Architexture IV

Blurring the lines between architecture, composition, acoustics and technology.
Who Am I?

- Second Year University of York student studying Electronic Engineering with Music Technology Systems.

- Interest in Music

- Some key skills I learnt from my degree
Architexture Projects

Architexture I -

Architexture II –

Architexture III -

Architexture IV…
Project Objectives

- Build on Architexture 3 in a new format

- Interactive Web Based tool anyone can access*

- Room acoustics as another musical flavour
Initial Steps

- Impulse response and convolution
- Research – Web Audio API and Glitch
- Version 1 - Simple Media Player with basic functionality
- Just working with pre-recorded tracks
Later On

- Four tracks all with basic functionality
- Ambisonics
- Panner Nodes
- User Interface
Mix Console Version 4

Source 1 -> Gain 1 -> Panner 1
Source 2 -> Gain 2 -> Panner 2
Source 3 -> Gain 3 -> Panner 3
Source 4 -> Gain 4 -> Panner 4

IR Selector
IR Convolver
IR Convolver
Conv W -> Conv X -> Conv Y

Minster Gain
Guildhall Gain
MaesHowe Gain

Dry Gain

W 30
X1 -30
X2 30
Y1 -30

Convolution Limiter Gain
Convolution Gain

Master Gain
Output Limiter Gain

Output
Visualiser all

Different tracks can be sent to different IRs
A Few Problems

• Performance

• File Naming Issue with part of Architexture III

• HTML / CSS

• General coding growing pains
Next Steps (One Week Left)

• Making it simpler and easier to understand

• Any performance improvements

• Upload own audio Files and Improve Microphone

• Pre-set Modes

• Bug Fixes / Tidy Up
What Have I taken from the Project

• A new-found appreciation for websites
• Understanding of Acoustics in space.
• Prioritising and achievable goals
• Independent work
Thank You for Listening

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Any Questions