

# Virtual Instrument - The user's Manual

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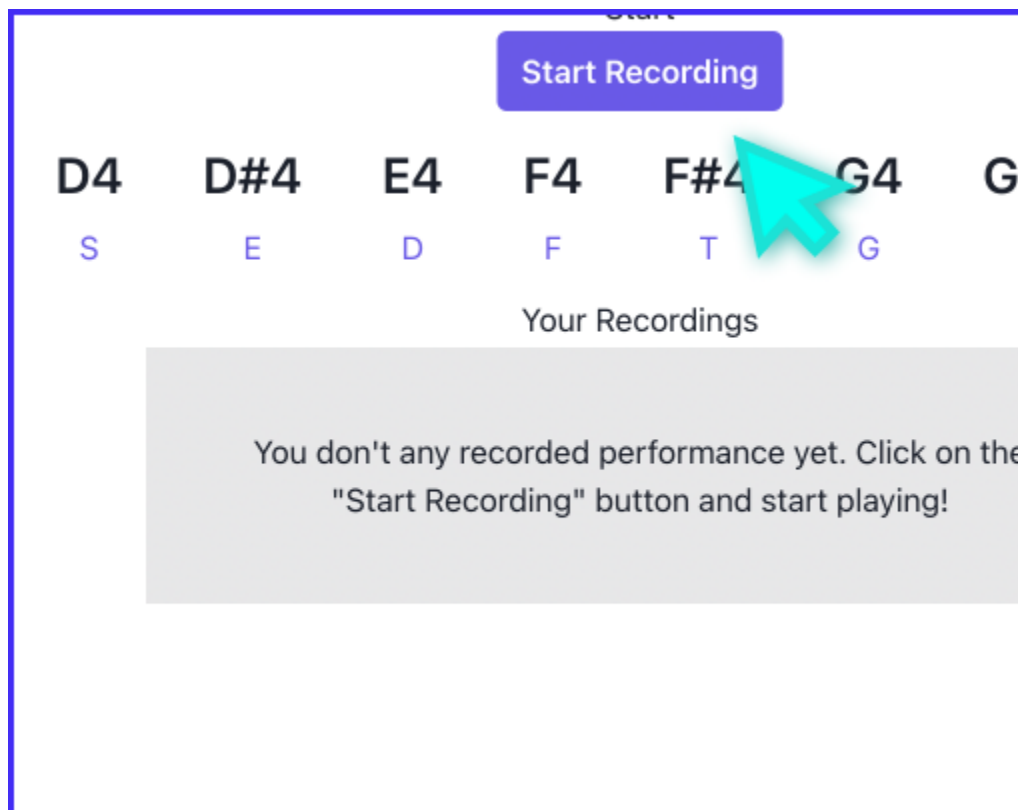
<https://chloeqino.github.io/virtual-instrument/>

## Overview

The virtual instrument is a web application that allows users to play melodies by pressing a range of keys on a virtual keyboard or using their computer keyboard. It enables users to record their performance, and play it back. In addition, the application provides a visual editor where users can edit the music they have recorded.

