

Contextual Music Playlists – Research Prototype

NOKIA

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SAME project - Sound And Music For Everyone Everyday Everywhere Everyway
<http://www.sameproject.eu>

SAME



Contextual mobile music player

- Mobile phone detects the user's environment and activity using the microphone and accelerometer sensors.
- Depending on the environment or activity, a playlist of music is returned. For example, "music for running".
- The system learns over time what kind of music is listened to in different environments and while doing different things.

Context analysis

- The mobile phone uses the microphone to "listen" to the surroundings and classifies the environment to "street", "office", "car" or "outdoors", for example.
- An accelerometer sensor in the mobile phone senses how the device moves with the user. This data can be used to detect what the user does, such as whether he is walking, running or bicycling.
- In addition the accelerometer data can be used to detect how fast the user walks or runs.



Music content analysis

- Software algorithms analyze the music on an online server.
- Automatic analysis of what the music "sounds like"
 - Enables finding music that "sounds similar" to what the user has been listening to earlier.
- Information on the tempo of the music can be used to find music which matches with the user's walking or running speed.

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