

# Piano

Proposal : Group 22

## Description

The piano can be considered as a simple starting point of fusing music into electronics. The purpose of this project is to develop a piano with seven notes with only analog electronic circuits.

## Outcomes

Design a piano that can generate sounds of frequencies associated with all the seven notes which are sensible for the human ear. The piano sound must be amplified for the sake of making it audible clearly. It is expected that the sound to be smoothened with noise-free constraints to make it more enjoyable.

## Skills

1. Hands-on experience with analog wave generation and wave addition.
2. Designing amplifier circuits from scratch which can handle higher frequencies.

## Evaluation Criteria

1. Design: Neatness, and sustainability of the electronic circuit.
2. Smoothness and audible level of output.
3. The smoothness of sound during switching between notes.

## Additional Notes

1. Members are not allowed to use any kind of IC, Timers, or op-amps in the design of the project.
2. Members are expected to have proper noise-cancelling strategies to make the sound enjoyable.
3. Having a proper sound controlling mechanism to switch between sounds is considered a plus.
4. Members are expected to implement techniques of pure wave generation and wave addition to achieve these requirements.