Space, Hardware, Software

Considerations for designing and building rooms for online teaching

Peter Windle

Department of Computing and Mathematics

South East Technological University

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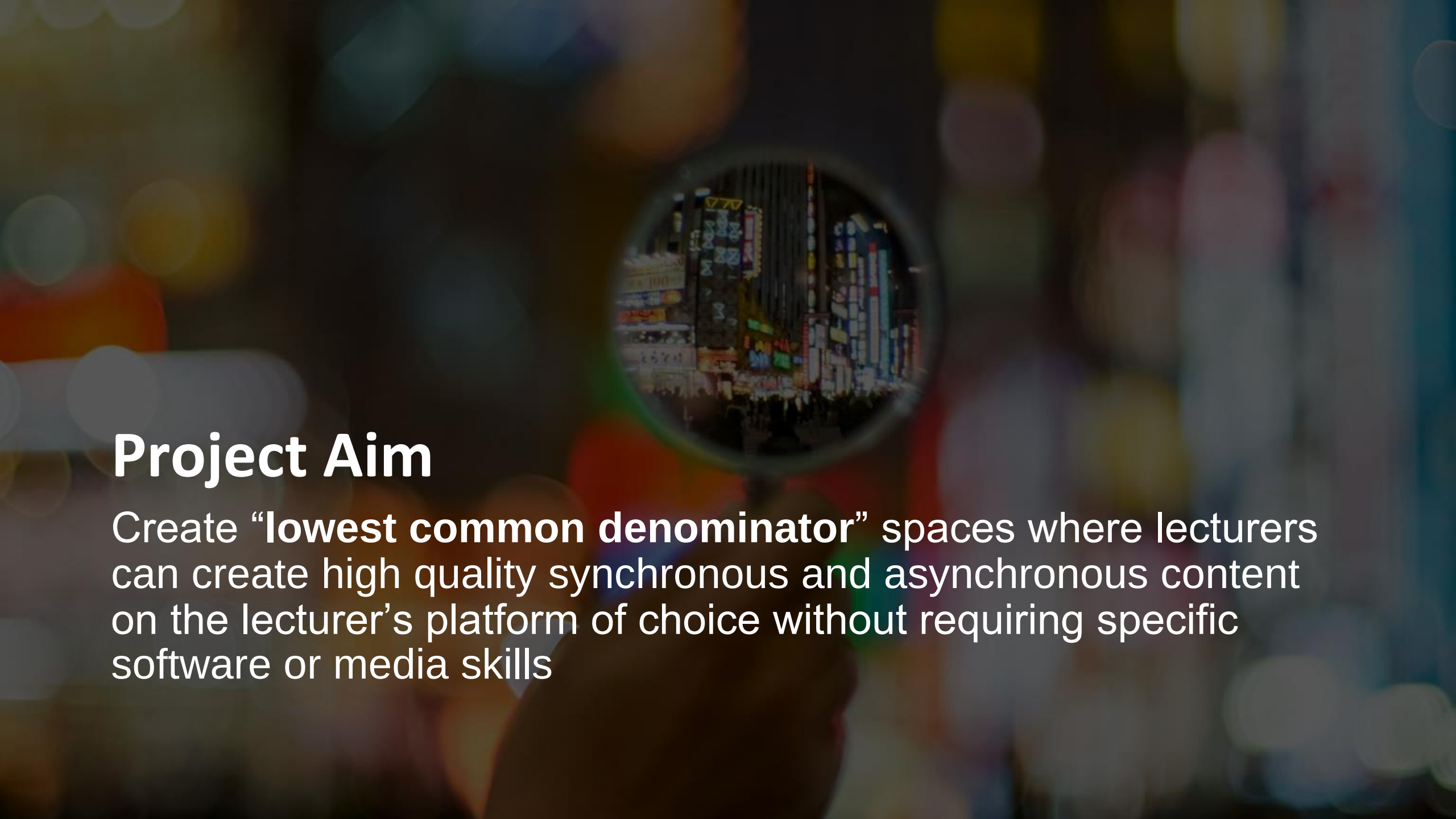
Project Background

Why develop four new pods?

- SETU's Department of Computing and Mathematics has grown the number of fully online modules
- Over 50+ online contact hours in any given week
- Further growth projected in the next academic year
- Delivering to Nanjing University of Information Science & Technology
- Placed excessive demand on the CTEL's Pods

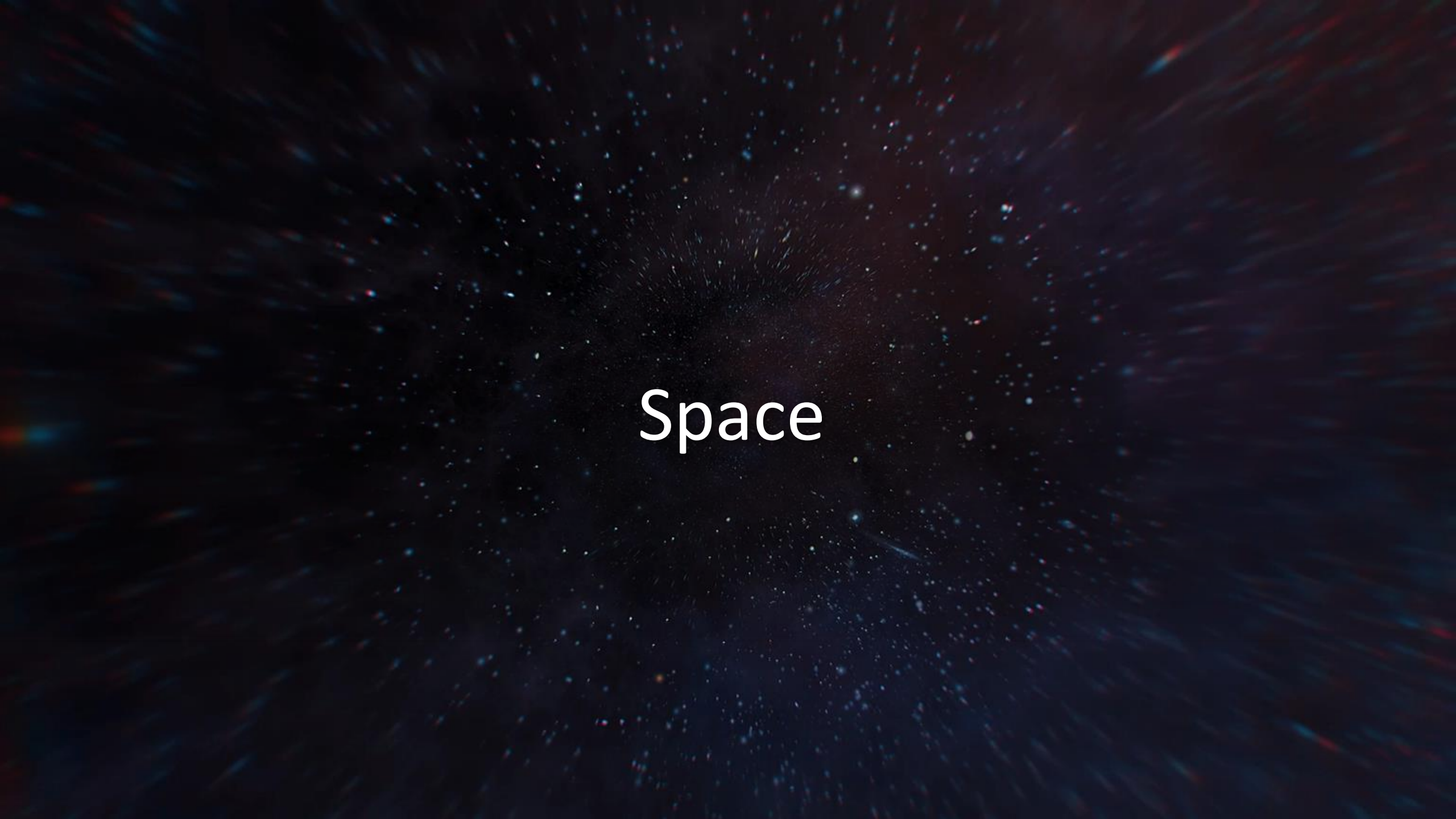


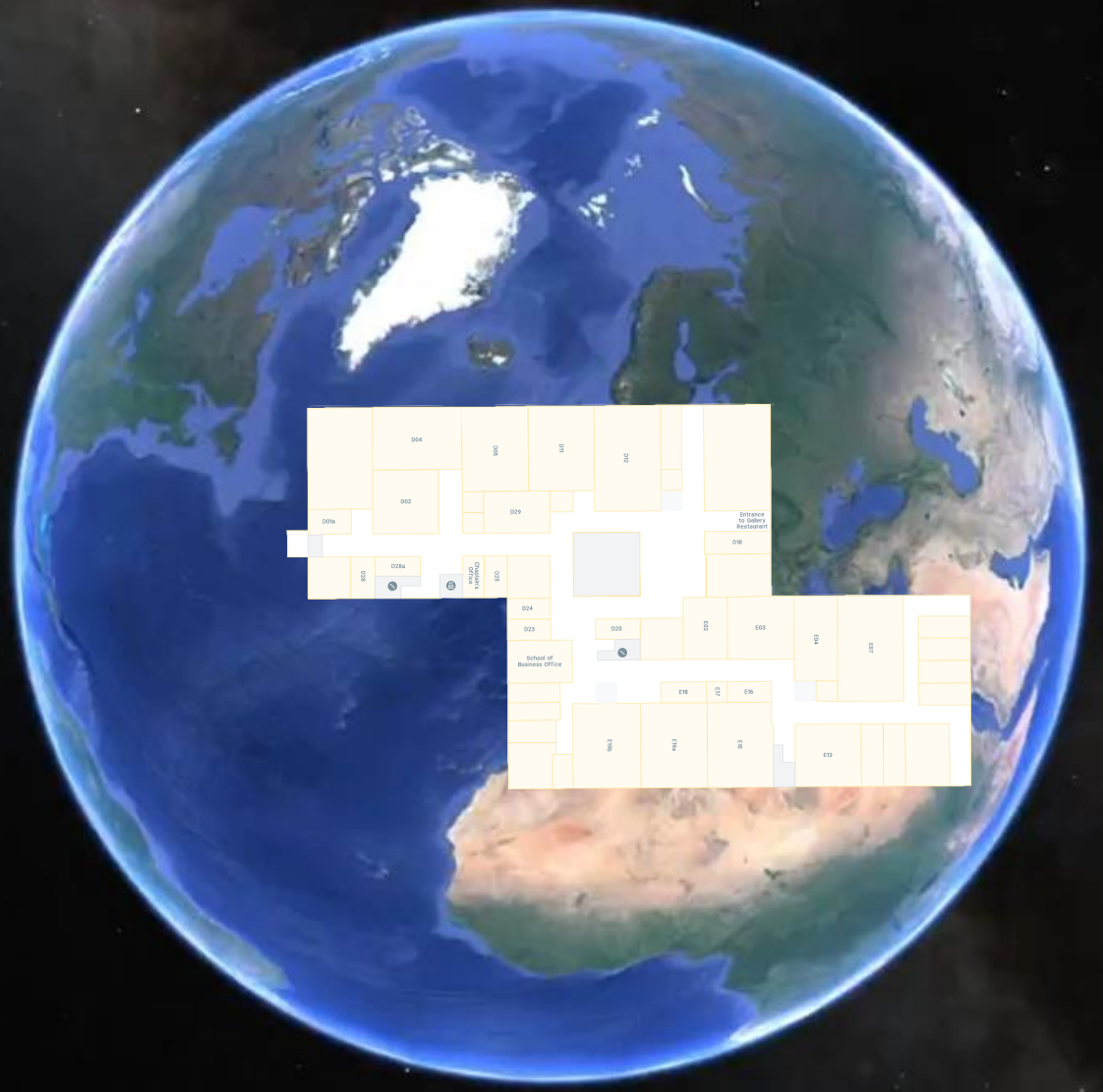
Project Aim

Create “**lowest common denominator**” spaces where lecturers can create high quality synchronous and asynchronous content on the lecturer’s platform of choice without requiring specific software or media skills

These spaces must:

- enable a **range** of workflows
- allow for **stand up** and **sit down** delivery
- accommodate lecturers who wish to **bring their own devices**
- have **quick** turnaround times
- eliminate the need to install **specialist software**
- remove the need to **unplug** any peripherals
- allow lecturers to **annotate**
  - PDF files
  - Powerpoint presentations
  - AND over any screen.


