

MEX design competition entry:

Flat Music Player version 2

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Embedded animation. Click to start.

An animated example (a flash file) accompanies this document. Please note that the text below is necessary for understanding the animated example.

The content itself is the interface

I've been thinking a bit about "content is the interface" lately. The idea is to avoid deep hierarchies of thin information by intensifying the information resolution on the screen. [Edward Tufte](#) is the great proponent of this idea and lately it has been made current by the MEX conference as [Manifesto #1: Content itself will be the interface of the future.](#)

It is easy to see how to employ this paradigm when the information is manageable, when it's on a "human scale" so to speak. The in-flight entertainment selection in an airline seat, the variety of coffees in a coffee shop, the selection of cars at a dealership. You can take in the information and hold it in your head at once. (Deciding what to choose is of course a different matter...)

It is certainly both possible and advantageous to use the content itself for most navigation and interaction. But when I tried to apply "content is the interface" to music there were a few additional issues. A typical device can store 8GB of music; that is 2000 songs or about 250 full albums. Many devices can store a lot more. Not to mention the millions of songs you can browse when you want to buy music. Presenting all this music *directly* is not possible.

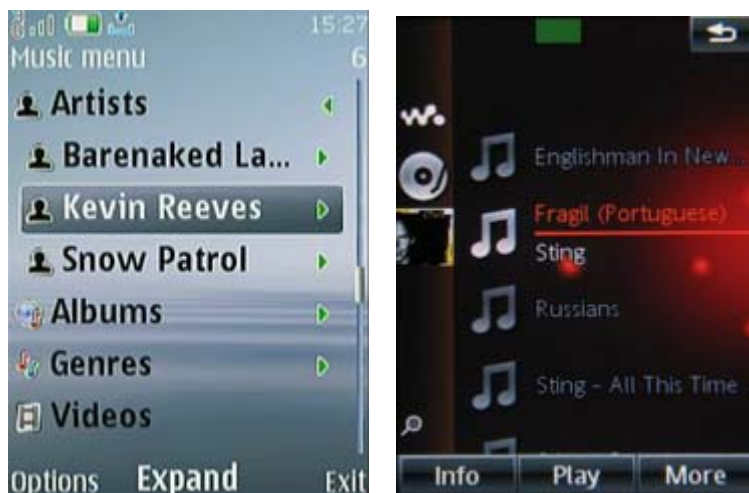
In addition, music is sound; you can't actually see it or touch it. You have to choose a visual representation and I've used album art because that's an abstraction that most people understand and are used to. With digital distribution, there is some movement away from albums in favor of individual songs. I've considered using images of the artists as visual representation but it does not work well. Album art has a strong visual identity and is associated with a particular selection of songs. It scales well; you are able to make out the album even when scaled way down. This is not the case for photos of artists or bands. They change randomly over time and do not scale well.

Spatial

In addition to this, I wanted to try to take advantage of spatial recognition and spatial memory to make it easier to find and navigate stuff. Let the user see the *scope* of information available. Let the user see the big picture. When it makes sense, let *it behave more like real-world objects*. You can normally pick up objects where you left them off. They don't move when you are not watching, something digital objects often do. (Insert your favorite joke about spouse here.) Over the last couple hundred thousand years our brains have developed a fantastic ability to take in and store *where stuff is* in our immediate surroundings. Since mobile screens are a part of our immediate surroundings, we should try to take advantage of this ability. It might sometimes make user interfaces a bit less confusing.

This is version 2 of [the concept player that I fiddled with over at OTA](#). This time I've used a larger touch screen (the size is equal to the upcoming Nokia Tube).

Current music players



Screens from a Nokia Series 40 phone and the Sony Ericsson 960W phone.

The problem with the illustrated players is that the vast majority of the screen is décor and "computer administrative debris". The information value is extremely small. All that fits on the 240 x 320 pixel screens are three band names (Nokia) or four song names (Sony Ericsson).

Nearly all players use a hierarchical presentation where the user steps through levels; Genre, Artist, Album, Song. The icons are genetic and do not add any information value. The layout of the W960 music player only uses half the screen width for the song name. The result is that most song names have to be truncated even if they are rendered in a small font.

