DECO2300/7230 – Design Report Concept

Application: Spotify XR Studio

Category: Creation / Editing

1. Application Redesign & User Task Identification

Chosen Application: Spotify

This project redesign transforms Spotify into an (XR) music platform that merges the user's physical environment with virtual music tools while creating an immersive,and interactive experience in enjoying music. The user's physical desks include vinyl decks and a central mixer, while album shelves are anchored to walls for browsing and usage.

User Goals:

- Immersive Music Playback: Listen to songs using interactive vinyl decks and mixers.
- Creative Mixing & Transitions: Play, crossfade and mix songs.
- Music Organisation: Arrange and manage a music library.

User Tasks:

1. Playback Control: Select a song from the wall library and load onto one of two vinyl decks and control playback via gestures.
2. Mixing & Transitions: Use the central mixer to crossfade and align beats.
3. Effects Application: Adjust reverb, echo, filters and tempo during playback.

2. XR Concept Definition & Immersive Interactions

Target Environment: Mixed-reality DJ studio combining the user's real-world room with virtual music equipment.

Immersive Interactions & Affordances:

- Central Mixer for crossfade, EQ and effects.
- Gesture-Based Playback: scratching and tempo adjustment.
- Music Shelves for browsing.
- Visual Audio Feedback: beat-synced lighting and waveforms.

3. Engagement with the Ideation Process

Initial Idea: VR-based Spotify vinyl player.
Refinement:

- Sketches in testing and visualising spatial layout.
- Feedback suggested XR for environmental awareness.
- Added two-deck DJ mixing and central mixer for interaction.
- Focus on mixer controls to physical surfaces for realism.

4. Initial Testing Plan

Features to Test:
- Loading & Playback from shelves to deck.
- Mixing & Transitions with central mixer.
- Effects Control via sliders.

Assumptions:
- Users prefer direct and simple controls.
- Gesture controls feel intuitive without DJ training.

Validation:
- Measure task completion times.
- Track errors and interaction hesitations.
- Collect immersion ratings.

5. Pictures of Concept