

# Instrument (inheritance)

## Description

Create a program that can handle a diversity of instruments, using subclasses of the class **Instrument** for every instrument. Base your code on the previous assignment (Instrument Class).

Make a class **Instrument** that contains all generic properties: all features and properties that instruments have in common, like e.g. a **play()** method or a pitch range. Rationale: every instrument needs a function to 'play' it and every tonal instrument has a pitch range variable. The actual pitch range can be given when **Instrument** objects of the are created.

For each **type** of instrument, create a subclass of **Instrument**. What would be a useful classification? String instruments, key instruments, percussion or something else? Properties that are specific for a certain instrument type can be specified in the subclass for that instrument type.

Create instrument objects for each instrument type, so we have e.g three trumpets, two guitars and a piano, then let all instruments 'play together' by calling their **play()** functions. They should print a text with the type and name of the instrument, a descriptive sound and the pitch range.

## Extra

Adapt the **play()** function to only play when the given note is in the pitch range, otherwise tell the user that the note is out of range.