Playlists and files

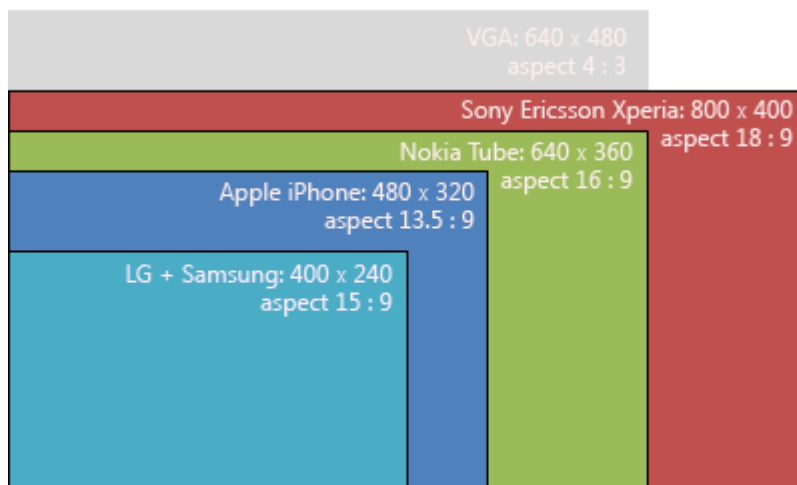
Terminology problem alert: Playlists are normally used to describe a selection of songs on your device. For lack of a better word I also use playlist to mean all songs on your device including their metadata.

Going forward I expect that playlists may become more important than the music files themselves. Renting (subscription) may well be the way to consume music in the future and the list of your music will be more important than the files themselves. A development similar to how bookmarks has moved away from individual browsers and computers and up in the "cloud" from where they are accessible regardless of device. Obvious example: del.icio.us. If you change your music subscription from, say, Rhapsody to Napster, you just take along your playlist and continue enjoying your music.

I don't think there should be any significant difference between a streaming player and a file player. If you add an album, it should appear in your music collection the same way as empeethree files does. ("Internet radio" streaming is different of course, as you don't select music, you select a station.) For performance reasons subscribed music probably have to be stored or cached locally.

Hardware

These sketches are made with the nascent/emerging trend of high resolution widescreen touch phones in mind. Examples are Sony Ericsson Xperia, Nokia Tube and Apple iPhone.



Not that the sketches *focuses on the interaction model*, not on the feature set or graphic design of a music player. Also, the ambition has been to work on something that might be useful on actual

emerging hardware, so no Jetson style 3D holographic interaction models at this time. The sketches are so called Hi-Fi sketches because it's easier to convey the ideas with something that resembles a product than with plain wireframes.

The basic structure of the app



- The bottom layer labeled "Albums" holds the music library. It is divided into rectangular sections (labeled Indie, R&B etc...)
- "Hype" is a closable panel. It has an, um, "river" where info related to the music floats by slowly. It has a drop area where you drag and drop content that you want to subscribe to. (No, let's not call it the shore or the riverbank ☺)
- "Shop" is another closable panel that contains a music shop.

Albums (the library)



The busy impression of this well filled music library is intentional. The library contains about 200 albums. (And movies. I'll stick to music to avoid distractions, but I don't see any reason a movie player needs to be distinct from a music player.)

- Most are files stored on the device, but no particular distinction is made between music that are streamed and music that are files.
- The albums are not sorted alphabetically. New and recently played albums appear on the top of each section. The reasoning behind this is that the human brain understands space well. We know approximately where things are when they have a position in a physical space. If you want play a song you tend to remember that it was "somewhere in the middle of the pile over there".
- Albums that are often played are shown bigger in size.
- Classification (Rock, Indie, R&B etc.) is based on metadata for the music. The user can change classification to fit any personal preference. All music needs a visual representation (album art), but it is entirely possible to automatically get album art from web services. It is even possible to identify unknown music tracks via somewhere like [Gracenote](#).
- Suggestions are based on playing patterns and suggestion engines like last.fm, Pandora and social engines "people you know listens to...".

