Link: https://getbootstrap.com/docs/4.1/getting-started/introduction/