

SmartMusic – smart your daily life!



The image shows a software window titled "SmartiTunes" with a dark background. On the left is a large, metallic Apple logo. To its right, the text "SmartiTunes" is written in a large, bold, white font. Below this, "beta 1.0 release" is written in a smaller white font. The window has a standard OS-style title bar with a close button (red 'x') in the top right corner. Below the main title area, there is a white panel containing several elements: a green text log on the left, a central graphic of a music equalizer with the word "MUSIC" below it, and a grid of buttons on the right. The log shows the following text: "Smart ActiveMusic CC 1.0..", "Executing..", "Loading local data..", "Checking updates..", and "OK!! Enjoy your SMART-ITunes!!". The buttons are arranged in two rows: the first row has "Music" and "User(s)", and the second row has "Speed" and "Exit". To the right of these is a large button labeled "Just SMART it!!". Below that are two smaller buttons: "Status" and "Show!!". At the bottom right of the white panel, the text "copyright: Sichao Song" is displayed.

Smart ActiveMusic CC 1.0..
Executing..
Loading local data..
Checking updates..
OK!! Enjoy your SMART-ITunes!!

MUSIC

Music User(s)
Speed Exit

Just SMART it!!

Status Show!!

copyright: Sichao Song

Image this senario..

- If you are running while listening to some musics that stored in your mp3..
- When it comes some sad, slow music, you probably have to stop running and taking out your mp3 and chance some other music..

• It drives you CRAZY!!



Don't worry!

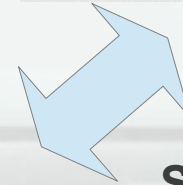
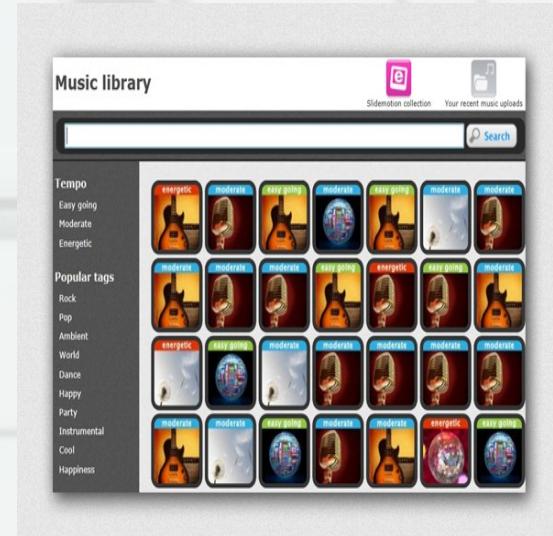
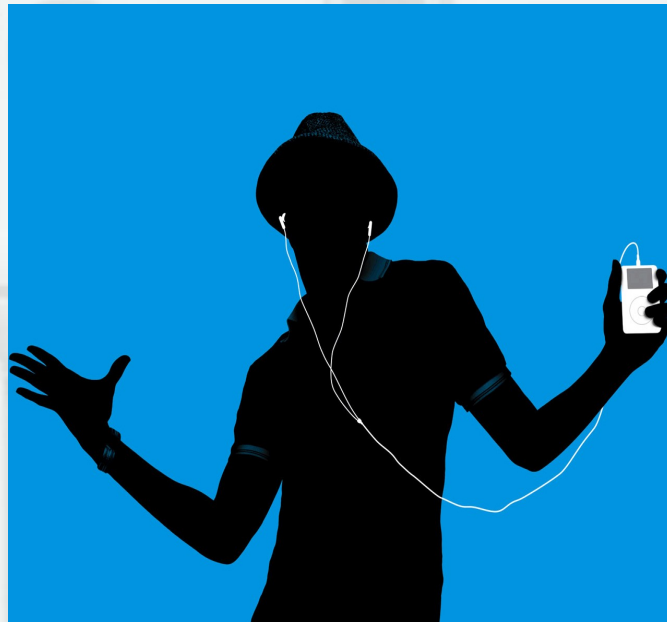
- Now we have the SmartMusic Itunes beta1.0 release now

Cool!



Senario

Running
Jogging
..



**Semantic
Technology**

SWRL rules

- For example..

- $\text{Person}(?p) \wedge \text{hasSpeed}(?p, ?s) \wedge \text{swrlb:greaterThanOrEqual}(?s, 10) \rightarrow \text{hasStatus}(?p, \text{running})$ --to determine whether a person is **RUNNING**
- $\text{Person}(?p) \wedge \text{hasPreference}(?p, ?s) \wedge \text{Music}(?m) \wedge \text{hasStyle}(?m, ?s) \rightarrow \text{like}(?p, ?m)$ --which songs the person likes?
- $\text{Person}(?p) \wedge \text{hasStatus}(?p, \text{sitting}) \wedge \text{Music}(?m) \wedge \text{hasRhythm}(?m, \text{slow}) \wedge \text{like}(?p, ?m) \rightarrow \text{select}(?p, ?m)$ --select songs for the person accordingly

Protege-OWL API

- In this project I choose to use Protege 3.4.8 and Protege-OWL API.
- More information about Protege-OWL API:
 - (1)
<http://protege.stanford.edu/plugins/owl/api/>
 - (2)
http://protegewiki.stanford.edu/wiki/Protege_OWL_API_Programmers_Guide

So, why Protege-OWL API?

- I decided to choose Protege 3.4.8 instead of Protege 4.2:
 - I feel more comfortable with Protege 3.4.8, and it supports RDF. However, Protege 4.2 only supports OWL 2.0.
- Protege-OWL API is suitable with Protege 3.4.8, and supports Jena; OWL API is suitable with Protege 4.2.

What it can do for you?

- Intelligently selects musics that suit you (based on your preference and current status, or user's PROFILE)