Master of Rock Device and App

- Development Notes -

# 1 | 26.09.2022 @ 15.32, Uni Project Idea: Master of Rock Guitar Hero Device and App

What if there was a device similar to Guitar Hero, which represented the original instrument more accurately? Current devices have five or six buttons and one switch for the picker.

­­­Diagram

Description automatically generatedA picture containing guitar

Description automatically generated

Figure 21 | Guitar Hero Standard Guitars

Guitar Hero offers an excellent opportunity for entertainment; however, it hardly contributes to its users' musical education apart from improving fine motor skills and rhythm sense due to its enormous layout difference compared to the original instrument. Nevertheless, with the proper set of 20 ( or 24) possible finger positions and six-string switches, it might be possible to turn this device into a multi-purpose input and build an application around it that is entertaining and seamlessly educational.

This input device could be used for:

* Learning the layout and notes of a guitar,
* Follow app instructions to practice scales,
* Play actual music,
* Learn songs and riffs,
* Learn to read guitar tabs,
* Compete,
* Practice anywhere without the nuisance of the volume,
* Compose new songs.

The very same time and effort that users spend pressing seemingly arbitrary buttons on a plastic mock guitar could be used to acquire practical knowledge.

Similar devices, apps and inventions:

* Frets Zealot Fretboard Guitar System,
* Fanville Portable Wooden Pocket Guitar Practice Tool Chord Trainer Finger Exercise Gadget for Beginner Guitar Picks and Finger Strengthener Tool,
* Guitar Riff Pro App,
* All available guitar tablature readers.

**Challenges**: writing an application that listens to a device's input is not the most significant challenge. However, creating an instrument that handles 20 fret switches and six pieces of strings switches, a USB or Wifi connection that sends user actions to the PC is. Moreover, the device should not only resemble an actual guitar but must be comfortable enough to use. Finally, given the resources and the timeframe, our device and the application would instead serve as proof of concept.