Space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D02
D29
D00a
Entrance to Gallery Restaurant
D18
D28a
D28
D25
Ladies Toilets
Gents Toilets
D24
D23
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E02
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School of Business Office
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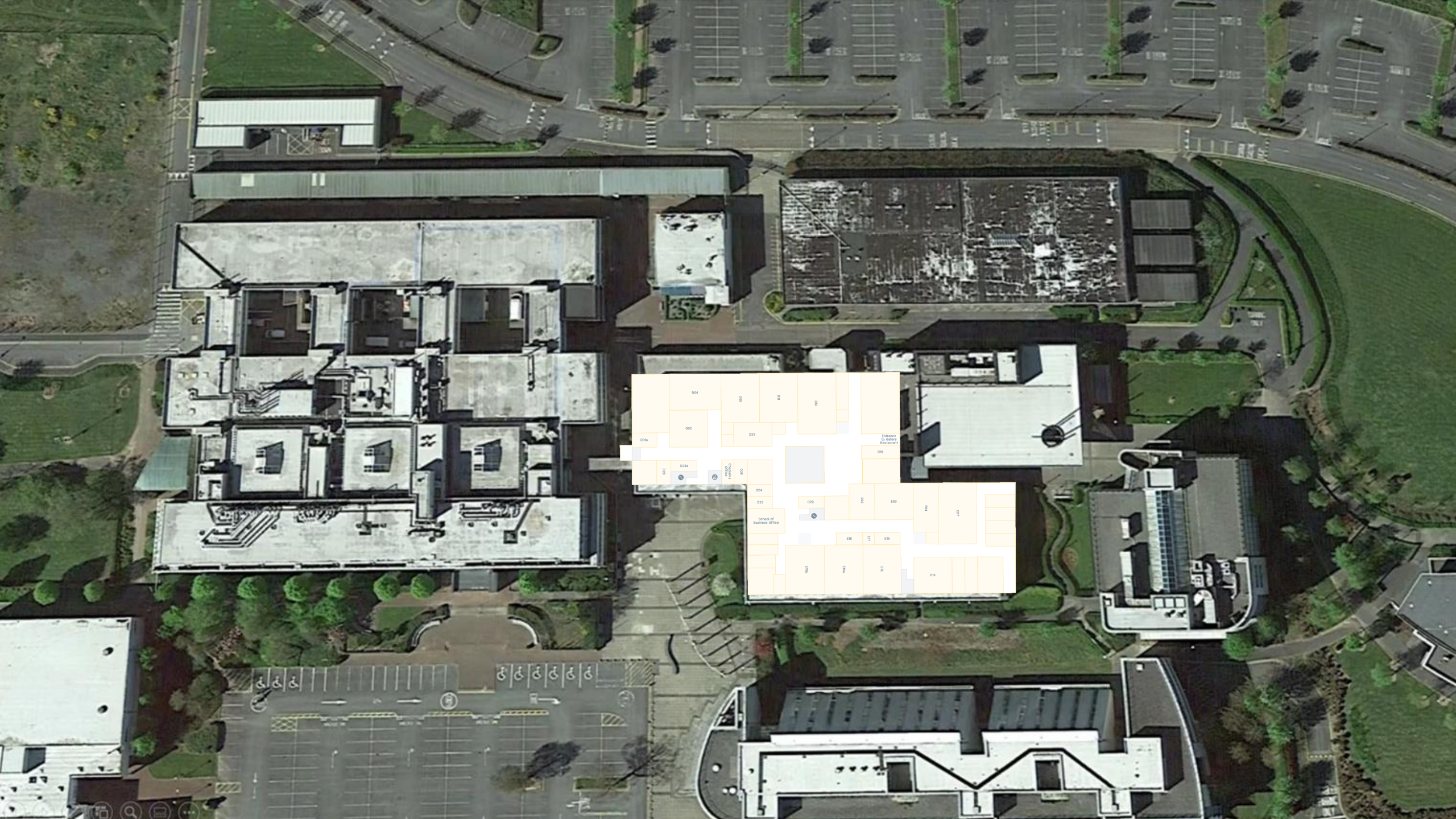
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School of Business Office
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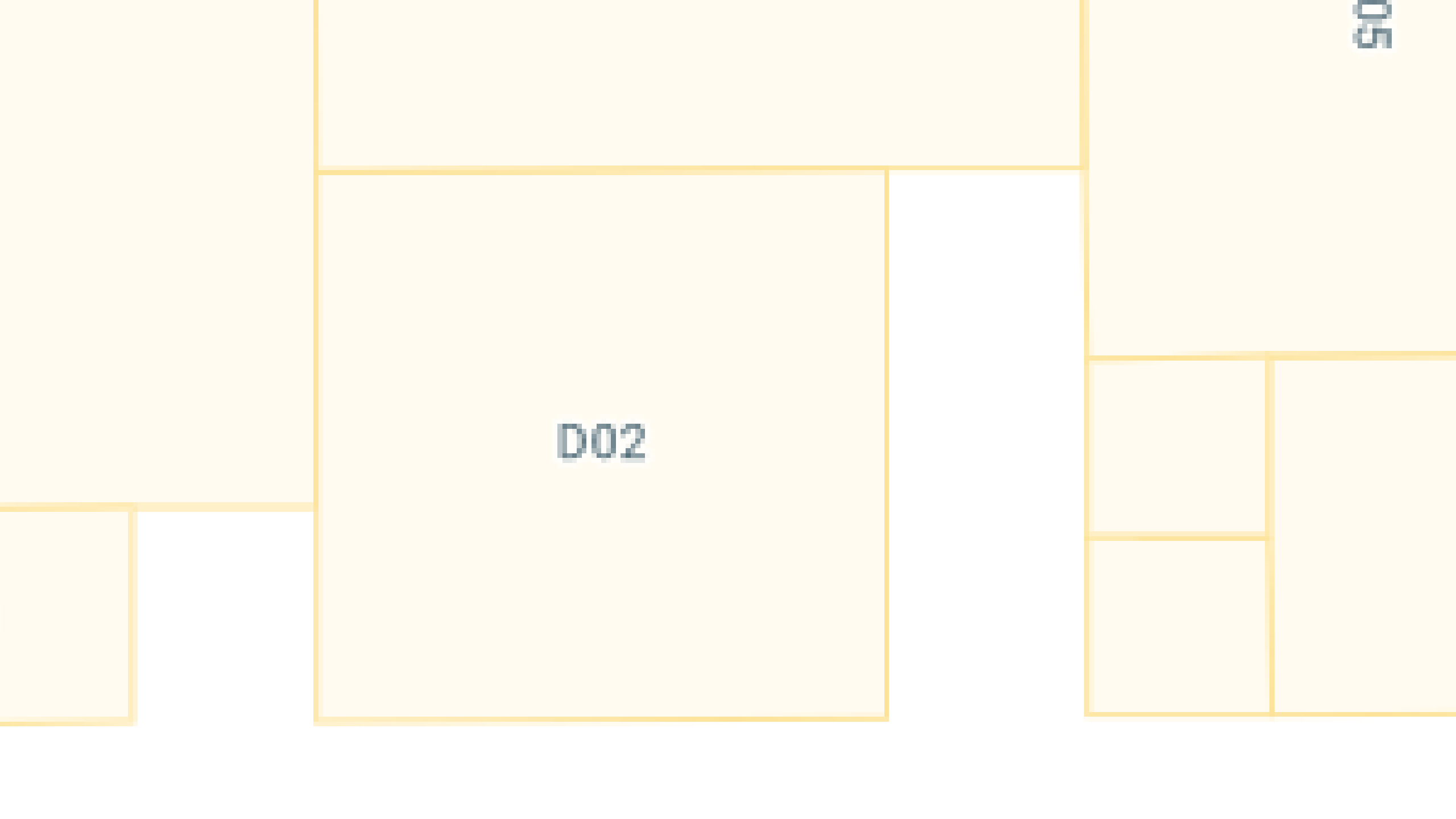