## Play and Record

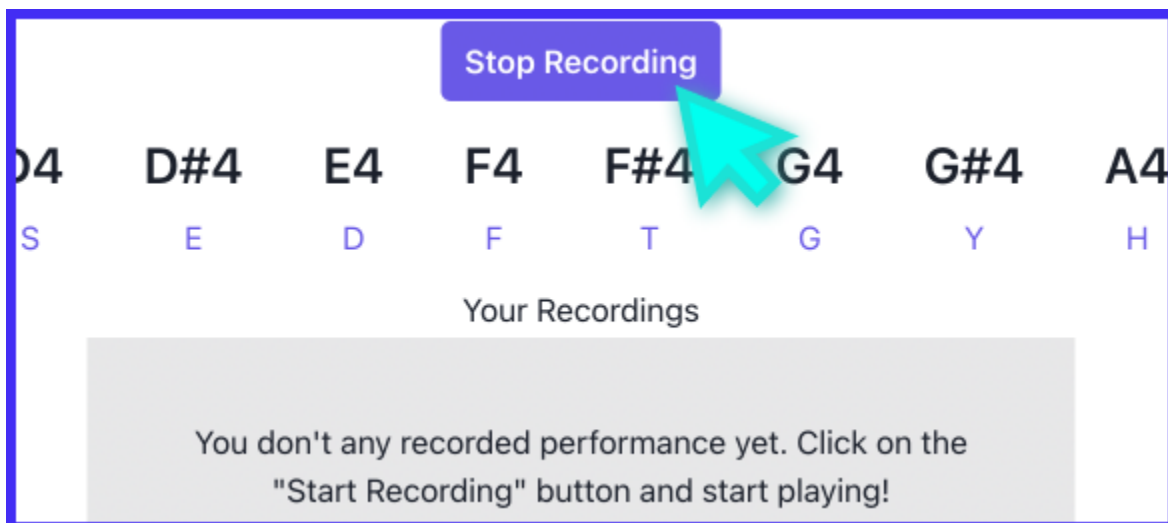
Step#1: Start recording by pressing the “start record” button.



Step#2: Play the melody by using your laptop keyboard or pressing the keys



Step#3: After finishing playing the melody, press the “Stop Record” button, your performance will then be recorded and added to the playlist.



Step#4: Play it back by pressing the “play” button!

Start Recording

D4

D#4

E4

F4

F#4

G4

G#4

A4

S

E

D

F

T

G

Y

H

Your Recordings

#	TITLE	DURATION(S)	
1	Recording 1	0.23	<div><div>play</div><div>edit</div></div>

Step#5: Repeat the above steps and make more music!

Edit

Step1: Select the track you want to edit and a edit window will pop up

Start Recording

D#4

E4

F4

F#4

G4

G#4

A4

E

D

F

T

G

Y

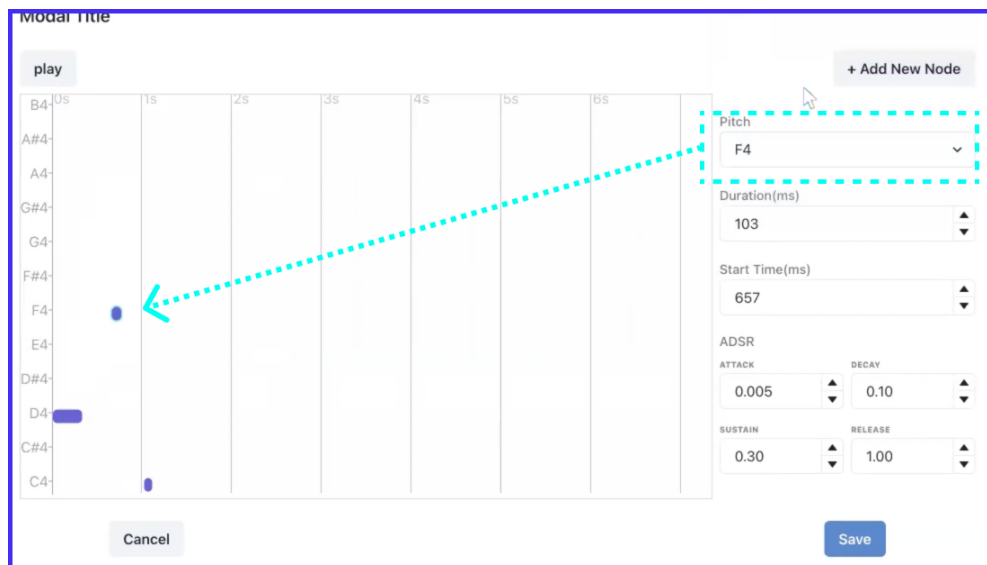
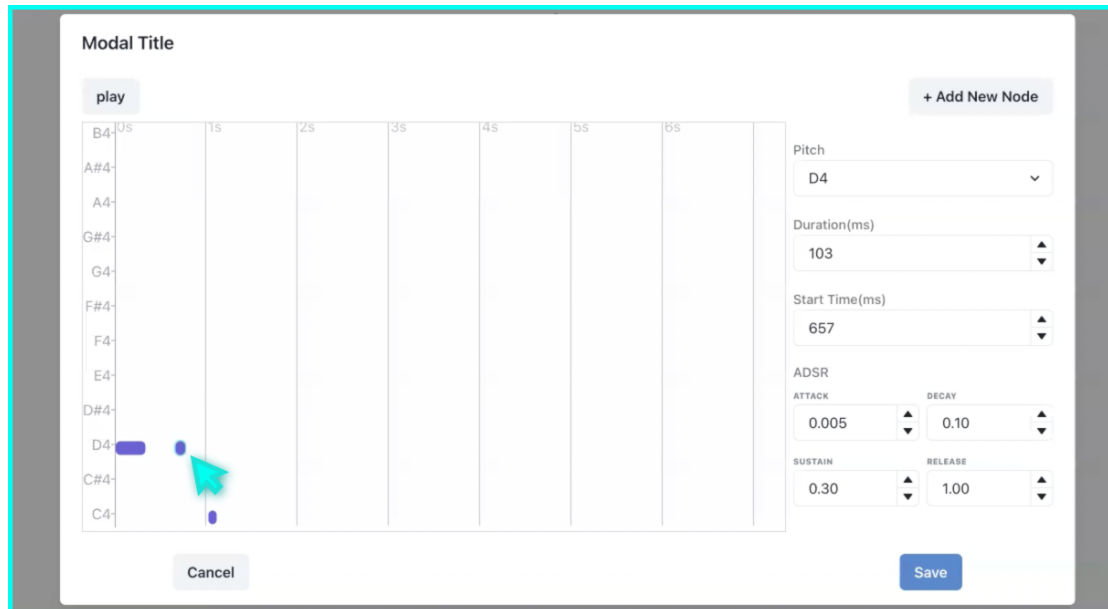
H