The bottom part of the screen displays a bar when music is playing. It holds player controls and volume control. If the hardware has separate player and volume controls, that's good. That will make it possible to control the player when in the pocket.

The top part of the screen should hold a back button and probably a search function (not shown).



↓ Zoom & organize



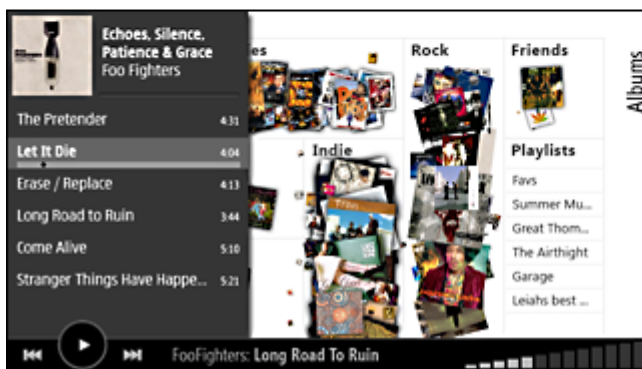
Clicking on a category expands the category to fill the screen. I have show the albums organized in a grid in this example. Keeping the position and size-difference when zoomed-out needs to be investigated.

Clicking on an album “opens it” and starts playing. See the flash demo for an animated example.

Individual songs



Tap to open player panel



The play bar needs a mechanism to access individual songs. Tapping the album above the play-control in the lower left corner could pop up a more detailed player.

Discovery

The "closable panel" labeled "Hype" is for exploring. Discovery of new artists and bands is an important function.

- Contains related "hype" (blog posts and news) about the artist or band.
- Can be accessed while listening.
- Holds information related to the currently selected music or to music in general if no particular album is selected.

The screenshot shows a music website interface. On the left, a vertical sidebar labeled 'Shop' contains a 'Subscriptions' section with the text 'drop them here'. Below this are several subscription items, each with a small image and text: 'D'ARCY FACES THE MUSIC' (19 APR 2008, 49 PERSPECTIVES), 'GOSPEL MUSIC CHANNEL GRABS US' (21 APR 2008, 23 PERSPECTIVES), 'MUSIC AND DANCE WHIP UP A FRENZY' (18 APR 2008, 14 PERSPECTIVES), and 'FOO FIGHTERS' (with a play button icon). On the right, a vertical sidebar labeled 'Hype Albums' contains a grid of items: 'DAVIS DUMPED: MUSIC'S HIT KING DETHRONED' (18 APR 2008, 47 PERSPECTIVES), 'CMT MUSIC AWARDS (2008) - WINNERS & PHOTOS' (15 APR 2008, 36 PERSPECTIVES), 'THE NEW SHAPE OF MUSIC' (17 APR 2008, 16 PERSPECTIVES), 'MEXICANS WRAP GANDHI IN FUSION MUSIC FOR KIDS' (19 APR 2008, 14 PERSPECTIVES), 'THE NEW MUSICAL UNIVERSE' (15 APR 2008, 12 PERSPECTIVES), 'REFINE MUSIC, VIDEO AND MOVIE TASTES' (14 APR 2008, 10 PERSPECTIVES), 'CHORUS SWAPS ROCKING CHAIRS FOR ROCK MUSIC' (18 APR 2008, 9 PERSPECTIVES), 'FASHION AND MUSIC COMBINE FOR HILFINGER'S TOMMYTV (REUTERS)' (16 APR 2008, 8 PERSPECTIVES), 'REVIEW: 'A CATERED AFFAIR' IS MUSICAL-THEATER MINIMALISM' (18 APR 2008, 7 PERSPECTIVES), and 'MUSIC FIRM CHRYSALIS ENDS TAKEOVER TALKS' (15 APR 2008, 6 PERSPECTIVES). At the bottom, a video player shows 'FooFighters: Long Road To Ruin' with a play button and a progress bar.

