Friday 30th May 2025

Inter-studio Session

Inter-studio Session

- Theory Recap
- Worksheet discussion
- Technical Design Document discussion
- Benefits of inter-studio talks
- News, Questions, & Chat
 - Industry News & Announcements
 - Questions
 - Informal discussion

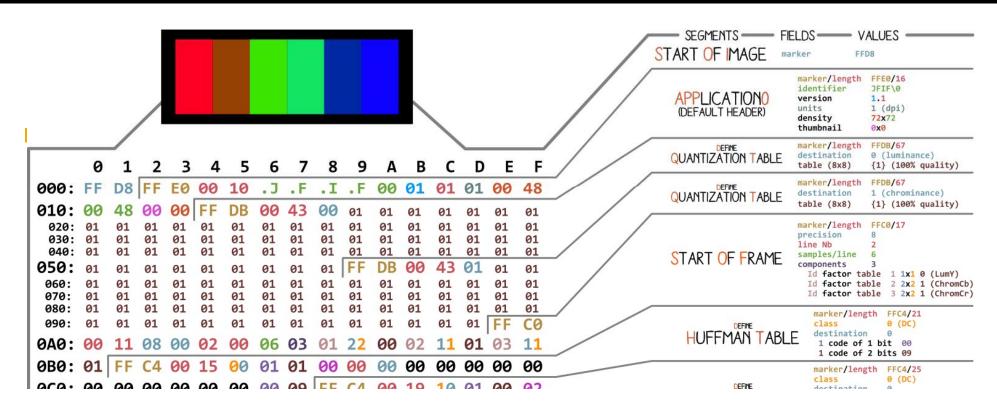
Theory Recap

- Persistent Data
 - What: Saved data (more generally "stored data")
 - Why: Respects the players' time invested
 - How: Record game states, settings, profiles, progress, etc.

Theory Recap

- Persistent Data in Unreal Engine exercise
 - Make use of SaveGame class
 - Create a SaveGame object from the class
 - Populate SaveGame object with data
 - Store the SaveGame object to disk

Serialization – (File Formats)



Albertini, A. (no date) PICS/binary/readme.md at master · Corkami/Pics, GitHub - Corkami's File Format Images repository. Available at: https://github.com/corkami/pics/blob/master/binary/README.md#images (Accessed: 30 May 2025).

Serialization – (Hex Editor)

```
C:\Windows\System32\Calc.exe
                          8
                                           F
                                                0123456789ABCDEF
0000h: AD 5A 90 00 03 00 00 00 04 00 00 00 FF FF 00 00
                                                MZ.....
0010h: B8 00 00 00 00 00 00 40 00 00 00 00 00 00
0040h: OE 1F BA OE 00 B4 09 CD 21 B8 01 4C CD 21 54 68
                                                   ....!..L.!Th
0050h: 69 73 20 70 72 6F 67 72 61 6D 20 63 61 6E 6E 6F
                                                is program canno
0060h: 74 20 62 65 20 72 75 6E 20 69 6E 20 44 4F 53 20
                                                t_be run in_DOS
0070h: 6D 6F 64 65 2E 0D 6X 32 9 61 70 ado
0080h: 87 45 16 64 C3 24 78 3A Fe 24 78 37 C3
                                                .E.d. A.F. 637. $x7
0090h: 39 07 38 37 C6 24 78 37 19 07 64 37 C8 24 78 37
                                                9.87.$x7..d7.$x7
OOAOh: C3 24 78 37 C2 24 78 37 C3 24 79 37 44 24 78 37
                                                .$x7.$x7.$y7D$x7
OOROh: 39 07 61 37 CE 24 78 37 54 07 3D 37 C2 24 78 37
                                                9.a7.$x7T.=7.$x7
00CMh: 19 07 65 37 DF 24 78 37 39 07 45 37 C2 24 78 37
                                                ..e7.$x79.E7.$x7
nnnna 4 4 4 5 5 68 C3 24 78 37 00 00 00 00 00 00 00 00
                                                Rich. $x7.....
OOFOh: 50 45 00 00 4C 01 03 00 10 84 7D 3B 00 00 00 00
```

Sweetscape (no date) Sweetscape Software Inc.
 Available at: https://www.sweetscape.com/graphics/ArtHexEditor.GIF (Accessed: 30 May 2025).

Worksheet examples

- https://github.com/dreynolds-tutor
 - CS1-InventorySystem
 - CS1-SaveLoadSystem1
 - CS1-SaveLoadSystem2

Technical Design Document

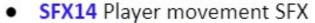
- Show and Tell' opportunity
- (Research how Game Studios present material)
 - Artstation, Behance, etc.

Technical Design Document

Sound

REQUIRED:

- SFX1 Menu Selected
- SFX2 Menu Selected Confirm
- SFX3 Menu Close
- SFX4 Menu Invalid Selection
- SFX5 Player Start
- SFX6 Player Valid Interaction
- SFX7 Player Invalid Interaction
- ..
- SFX12
- SFX13



- o SFX14.1 Walk
- SFX14.2 Run
- SFX14.3 Jump
- SFX14.4 Land

DESIRED:

- SFX15 Environmental Ambience
- SFX16 Player Collision Detected

NON-VITAL:

• SFX17 SFX

For Art / Sound / Music / Controls /etc.... Each code is used in the Product Backlog

Technical Design Document

- Major technical areas and risks
- Target hardware and specific requirements/assumptions
- Infrastructure
 - Directory structure / File naming conventions / Data file format
- Server, client, and network architecture (as needed)
- Artificial intelligence and other autonomous/procedural systems
 - Procedural world creation / Pathfinding / Economy
- Technical (programming doc for each major feature or system, linked to the design doc for each above. These docs are for programmers, and focus on implementation details rather than the design itself or its rationale.
- Game cheats for testing

Benefits of inter-studio talks

- Industry Networking
- Sharing best practice
- Boost CV value
- Entrepreneurial opportunities

News – Questions - Chat

- Industry News & Announcements
- Questions
- Inter-studio discussion

Industry News & Announcements

- Unreal Fest 2nd -5th June 2025
- Unreal Fest Orlando 2025 Unreal Engine
- The State of Unreal 2025 Unreal Engine
 Tues 3rd June
- <u>Fab</u> limited-time-free (read T&Cs)
 - New items available from the first Tuesday of each month
- Humble Bundle
- Week 4 submissions! Backups/Verify

Questions & Chat

Thank you!