Your Recordings

#	TITLE	DURATION(S)	
1	Recording 1	4.76	edit
<div>play</div>	Recording 2	1.11	edit

Step2: Select a note by clicking on it

- Change the length/duration of the note
- Change the pitch
- Change the start time
- Adjust the ADSR envelope
- If you want to delete the note, press the “delete” key on your laptop keyboard



Step3: Now play the edited melody by clicking on the “Play” button on the top left corner

Step4: Add a note by clicking on the “Add note” button and entering the information

The screenshot shows a music notation editor interface. On the left, there is a piano roll with a vertical axis for pitch (ranging from C4 to B4) and a horizontal axis for time (ranging from 0s to 6s). A blue note is visible on the piano roll, positioned at approximately 1s and F#4. Above the piano roll is a "play" button. To the right of the piano roll is a settings panel titled "+ Add New Node". The settings panel includes fields for Pitch (A4), duration(ms) (120), Start Time(ms) (2000), Attack (0.003), Decay (0.10), Sustain (0.40), and Release (1.00). There is also an "Add" button with a mouse cursor icon. At the bottom of the interface are "Cancel" and "Save" buttons.

Step5: The note has been successfully added to the track! Now try to play it back again

The screenshot shows the same music notation editor interface as in Step 4. The piano roll now displays the note added in Step 4, positioned at approximately 2s and A4. The note is highlighted with a dashed red circle. The settings panel on the right is still visible, showing the same parameters as before. The "play" button is still present above the piano roll. At the bottom of the interface are "Cancel" and "Save" buttons.

Step6: After finishing editing, save your changes by clicking on the “Save” button. The editor modal will then be closed


Step7: Try playing the edited track again and you should be able to tell that it has been successfully edited

Start Recording

D4D#4E4F4F#4G4G#4A4

S E D F T G Y H

Your Recordings

#	TITLE	DURATION(S)	
1	Recording 1	4.76	edit
	Recording 2	2.12	edit

Have Fun Making Music!

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