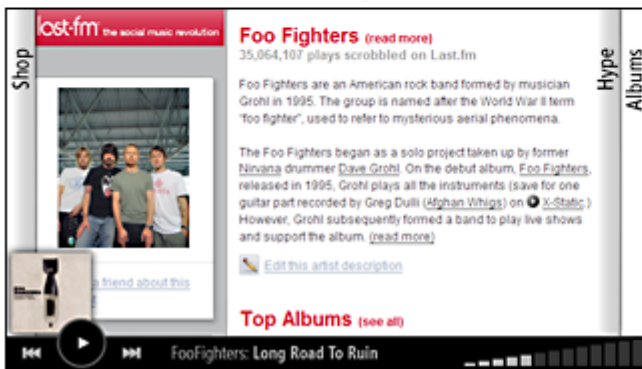
The “Hype” panel displays information about the artist or band.

- The hype blurbs flows down from the top.
- You can subscribe to any of the sources you find here by dragging them over to the leftmost column.
- I've used last.fm to illustrate one source of info, but sources can be anything, HTML-based, API-based, RSS based, etc.

Accessing hype content

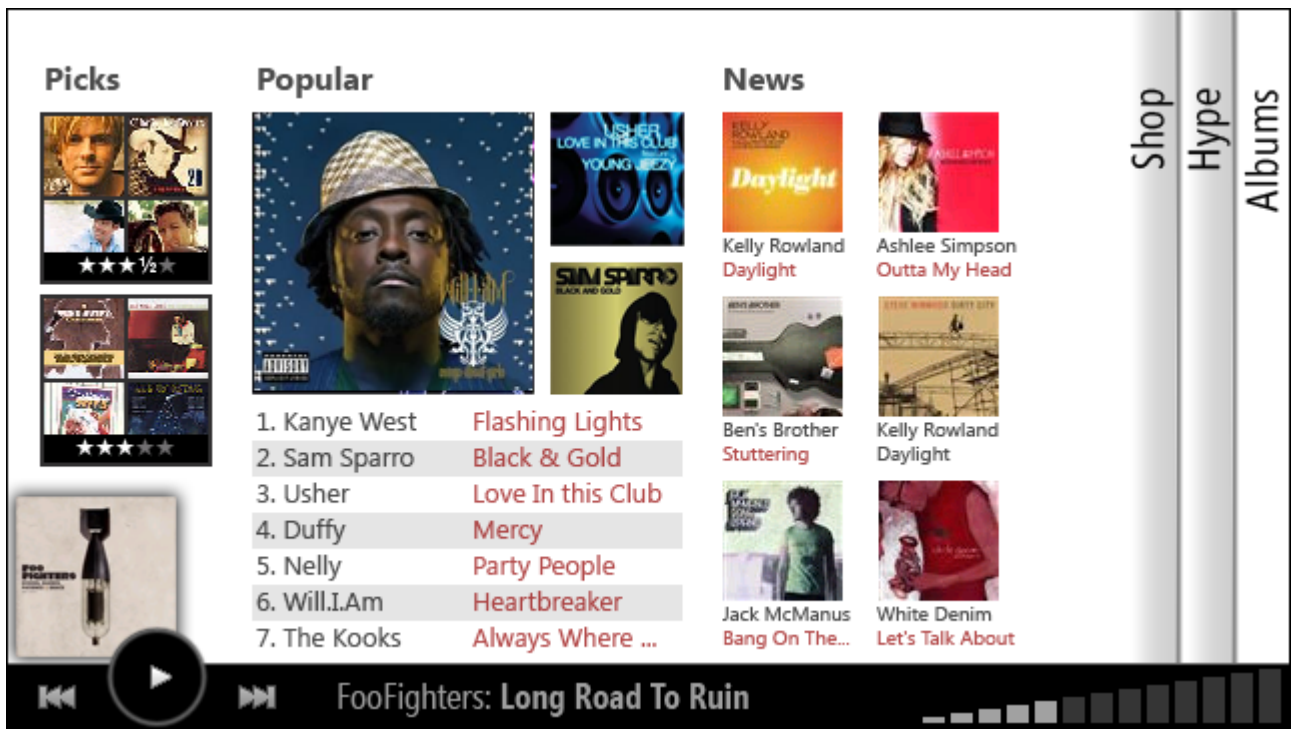


Tap to zoom



Tapping any story box in the Hype panel zooms to the full content.