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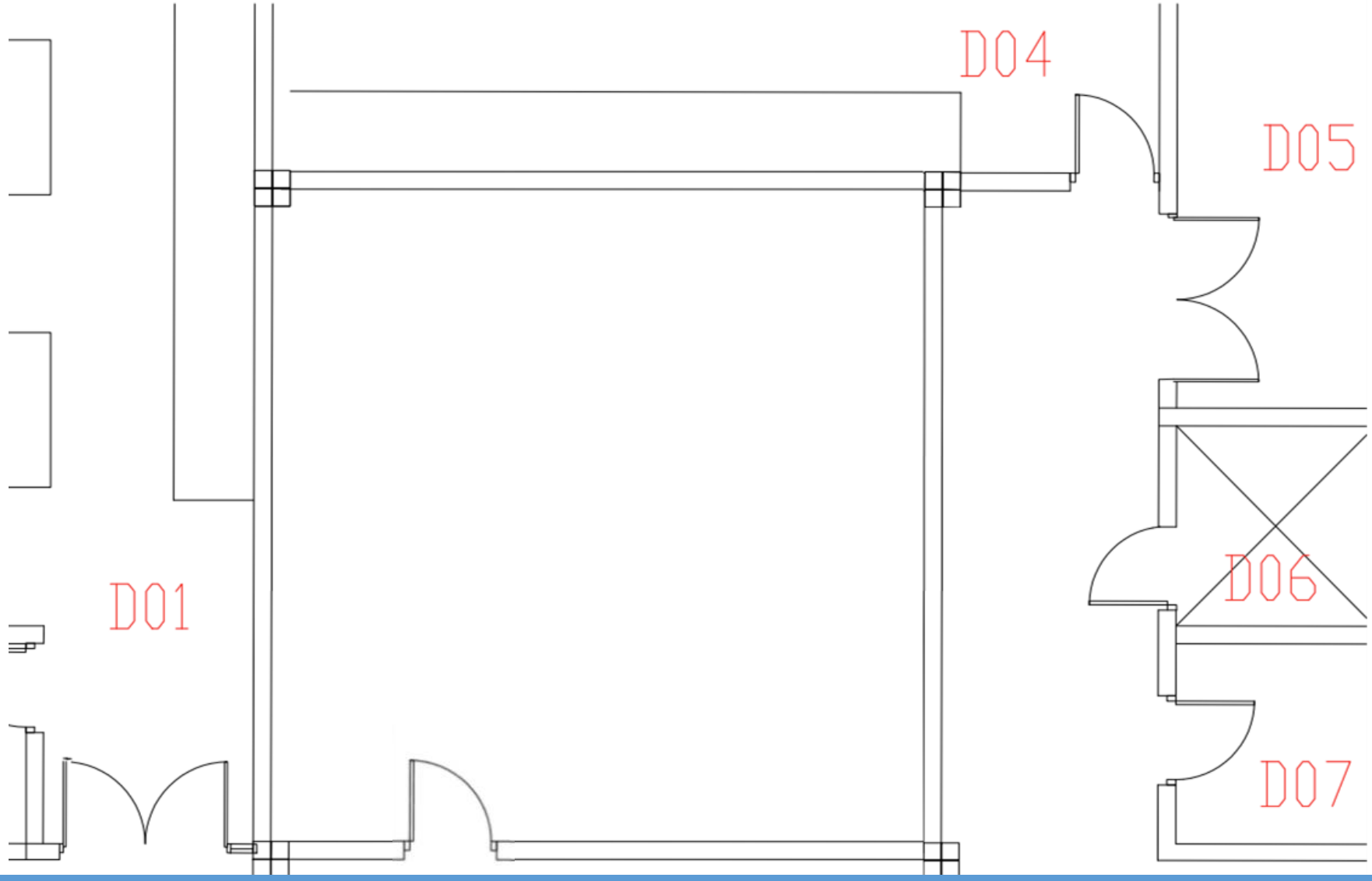
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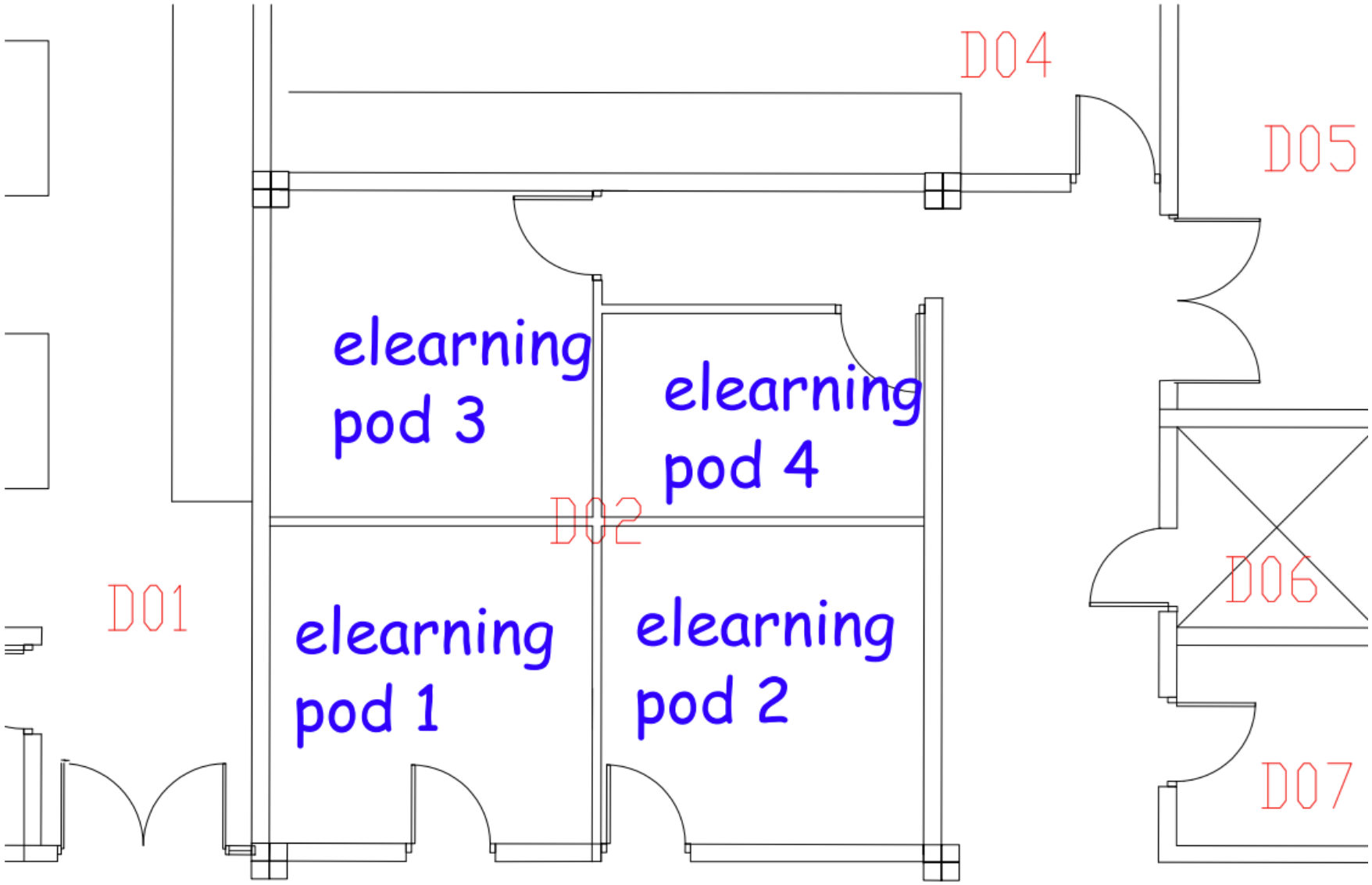
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elearning
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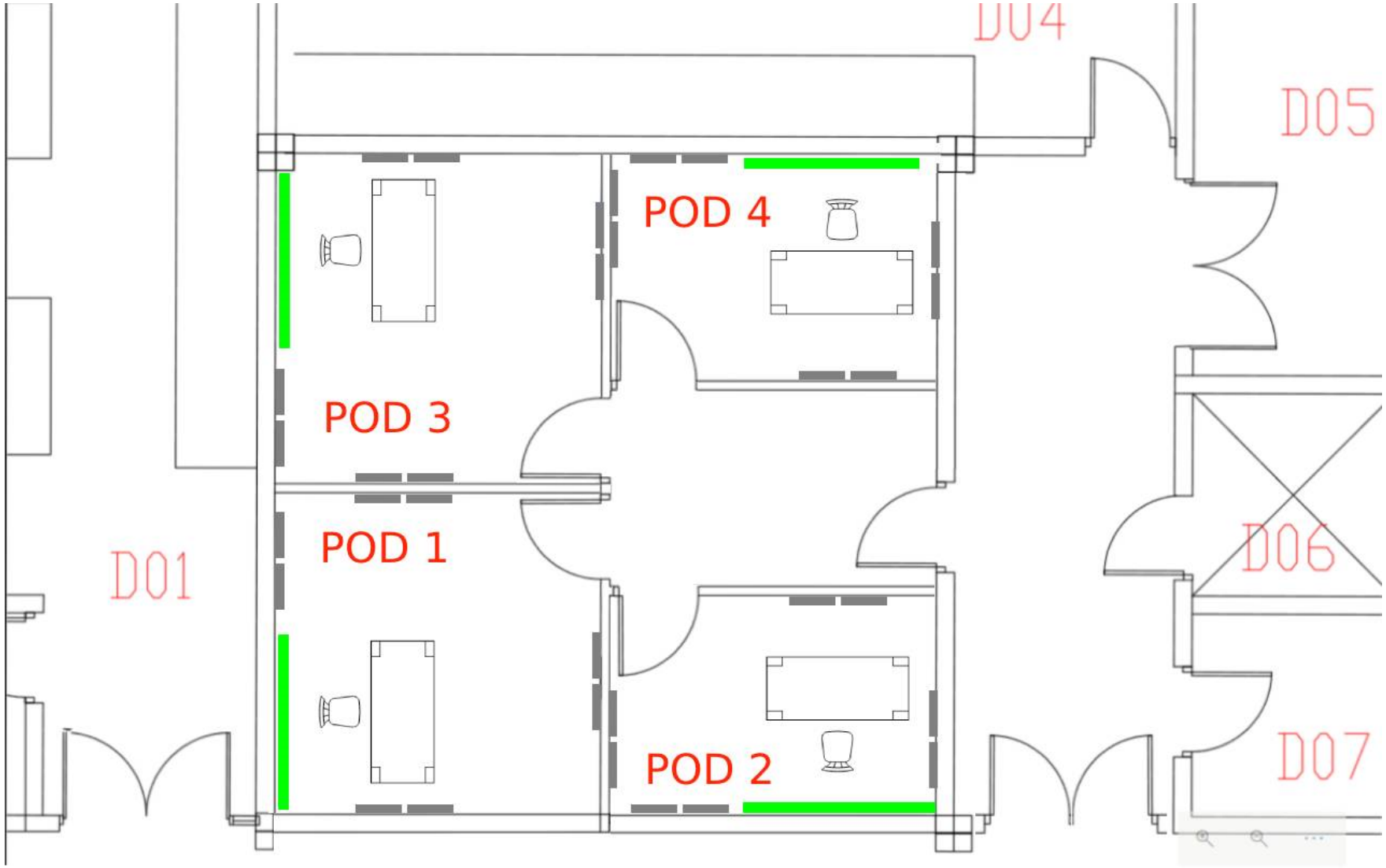
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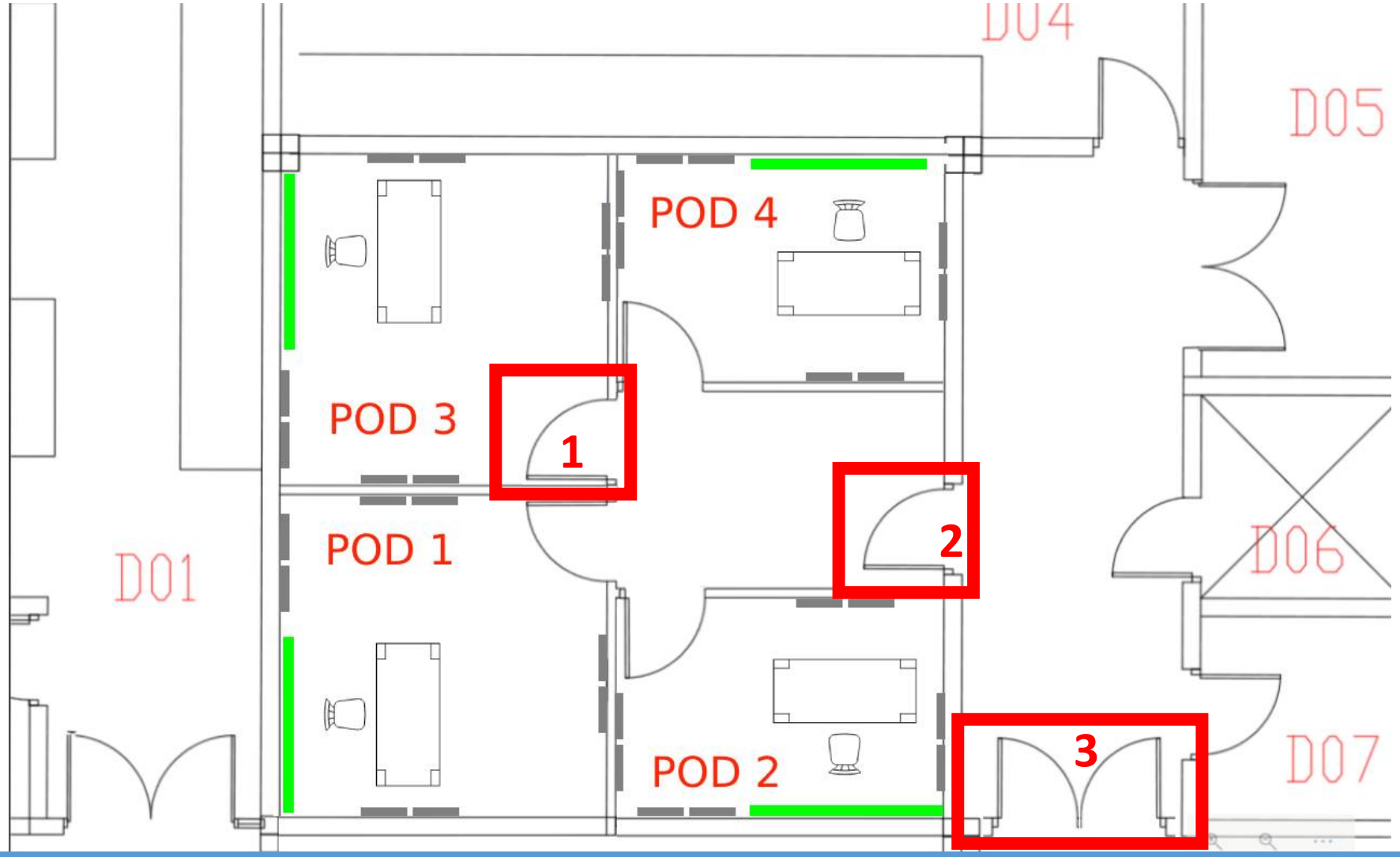
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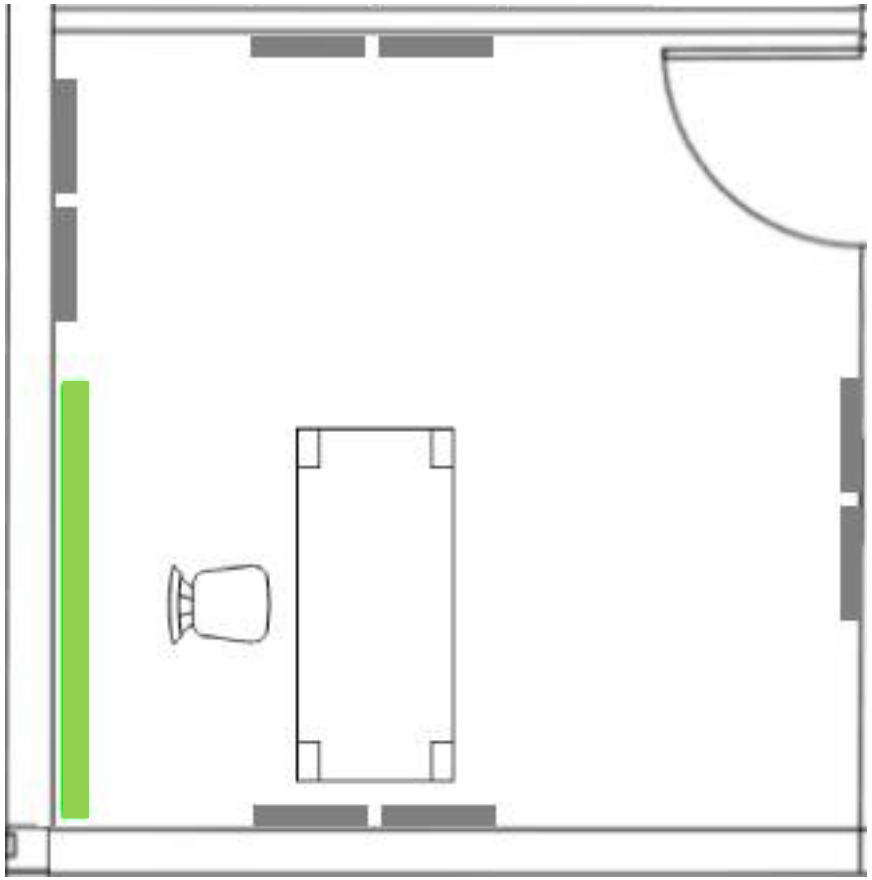
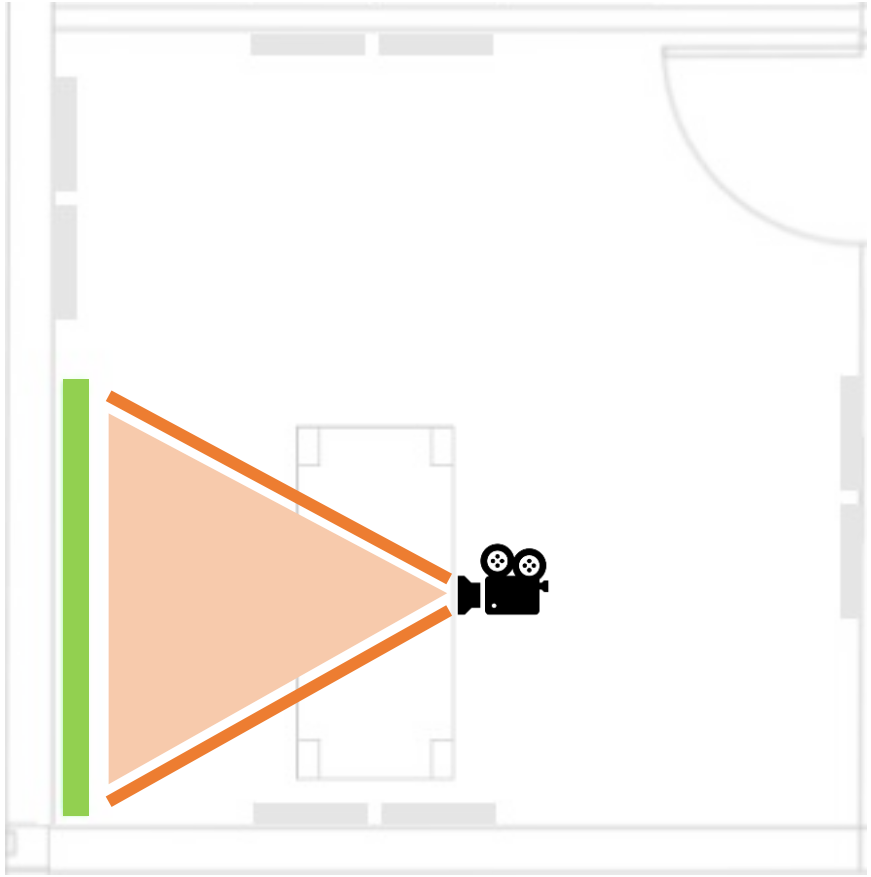
POD 2

