

# **BANKAI - JUKEBOX**

**Construction And Testing Phase**

**Friday, 08 March 2024**

# The Team

- Kevin Nyende Omyonga (Dr. KNO)
- Billy Nelson Omingo (DJ Kutah)
- Leonard Ochieng Omondi (Man Leo)
- Wellington Wekesa Luvonga (WelliWelu)
- Brian John Onsati (Brainiac)

# Testing

# Types Used

- Unit Testing
- Integration Testing
- A/B Testing

# Unit Test Example

```
new *
7 ⌂ public class RadioStationTest {
8
9     new *
10    @Test
11    public void testSetTitle() {
12        RadioStation radioStation = new RadioStation();
13        radioStation.setTitle("Test Title");
14        assertEquals(expected: "Test Title", radioStation.getTitle());
15    }
16
17    new *
18    @Test
19    public void testSetDescription() {
20        RadioStation radioStation = new RadioStation();
21        radioStation.setDescription("Test Description");
22        assertEquals(expected: "Test Description", radioStation.getDescription());
23    }
24    new *
25    @Test
26    public void testSetGenre() {
```

# Unit Test Example Results

The screenshot shows an IDE interface with several panes:

- Project:** Shows a tree view with nodes like "pages", "utils", "views", and "Main".
- Code Editor:** Displays Java code for a test class:

```
23     @Test
24     public void testSetGenre() {
25         RadioStation radioStation =
26             radioStation.setGenre("Tech")
27         assertEquals("Tech", radioStation.getGenre());
}
```
- Run Tab:** Shows tabs for "Run", "Jukebox", and "RadioStationTest".
- Toolbars:** Includes icons for run, stop, refresh, and other test-related functions.
- Test Results:** The "RadioStationTest" tab shows the following output:
  - Summary:** "Tests passed: 12 of 12 tests – 27 ms"
  - Test Details:** A list of 12 test methods, all marked with a green checkmark and a duration of 1 ms each:
    - ✓ testsetDescription() 23 ms
    - ✓ testSetCountry()
    - ✓ testSetLanguage() 1 ms
    - ✓ testSetSource1() 1 ms
    - ✓ testSetSource2() 1 ms
    - ✓ testSetSource3()
    - ✓ testSetSource4()
    - ✓ testSetSource5()
    - ✓ testSetSource6()
  - Completion:** "Process finished with exit code 0"
- Sidebar Icons:** Various icons representing build, clean, run, and other development tasks.
- Bottom Navigation:** Shows the full path: "Bankai-Jukebox > tests > com > bankai > jukebox > models > RadioStationTest".