Shop



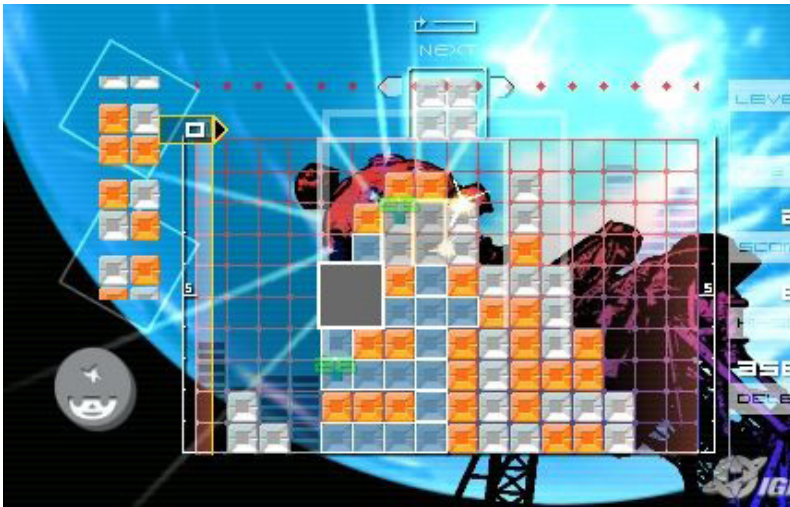
The Shop can display its content in a nice and tidy fashion, as shops do. Since it's so tidy, it's even possible to drop gridlines between sections. Navigation should probably be a combination of Tap to zoom in, and Drag to scroll vertically. I haven't spent a lot of time on the shop to be honest.

End notes

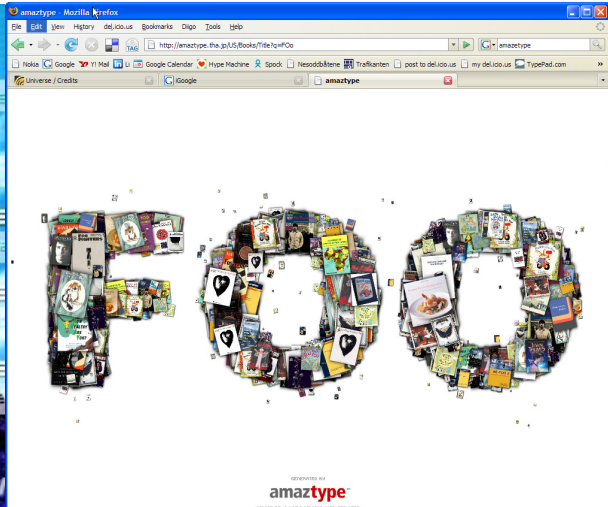
The Flat Music Player version 2 ended up having only play/pause controls, a back-button, and two closable panels that are manipulated by gestures. An actual product would need a little more; it has to be possible to type in names for sections, probably URLs and ways to connect to friends. But I think this shows that you can get quite far using the content itself as the interface.

I was looking for more plasticity and viscosity than I could wring out of Flash, hopefully the animation gives *some* sense of the intent.