Single Room

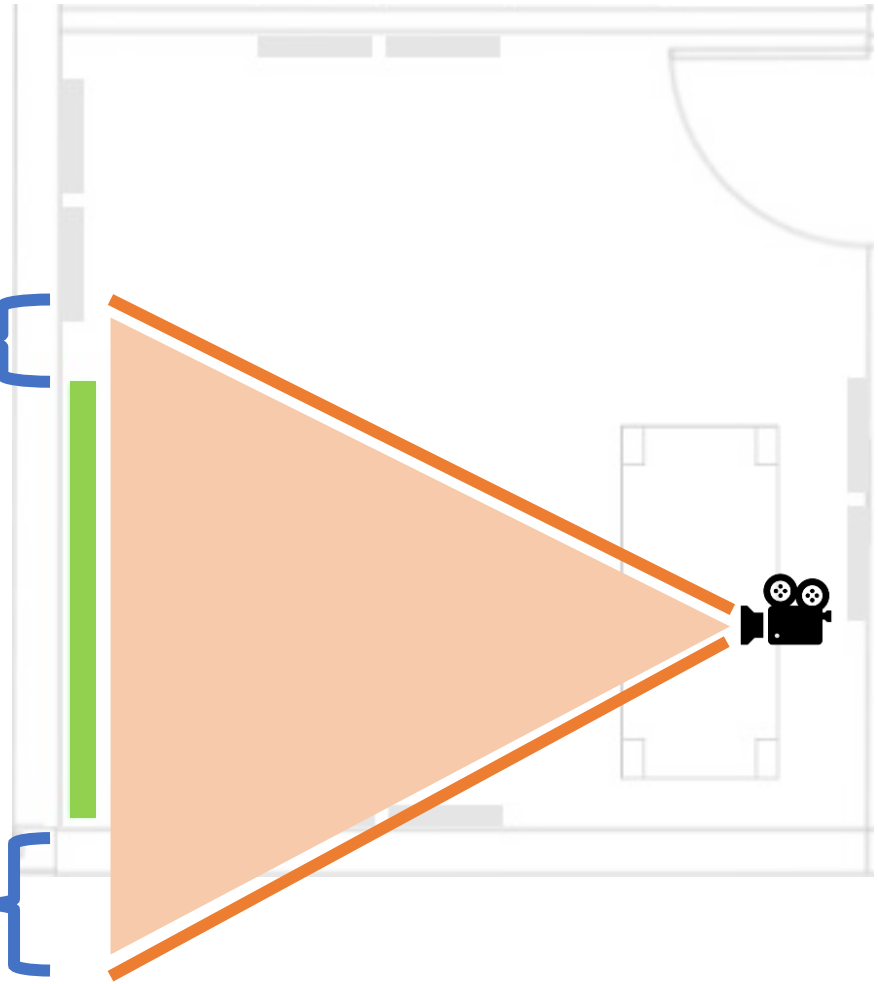


Why is the desk in the middle of the room?



Why is the desk in the middle of the room?

Too Much Space Around The Green Screen



Acoustic Considerations

Keep noise out + make rooms sound better

Gyproc SoundBloc Acoustic Rated Plasterboard

Plasterboard Selector Guide

For all drylining solutions

Gyproc plasterboards

Providing the ultimate drylining solutions for today's buildings

Gyproc plasterboards provide high levels of fire, acoustic, thermal, moisture, impact resistance and fixing capability to create modern internal environments that offer comfort and safety for occupants.

They offer high quality, high performance linings for walls and ceilings, lift shafts and stairwells, corridors and auditoria, in buildings as diverse as houses, schools, hospitals and cinemas.

Plasterboard performance

Enhanced performance solutions for any building requirement

Enhanced acoustic performance

Improving the acoustic performance of walls and ceilings has a direct and measurable impact on the environment in which we work and live. For use in new build and renovation projects to minimise sound transfer.

Enhanced moisture performance

For use in medium to high moisture environments such as toilets, bathrooms and kitchens for both walls and ceilings. For areas with direct water contact such as splashbacks around sinks or areas that require tiling, Glasroc H TILEBACKER should be used.

Enhanced fire performance

Fire performance is a common feature of all Gyproc boards, but many areas in buildings require higher fire performance levels, such as stairs, attics and high traffic areas. For structural steel encasement and the highest performance see our Glasroc F products.