# Test Coverage Goal

- Ideally > 85%

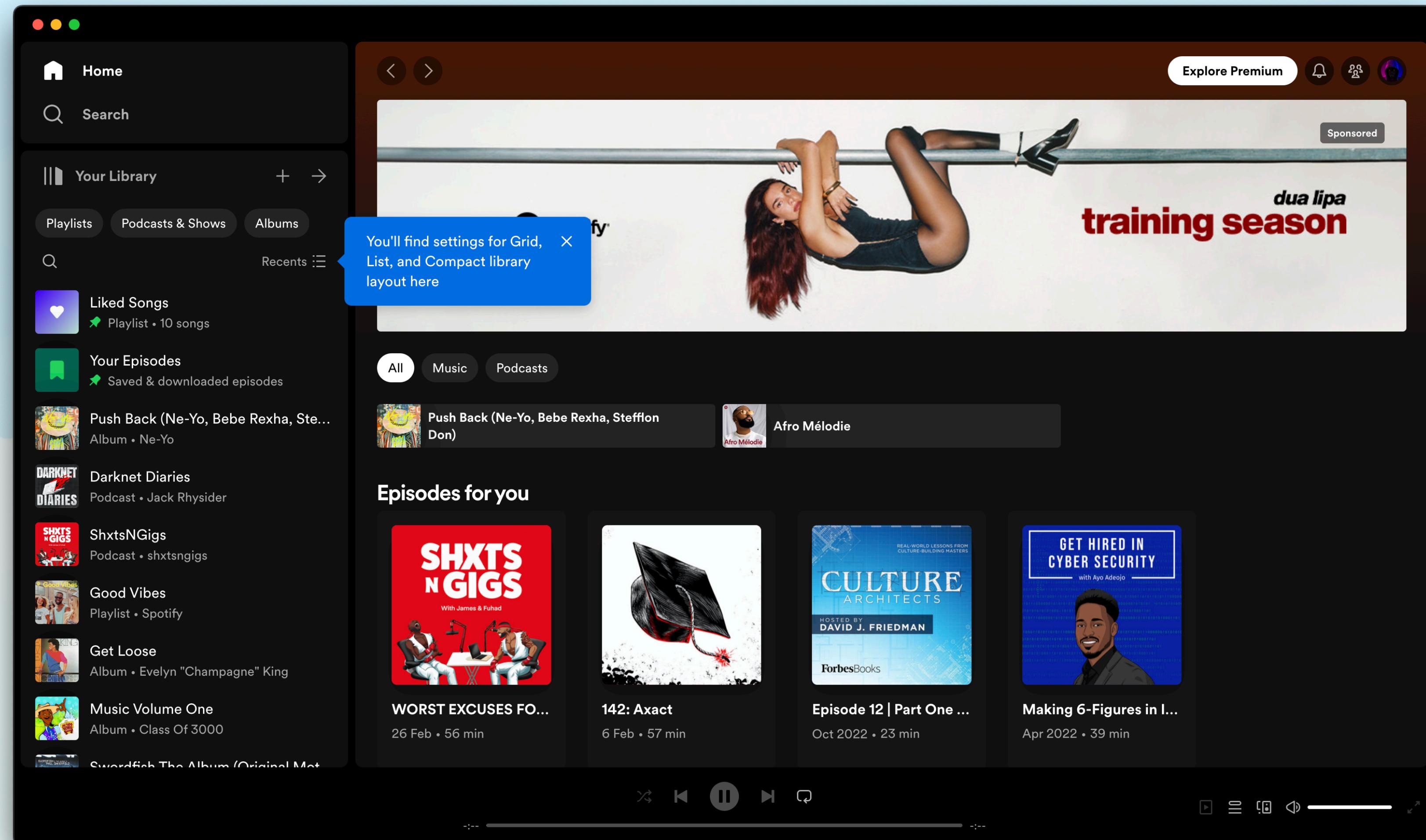
# UI Design

# UI Layout

- Master Detail flow
- Goal 1: To keep navigation visible all through.
- Goal 2: Allow customisation.

