

# Sound

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Slides contain examples from the official Corona docs as well as the textbook.

# + Sound

- We will use some sound effects.
- No need for require() function.
- Use <http://www.bfxr.net/> for creating and download game sound effects



# Audio Handles

- audio.loadSound() and audio.loadStream()
  - returns **audioHandle** to be used in playing the sound
  - audio.loadSound(): loadSound loads in sound files
  - audio.loadStream(): loadStream loads them as a stream:
    - used for long files to save memory
    - loads blocks at a time
    - cannot be shared across channels
- Examples:
  - local **soundEffect** = audio.loadSound( "chime.wav" )
  - audio.play( **soundEffect** )



# Playing Sounds

- `audio.play( audioHandle [, options ] )`
  - returns selected channel
  - **Options** table can include:
    - `channel` : select 1 to 32. default=0=auto
    - `loops`: repeat x times.
      - 0=no repetition. 1=repeat 1 more, for total 2 times.
      - 2=repeat 2 more, for total 3 times.
    - `duration`: duration including repeats. (ms)
    - `fadein`: (ms)
    - `onComplete`: callback function pointer
      - It will pass back an event table to the callback function:
        - `event.name`
        - `event.channel`
        - `event.handle`
        - `event.completed`
- `audio.pause(<channel # >)`
  - Empty input parameter → pause ALL channels

# + Playing Sounds (continued)

## ■ Handles

```
local soundTable = {  
    shootSound = audio.loadSound( "shoot.wav" ),  
    hitSound = audio.loadSound( "hit.wav" ),  
    explodeSound = audio.loadSound( "explode.wav" ),  
}
```

## ■ When shooting

```
audio.play( soundTable["shootSound"] );
```

## ■ When target is hit

```
audio.play( soundTable["hitSound"] );
```

## ■ When enemy explodes

```
audio.play( soundTable["explodeSound"] );
```



# Audio Format

- Supports different audio formats:

- .wav
- .mp3
- .mp4
- .acc,
- .ogg



# Channel & Volume

## ■ Audio Channels:

- Supports 32 channels.
- You can reserve certain channels using:
  - `audio.reserveChannels(#channels)`
  - `audio.isChannelActive()`, `audio.isChannelPlaying()`, and `audio.isChannelPaused()`

## ■ Control Volume

- a decimal representation of 0%-100% to the `audio.setVolume()` API
- `audio.setVolume( 0.5 )`
- `audio.setVolume( 0.5, { channel=1 } )`



# Control Audio

- `audio.pause`
- `audio.resume`
- `audio.rewind`
- `audio.seek()`
- `audio.stop()`
- `audio.stopWithDelay()`
- `audio.dispose(audioHandle)`



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# NEXT Agenda

- OOP

- Inheritance, overriding, etc. in LUA