Enhanced robust performance

Robust boards are less prone to damage from glancing blows, impacts and general wear and tear. Robust boards are ideally suited for high traffic areas such as public

Rockwool RWA45 Acoustic Rated Insulation

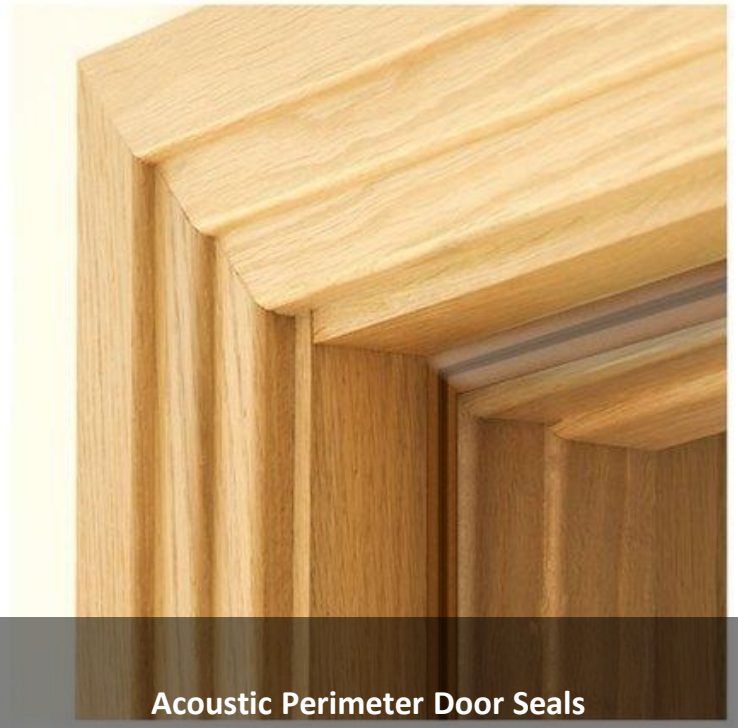
Slab Products Ground Floor Products Separating Wall Products Partition Wall Products Intermediate Floor Products

RWA45

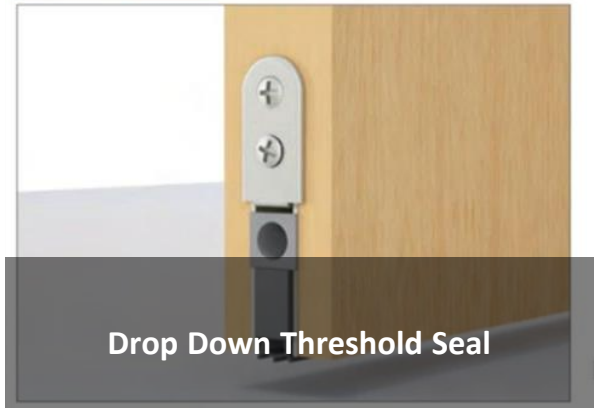
An all round performer

ROCKWOOL RWA45 is a robust insulation solution for a range of general building projects as well as specialist specifications such as commercial, leisure, industrial buildings and more. The insulation provides excellent acoustic, thermal and fire performance.

Other Acoustic Considerations



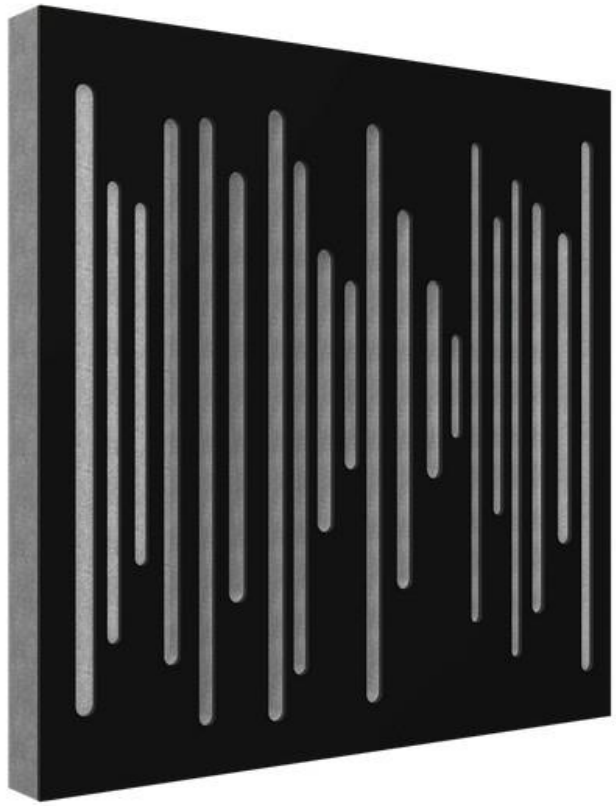
Acoustic Perimeter Door Seals



Drop Down Threshold Seal

Ensure Walls Went to Roof Level Not Tile Tile Level

Acoustic Diffusers To Alleviate Echo/Reverb



Vicoustic Wavewood Diffuser Ultra Black

Hardware

USB Only

Dell OptiPlex 7060 Tower + Two 24” Monitors

Wacom Cintiq 16 Pen Display

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Introduce myself
Recently moved to full time academic position
Previously I lectured parttime and worked in the Centre for Technology Enhanced Learning (CTEL)
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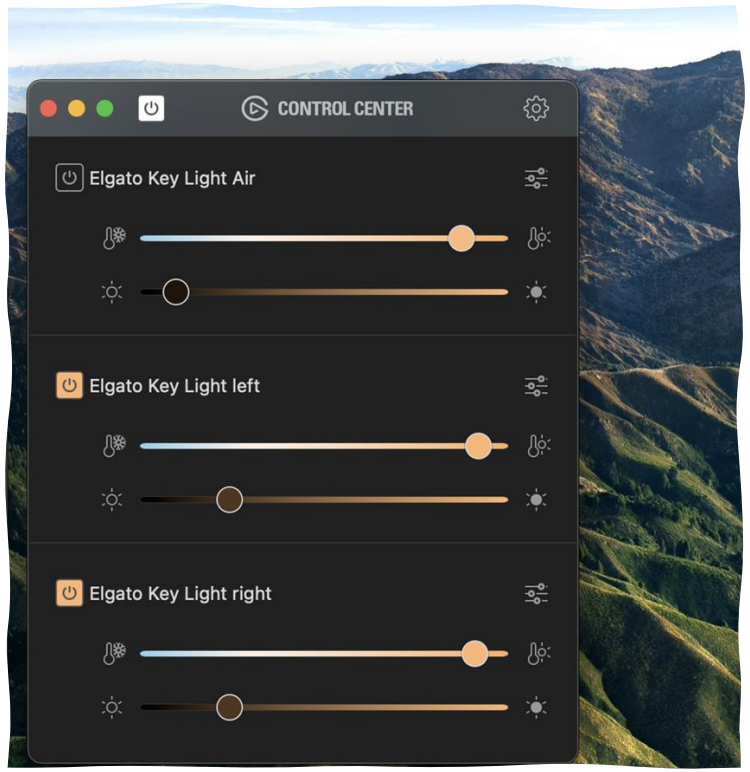
Microphone + Camera

Audio-Technica AT2020 USB+ Desk Mic

Logitech PTZ Pro 2 - Remote pan-tilt-zoom USB Camera

Elgato Key Light



Elgato Stream Deck

- Control OBS (scenes, sources, start and stop stream etc)
- Control Zoom (mute, camera, share etc)
- Control Key Lights
- Turn on annotation tools
- Shortcuts to other apps

Pull Down Green Screen

Elgato Green Screen MT

HDMI Capture Card

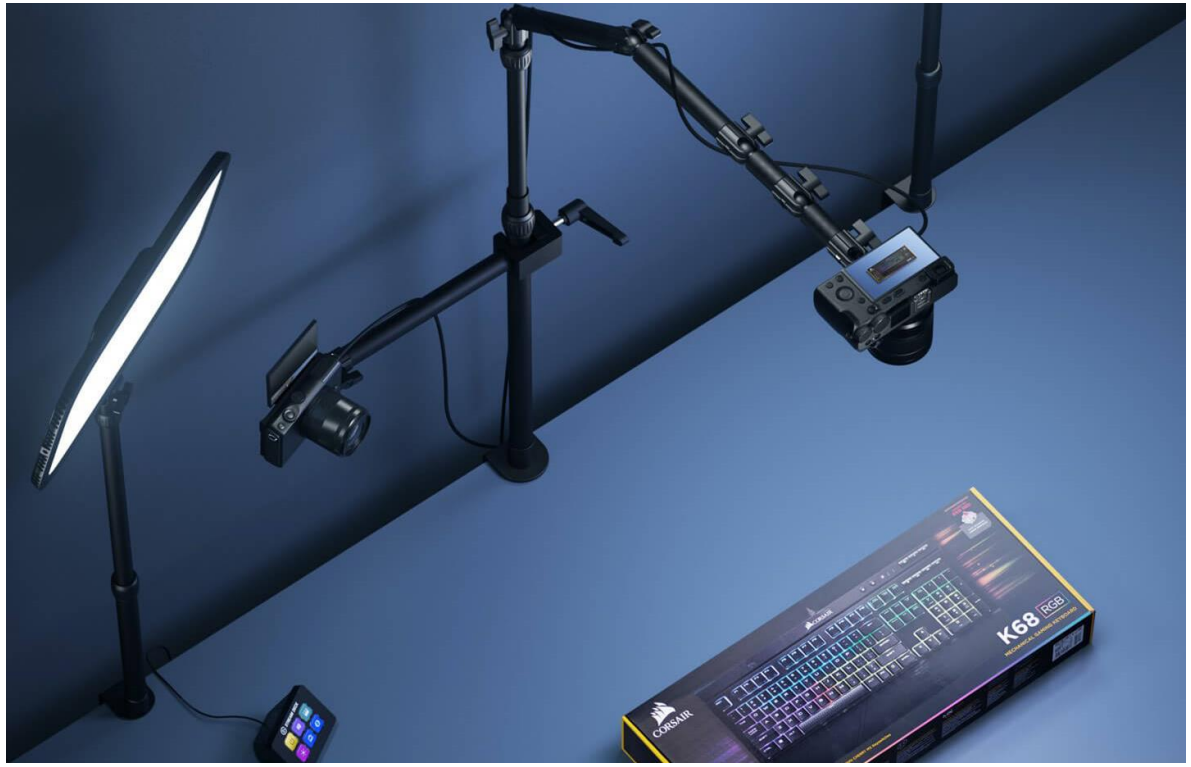
INOGENI HD to USB 3.0 Converter – Capture laptop output