# Inspirations/References

# Spotify



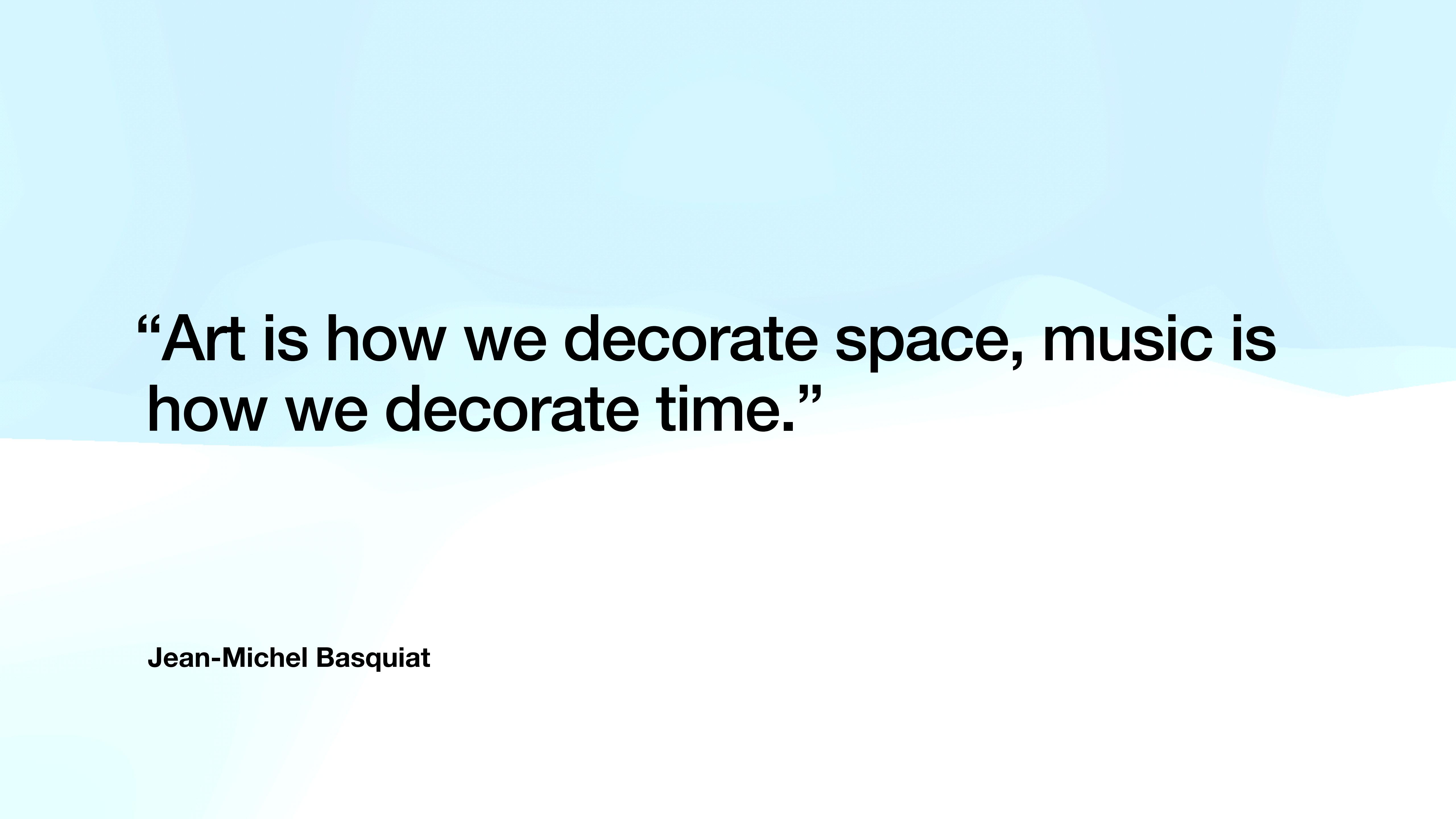
Simple Interface

# Apple Music

The screenshot shows the Apple Music application interface on a Mac. The left sidebar is titled "Library" and contains sections for "Recently Added", "Artists", "Albums", "Songs" (which is selected and highlighted in grey), and "Music Videos". Below these are "Playlists" including "All Playlists", "Favourite Songs", "90's Music", "Classical Music", "My Top Rated", "Recently Played", "Top 25 Most Played", and several album artwork screens. The main content area is titled "Songs" and displays a list of tracks with columns for Title, Cloud icon, Time, Artist, Album, Genre, Star icon, and Plays. The first track listed is "Dancin (Krono Remix) [feat...." by Aaron Smith. The list continues with various artists like AC/DC, Adam Lambert, Adele, Alan Menken, and Alicia Keys. At the bottom of the list, it says "2,584 items, 7 days, 27.39 GB". The top bar includes standard Mac OS X controls (red, yellow, green buttons), a music note icon, the Apple logo, volume controls, and a search icon.

Title	Cloud	Time	Artist	Album	Genre	Star	Plays
Dancin (Krono Remix) [feat....	...	3:18	Aaron Smith	Dancin (Krono Re...	Dance	17	
Shoot to Thrill	...	5:18	AC/DC	Back In Black	Hard Rock	1	
Thunderstruck	...	4:52	AC/DC	The Razors Edge	Hard Rock	17	
Whataya Want from Me	...	3:47	Adam Lambert	For Your Entertain...	Pop	6	
Skyfall	...	4:46	Adele	Skyfall - Single	Pop	8	
Prelude 12/21	...	1:34	AFI	Decemberundergr...	Rock	23	
Nite and Day	...	3:58	Al B. Sure!	In Effect Mode	R&B/Soul	10	
Off On Your Own (Girl)	...	4:09	Al B. Sure!	In Effect Mode	R&B/Soul	2	
Oh Mighty Zeus	...	0:46	Alan Menken	Hercules (Original...	Children's...	1	
The Big Olive	...	1:07	Alan Menken	Hercules (Original...	Children's...		
The Prophecy	...	0:54	Alan Menken	Hercules (Original...	Children's...	1	
Destruction Of The Agora	...	2:07	Alan Menken	Hercules (Original...	Children's...	2	
Phil's Island	...	2:25	Alan Menken	Hercules (Original...	Children's...	1	
Rodeo	...	0:40	Alan Menken	Hercules (Original...	Children's...	2	
Speak Of The Devil	...	1:31	Alan Menken	Hercules (Original...	Children's...	2	
The Hydra Battle	...	3:28	Alan Menken	Hercules (Original...	Children's...		
Meg's Garden	...	1:14	Alan Menken	Hercules (Original...	Children's...	2	
Hercules' Villa	...	0:37	Alan Menken	Hercules (Original...	Children's...	1	
All Time Chump	...	0:38	Alan Menken	Hercules (Original...	Children's...	3	
Cutting The Thread	...	3:24	Alan Menken	Hercules (Original...	Children's...	1	
Karma	...	4:16	Alicia Keys	The Diary of Alicia...	R&B/Soul	2	
Diary (feat. Jermaine Paul &...)	...	4:44	Alicia Keys	The Diary of Alicia...	R&B/Soul	4	
Un-thinkable (I'm Ready)	...	4:09	Alicia Keys	The Element of Fr...	R&B/Soul	2	
Fallin'	...	3:30	Alicia Keys	Songs In A Minor	R&B/Soul	4	
My Boo	...	3:43	Alicia Keys & USH...	Confessions (Expa...	R&B/Soul	3	
Kadogo	...	3:18	Alikiba	Kadogo - Single	Bongo-Fla...	8	
Seduce Me	...	3:19	Alikiba	Seduce Me - Single	Pop	11	

Well Cataloged Content



**“Art is how we decorate space, music is  
how we decorate time.”**

**Jean-Michel Basquiat**

# Versioning

- Reverse CalVer.
- Helps keep track of changes throughout the development of the app.
- Reliable naming scheme.

# Demo

**The End... For Now (Na Bado)**