MA VIRTUAL REALITY / FINAL MAJOR PROJECT

ECHO ARCHIVE

A first-person VR narrative

After Earth's evacuation, an archive collector enters a reconstructed station. Everyday objects carry traces of the people who left them.

SCRIPT ↗

Jiaao Huang UNREAL ENGINE 5.8

PROJECT ROLE / NARRATIVE, LEVEL & XR INTERACTION DESIGN

LONDON COLLEGE OF COMMUNICATION / 2026

EVACUATION STATION / IN-ENGINE VIEW

World and player journey

02 / STORY & FLOW

Research question

What can objects left behind in VR tell us about the past, and what changes when they become archive records?

Research into design

Environmental storytelling informed where objects are placed and which traces are visible. Players can compare what they see in the scene with ECHO's edited record.

Design references

Jenkins (2004), game design as narrative architecture. Fernández-Vara (2011), Indexical storytelling.

Opening sequence



A city expanding



Resources run out



Leaving Earth



The fleet in space

Playable sequence

1 **Briefing** Wake aboard the fleet.

2 **Arrival** Enter the Earth Archive projection.

3 **Recovery** Seed Canister, Water Filter and Earth Restoration Archive Drive.

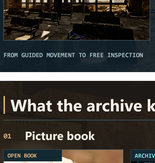
4 **Review** Upload the three key records. Review any optional relics you scanned successfully.

Optional 3D stories open when the player turns to either book's final page.

Interaction design

03 / MECHANICS

01 SELECT A TOOL

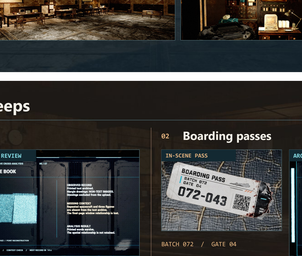


Left wrist / right hand

The player opens the wrist panel and points with the opposite hand to select a tool.

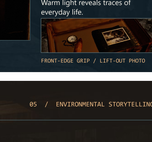
SCAN LOCATOR STORE TELEPORT

02 READ THE SCAN



The beam connects the tool to the object. The ring makes the scan state visible.

03 STORE THE RECORD



Recovery feedback

The locator confirms that the record was recovered.



Scanner readout



FAR / CLOSE guidance

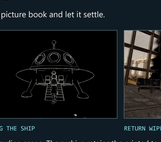
From fleet corridor to evacuation hall

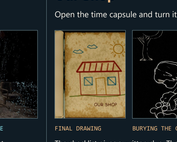
04 / SPATIAL DESIGN

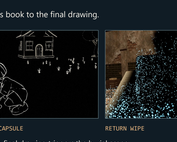
SPACE STATION

A guided departure

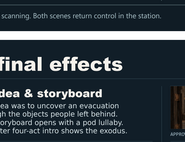
A controlled sequence of doors and instructions leads to the transfer point.

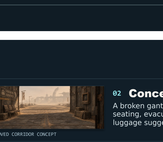












FROM GUIDED MOVEMENT TO FREE INSPECTION

EVACUATION STATION

Open exploration

Warm light reveals traces of everyday life.

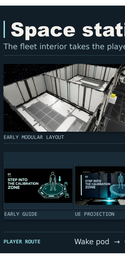


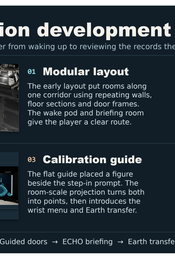
FRONT-EDGE GRIP / LIFT-OUT PHOTO

What the archive keeps

05 / ENVIRONMENTAL STORYTELLING

01 Picture book





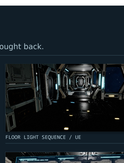
Observed on the page

Drawings of a spacecraft and three figures recur in the margins.

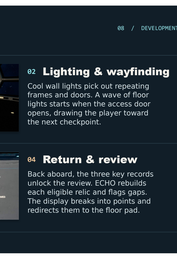
Retained in the archive

The upload stores the printed text. ECHO describes the drawings in review, while the drawings stay on the page.