Extras

Rode PSA-1 Mic Stand

Elgato MultiMount

Elgato Flex Arm L



Flex Arm – Flexible Mounting Kits

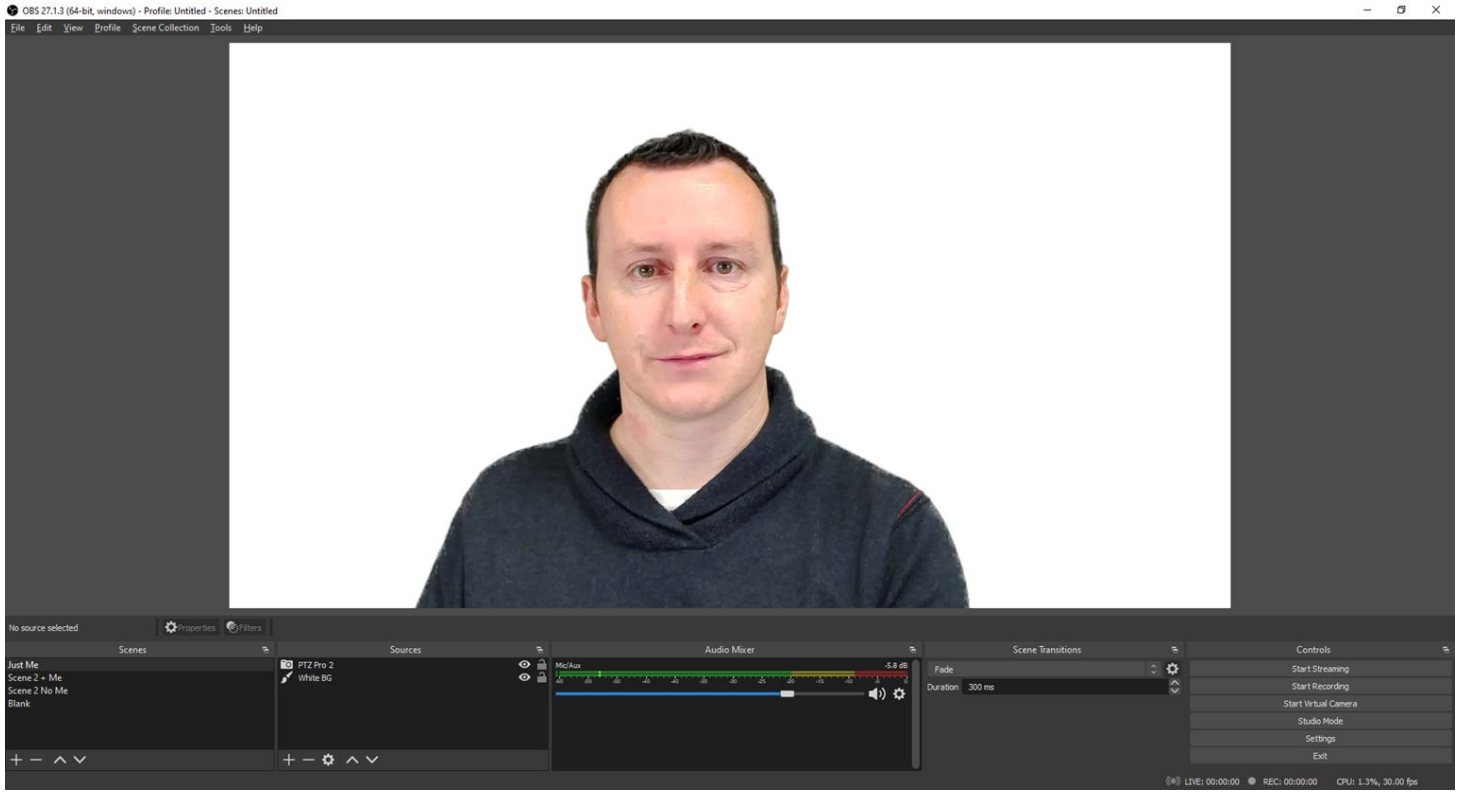
LEAP Electric Height Adjustable Desk

Software

Zoom

Zoom Meeting
View
Jan
Alison (she/her/hers)
Jam (she/her/hers)
Hannah
FH
Lauren
John
Myja
Raise Hand
Slow down
Mute
Stop Video
Security
Participants
Chat
Share Screen
Polling
Record
Live Transcript
Breakout Rooms
Reactions
Support
More
End

Open Broadcaster Software (OBS) Studio



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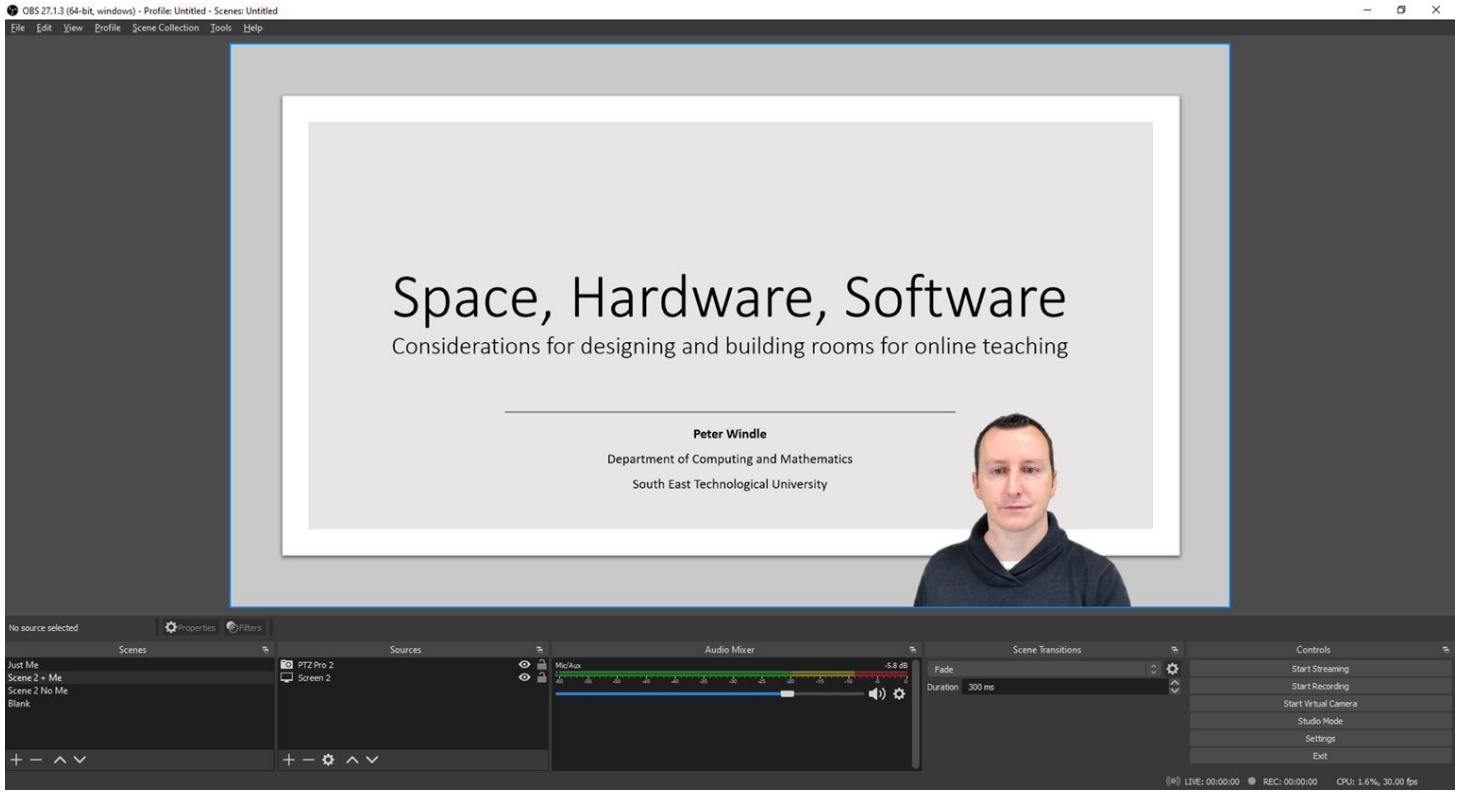
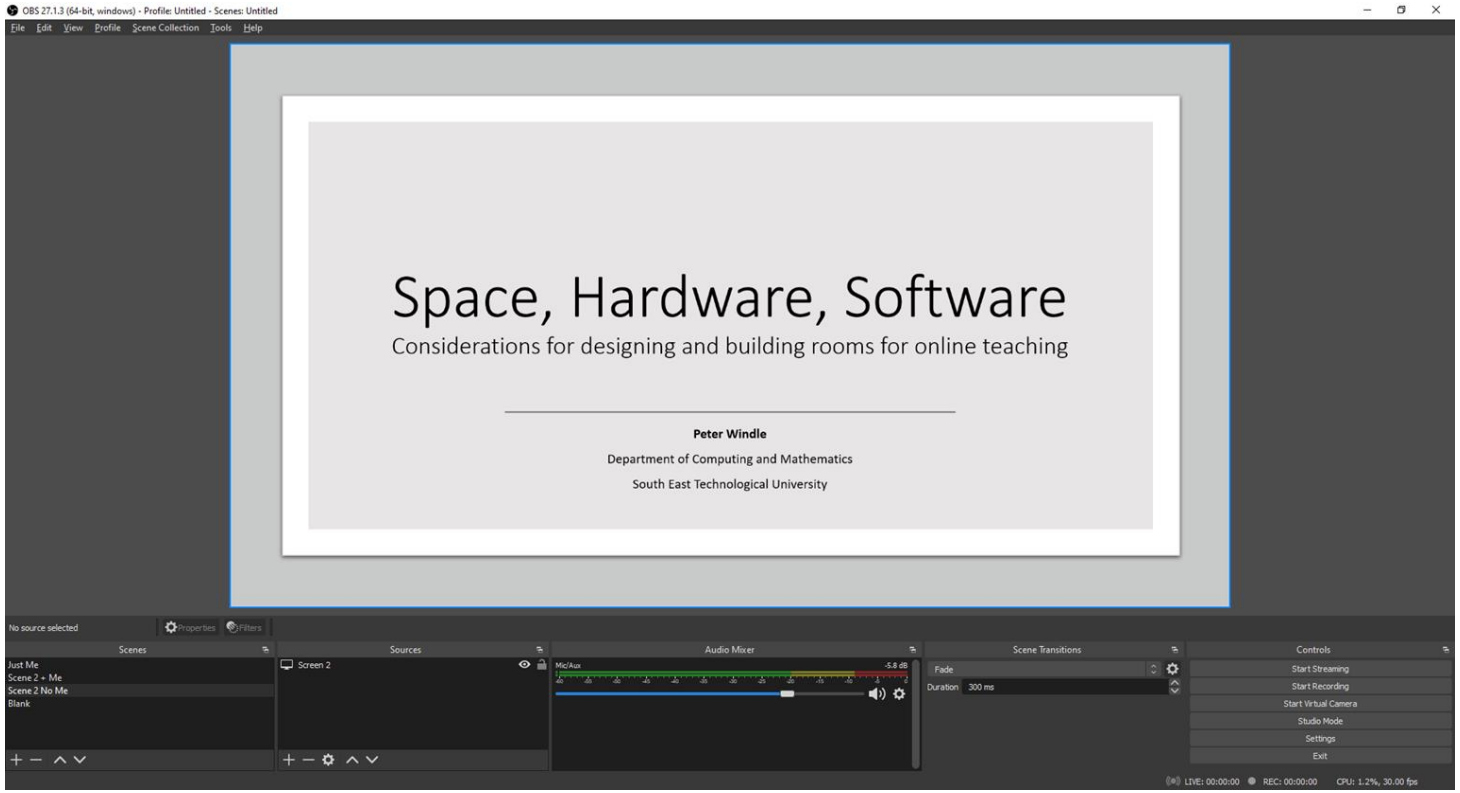
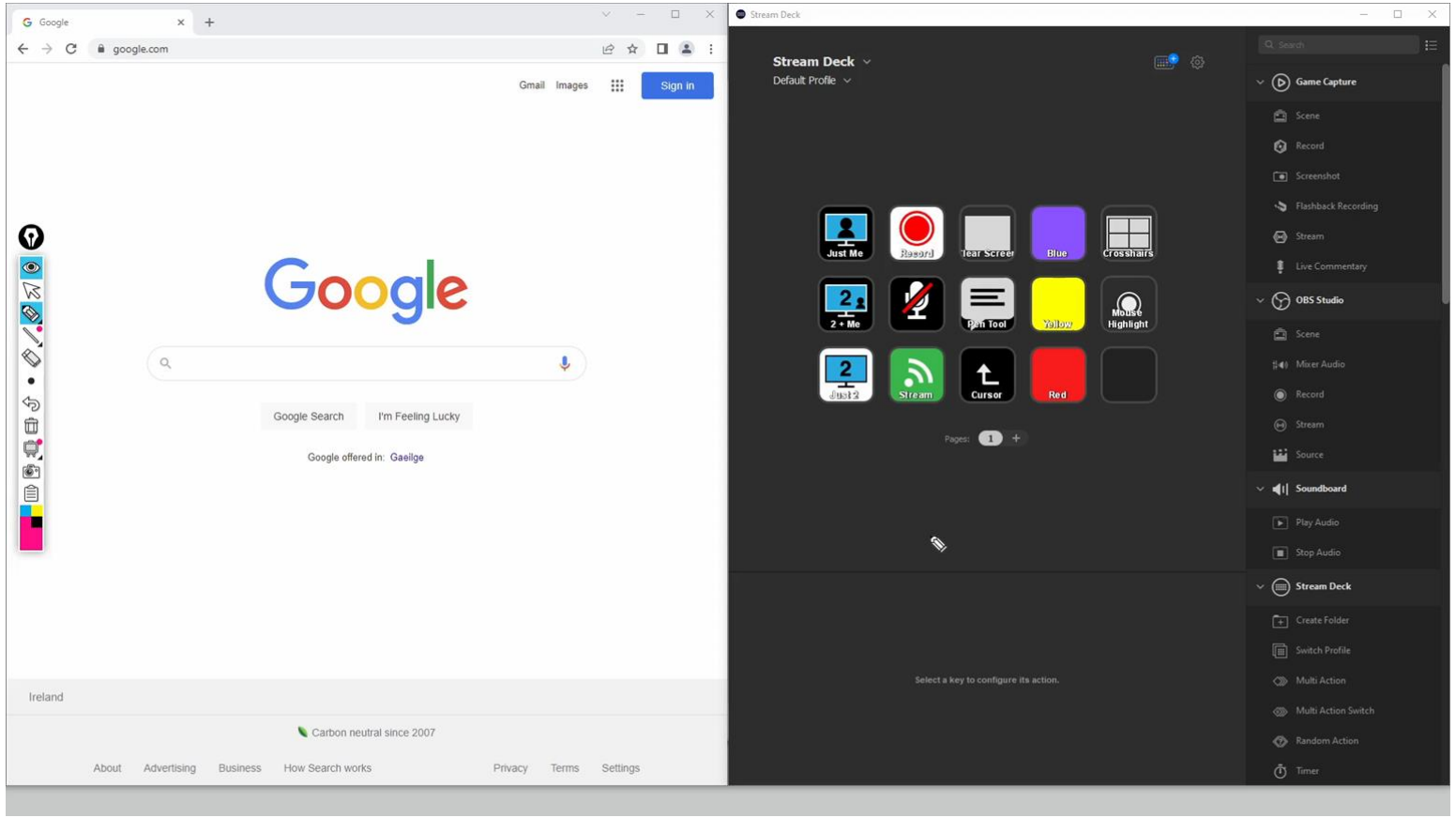
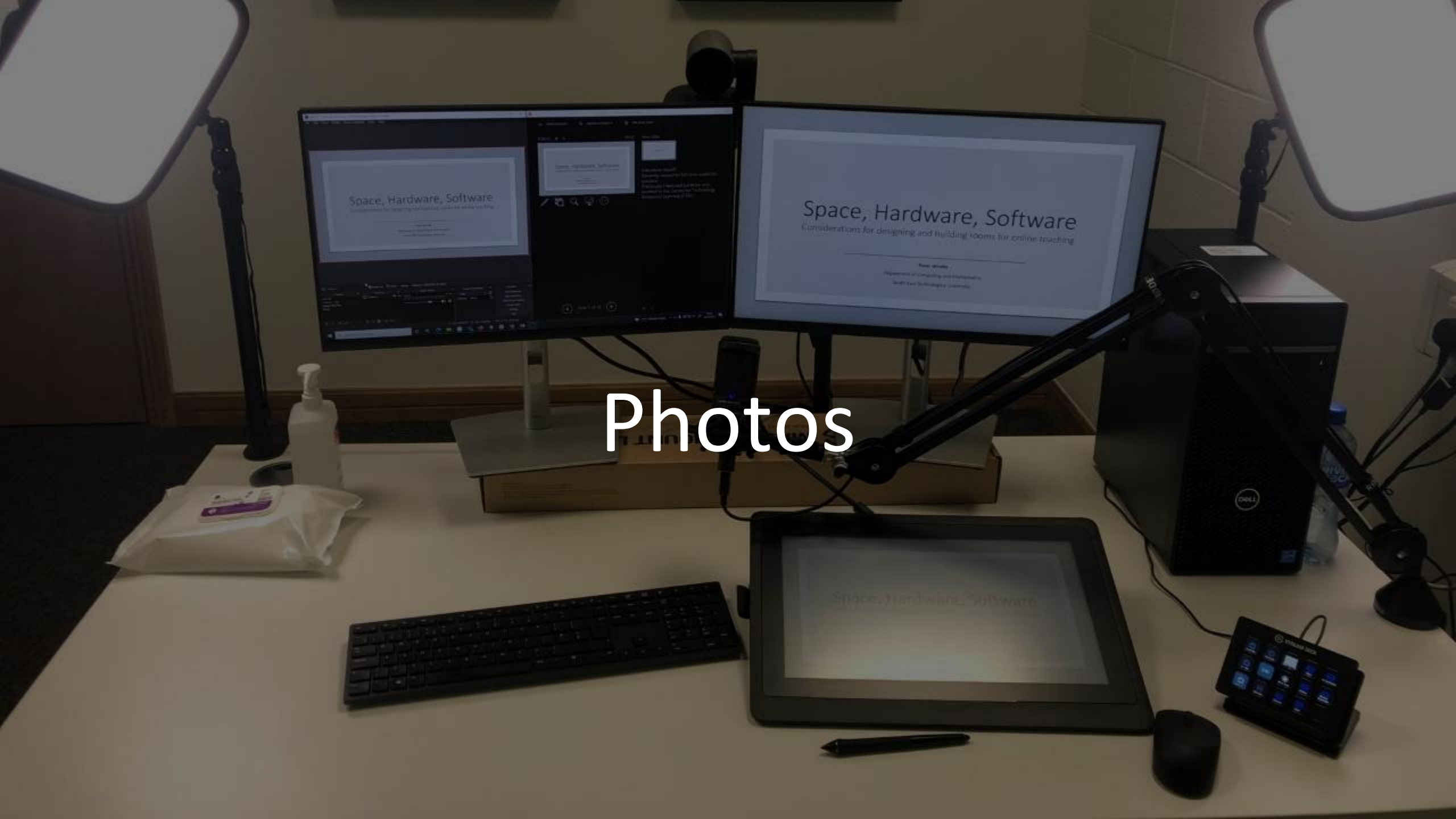