Inspiration



Lumines



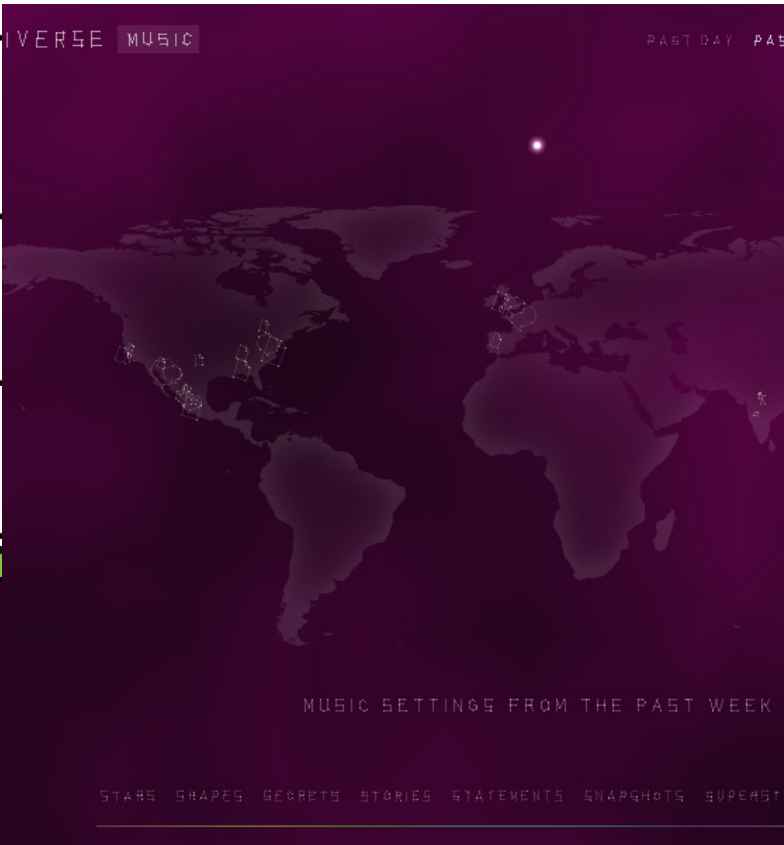
Amaztype



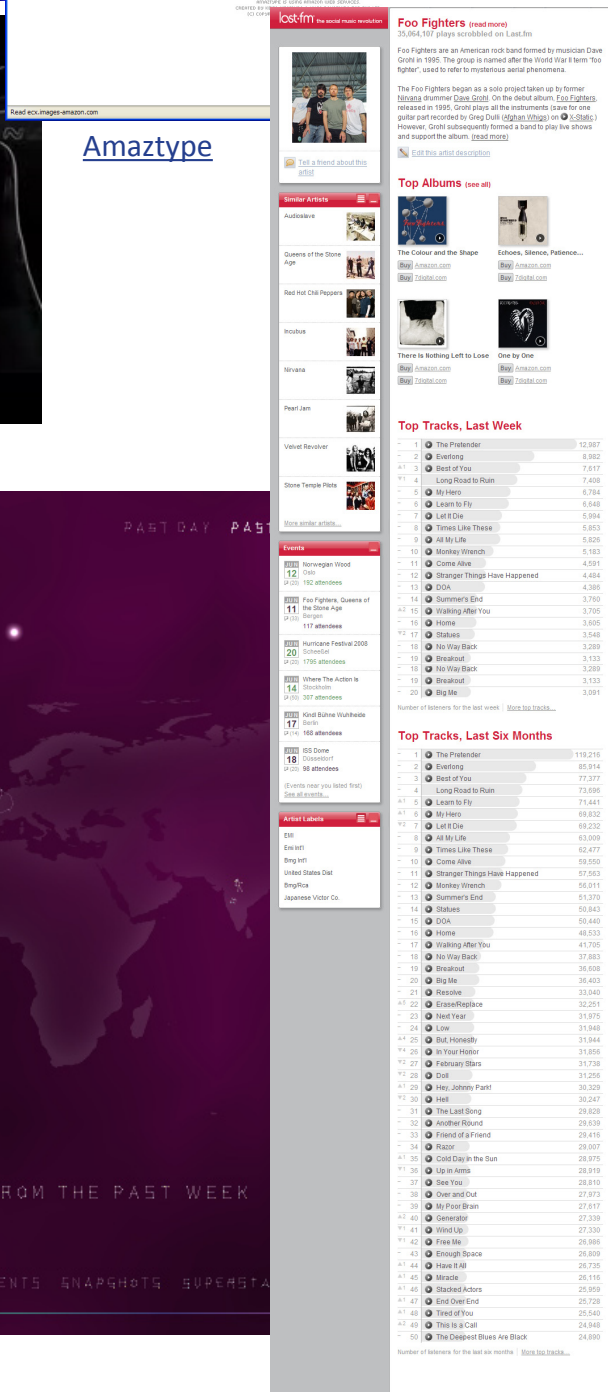
Hype Machine



NokiaDesign



Universe by Jonathan Harris



last.fm