02 Boarding passes



BATCH 072 / GATE 04



Visible on the pass

The pass shows a batch and gate number. Players can scan from above or at an angle.

Retained in the archive

Gate records document boarding arrangements. The holder's fate remains unknown.

From objects to memories

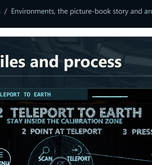
06 / OBJECT-TRIGGERED STORIES

The Light Beyond

Turn to the final page of the picture book and let it settle.



FINAL PAGE



BOARDING THE SHIP



RETURN WIPE

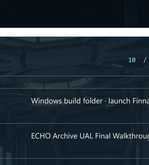
The drawings become a 3D boarding scene. The archive retains the printed text.

Our Shop

Open the time capsule and turn its book to the final drawing.



FINAL DRAWING



BURYING THE CAPSULE



RETURN WIPE

The checklist gives a written clue. The final drawing triggers the burial scene.

Reading opens each 3D story independently of scanning. Both scenes return control in the station.

From idea to final effects

07 / DEVELOPMENT

EARLY FIRST-PERSON STORYBOARD

01 Idea & storyboard

The idea was to uncover an evacuation through the objects people left behind. The storyboard opens with a pod lullaby. The later four-act intro shows the exodus.

APPROVED CORRIDOR CONCEPT

02 Concept art

A broken gantry anchors the view. Worn seating, evacuation signs and abandoned luggage suggest how the station emptied.

BLENDER RENDER OF PROJECT MESHES

03 Base modelling

The first Blender kit used 11 modular meshes and one texture atlas. The bench, luggage and terminal fit the existing shell.

04 Refinement

Signs, pipes and furniture defined the passage while keeping the path clear. An exit barrier separates the playable route from the extended exterior scenery.

05 Lighting

Warm window light and cooler fill gave the hall depth in the haze. Wall and desk lamps lit the windowless archive.

06 Final effects

The early review reset to a flat dot panel. Now the points form the next relic after ECHO speaks. A separate particle wipe reveals the station on return from a story.

UNREAL EDITOR TEST

After refining boarding-pass detection, scans worked from above and at an angle when the seat did not cover the pass.

Space station development

08 / DEVELOPMENT

The fleet interior takes the player from waking up to reviewing the records they brought back.

EARLY MODULAR LAYOUT

01 Modular layout

The early layout put rooms along one corridor using repeating walls, floor sections and door frames. The wake pod and briefing room give the player a clear route.

FLOOR LIGHT SEQUENCE / UE

02 Lighting & wayfinding

Cool wall lights pick out repeating frames and doors. A wave of floor lights starts when the access door opens, drawing the player toward the next checkpoint.

EARLY GUIDE / UE PROJECTION

03 Calibration guide

The flat guide placed a figure beside the step-in prompt. The room-scale projection turns both into points, then introduces the wrist menu and Earth transfer.

RETURN TO THE ARCHIVE ROOM

04 Return & review

Back aboard, the three key records unlock the review. ECHO rebuilds each eligible relic and flags gaps. The display breaks into points and redirects them to the floor pad.

PLAYER ROUTE

Wake pod → Guided doors → ECHO briefing → Earth transfer → Return and review

The experience in-engine

09 / FINAL SHOWCASE



Unreal Engine captures / Environments, the picture-book story and archive review.

Project files and process

10 / SUBMISSION MATERIALS

Supporting design documents are provided in Design_Documents.

XR build	Windows build folder · launch Finnal.exe
Walkthrough video	ECHO Archive UAL Final Walkthrough.mp4
Design documents	Development screenplay, early English script and storyboard
MyBlog process journal	Published UAL link to be added
Selected asset and audio credits	Sci-Fi Robo Hand by darklordzd (CC BY 4.0). Hand mesh adapted and re-rigged for VR. GoodSky V3 sky. Selected props assisted by Meshy. ECHO voice and selected sounds via ElevenLabs.