Open Broadcaster Software (OBS) Studio



Epicpen


Google
google.com
Gmail
Images
Sign in
Google
Google Search
I'm Feeling Lucky
Google offered in: Gaeilge
Ireland
Carbon neutral since 2007
About
Advertising
Business
How Search works
Privacy
Terms
Settings
Stream Deck
Stream Deck
Default Profile
Just Me
Record
Tear Screen
Blue
Crosshairs
2 + Me
Pen Tool
Yellow
Mouse Highlight
Stream
Cursor
Red
Pages:
1
Select a key to configure its action.
Search
Game Capture
Scene
Record
Screenshot
Flashback Recording
Stream
Live Commentary
OBS Studio
Scene
Mixer Audio
Record
Stream
Source
Soundboard
Play Audio
Stop Audio
Stream Deck
Create Folder
Switch Profile
Multi Action
Multi Action Switch
Random Action
Timer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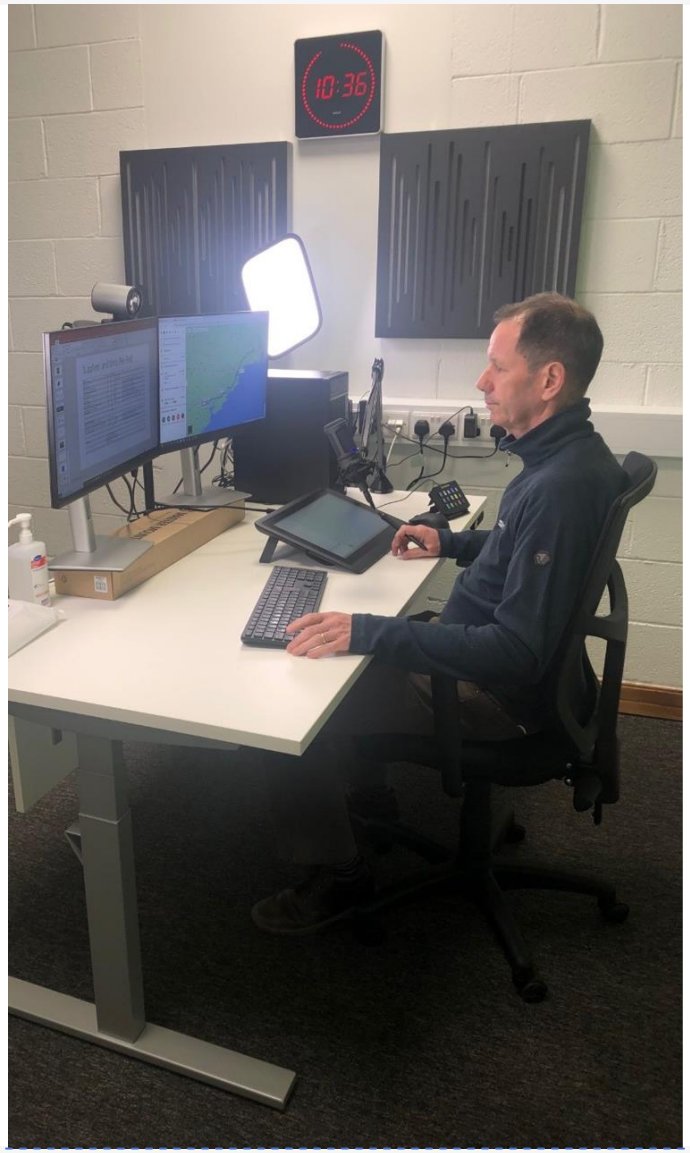
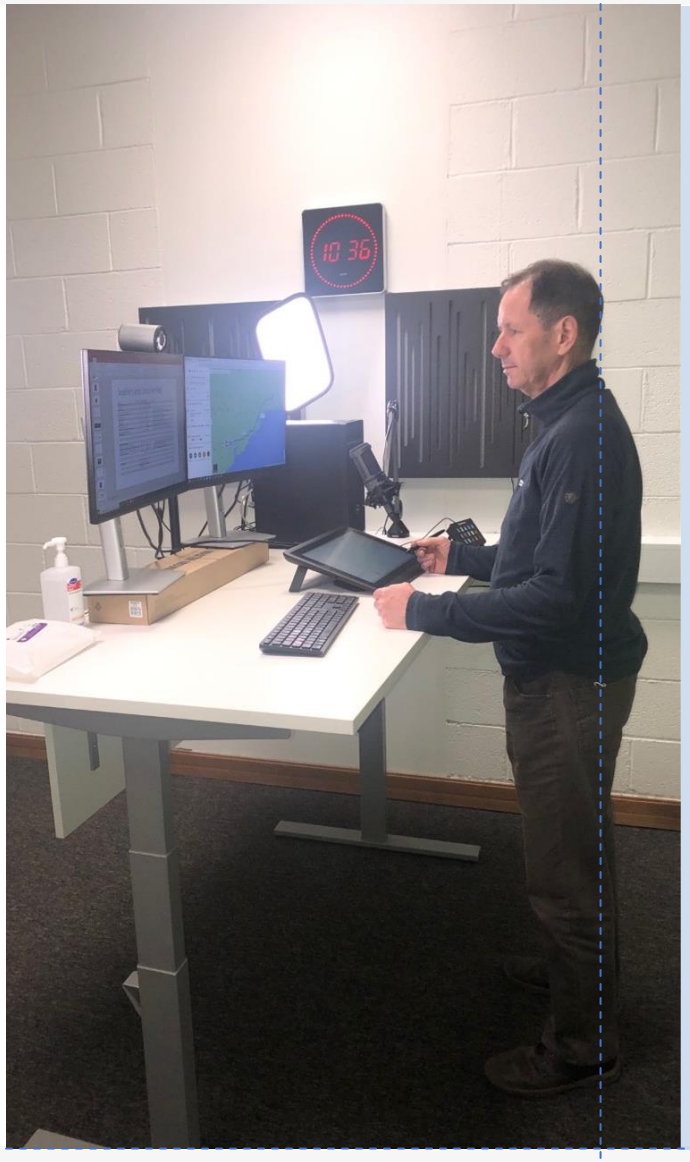
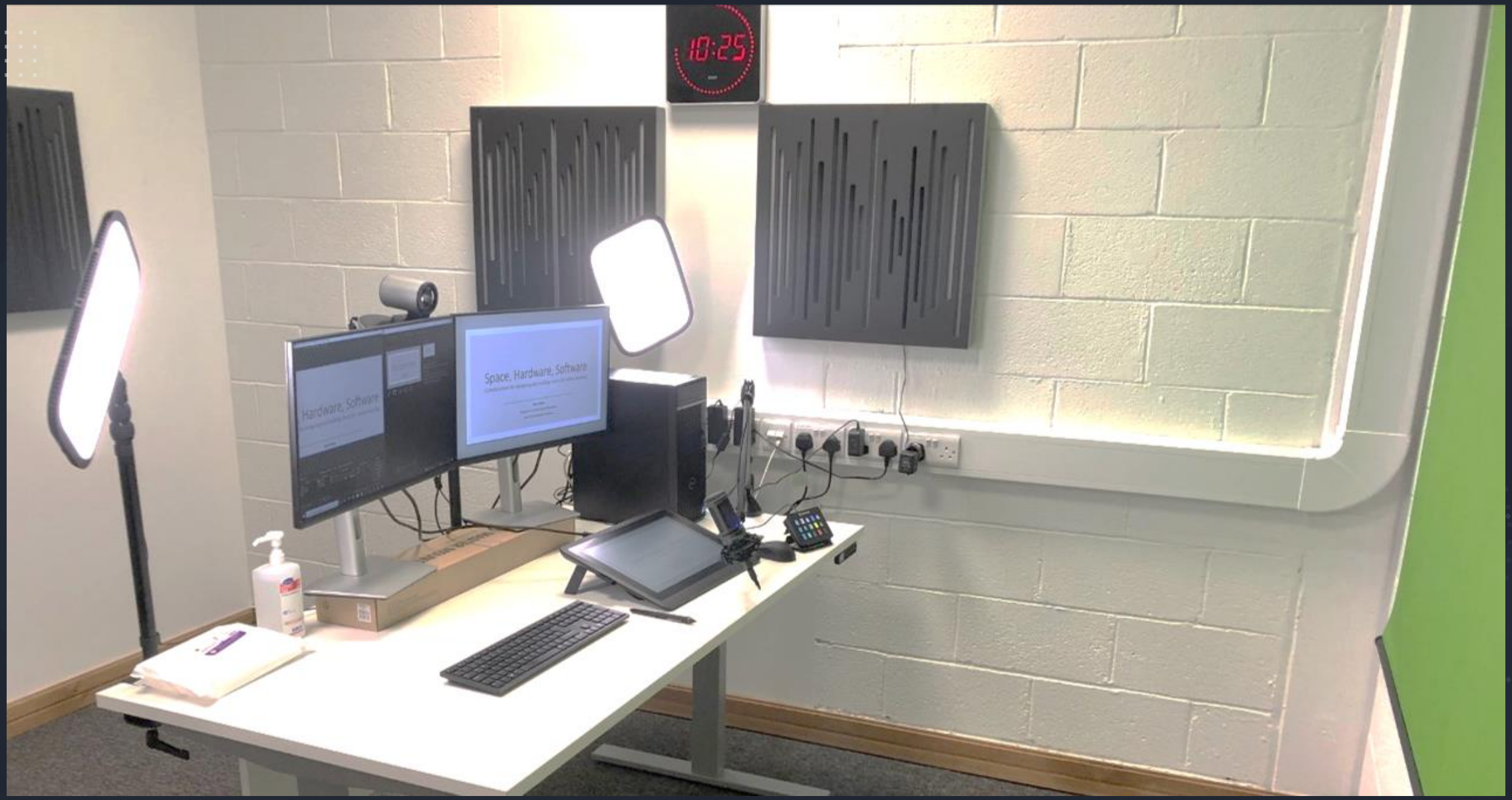
Photos

Stand Up and Sit Down



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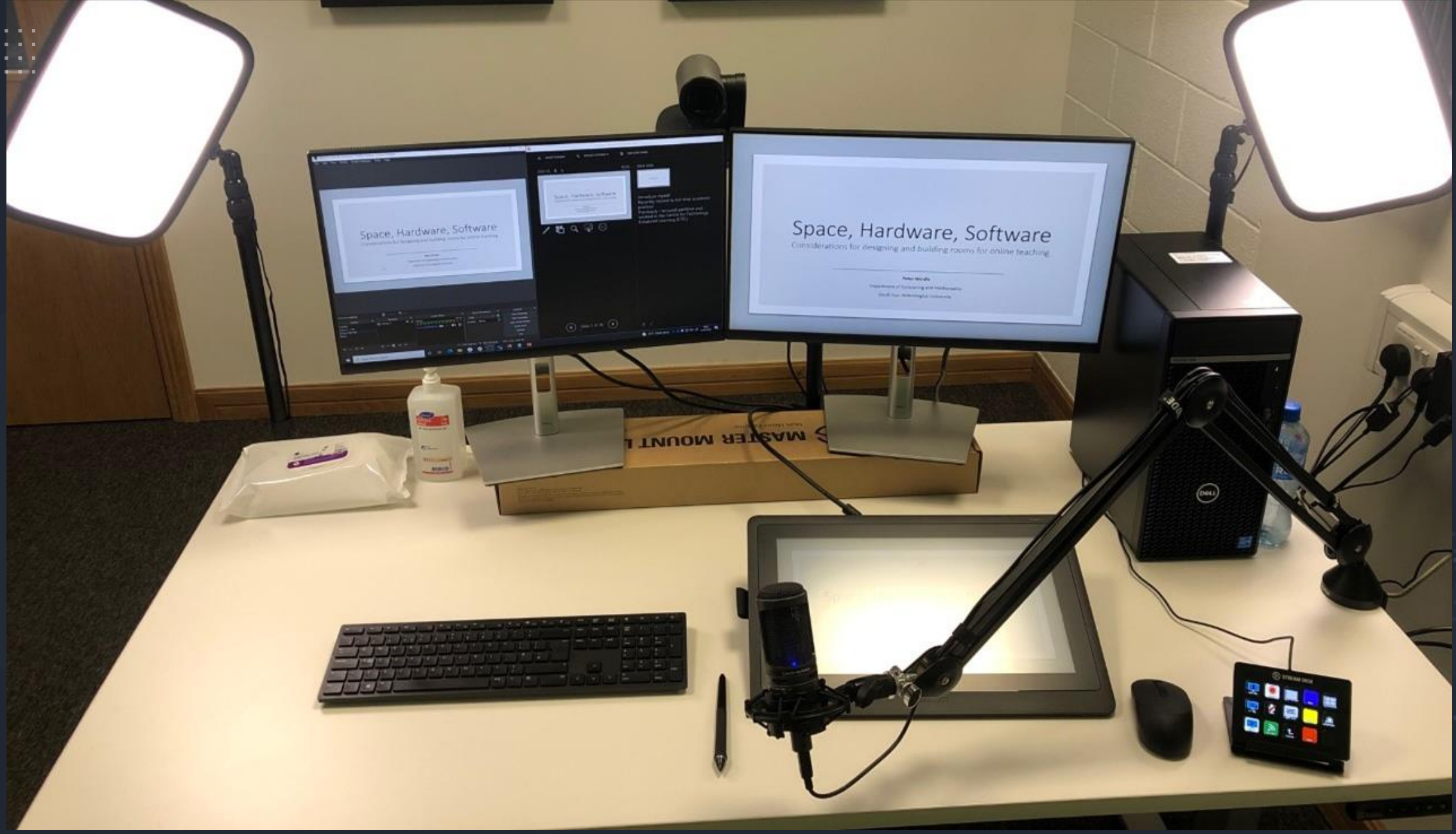
Hardware, Software
Space, Hardware, Software


Space, Hardware, Software
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10:25
KEY LIGHT

Space, Hardware, Software
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Suppliers and Units (Per Pod)

Equipment	Units	Cost P/U	Total Cost	Supplier	Link
Logitech C930 Web camera	1	€ 113	€ 113	Dell - Approved Supplier	
Dell 24" Monitor	2	€ 175	€ 350	Dell - Approved Supplier	
OptiPlex 7060 Tower	1	€ 1,400	€ 1,400	Dell - Approved Supplier	
Audio-Technica AT2020 USB+ Desk Mic	1	€ 125	€ 125	Thomann.de	https://www.thomann.de/ie/audio_technica_at2020_usb.htm
Chromakey Backdrop Background Green	1	€ 75	€ 75	Komplett.ie	https://www.komplett.ie/outlet-elgato-green-screen-mt/80059140/product
Rode PSA-1 Mic Stand	1	€ 69	€ 69	Thomann.de	https://www.thomann.de/ie/rode_psa1.htm
Elgato Gaming Deck	1	€ 160	€ 160	Thomann.de	https://www.thomann.de/ie/elgato_stream_deck.htm
Elgato Keylight	4	€ 200	€ 800	Komplett.ie	https://www.thomann.de/ie/elgato_key_light.htm
Elgato MultiMount	2	€ 49	€ 98	Komplett.ie	https://www.thomann.de/ie/elgato_multi_mount.htm
Elgato MultiMount FlexArm Kit	1	€ 39	€ 39	Komplett.ie	https://www.thomann.de/ie/elgato_multi_mount_flex_arm_kit.htm
INOGENI HD to USB 3.0 Coverter - Capture laptop output	1	€ 363	€ 363	D+P Multimedia Products Ltd	https://camerakit.ie/product/inogeni-4k-hdmi-usb3-0-converter/
Vicoustic Wavewood Diffuser Ultra Black (3 panels)	2	€ 265	€ 530	Komplett.ie	https://www.thomann.de/ie/vicoustic_wavewood_diffuser_ultra_black.htm
Wiring/miscellanious			€ 250		
		Total	**€ 4,372**		
Upgrades and Optional Extras					
Logitech PTZ Pro 2 - Remote pan-tilt-zoom USB Camera	1	€ 808	€ 808	Elara	https://www.elara.ie/productdetail.aspx?manufacturer=LOGITECH&mancode=960-001186
Rode VideoMic NTG - if you're going to be further away from the mic	1	€ 245	245	Thomann.de	https://www.thomann.de/ie/rode_videomic_ntg.htm
Rode Wireless GO II - Wireless microphones if you're moving around	1	€ 295	295	Thomann.de	https://www.thomann.de/ie/rode_wireless_go_ii.htm
Wacom Cintiq 16" Pen Display	1	€ 687	687	Elara.ie	https://www.elara.ie/productdetail.aspx?productcode=MMEK101071
			€ 2,035		
Email Addresses	Thomann P. O. <po@thomann.de>				
	B2B / Komplett.ie <B2B@komplett.ie>				
	Kin Mak (Elara Online) <ckmak@elara.ie>				
	orders@camerakit.ie				

Questions?