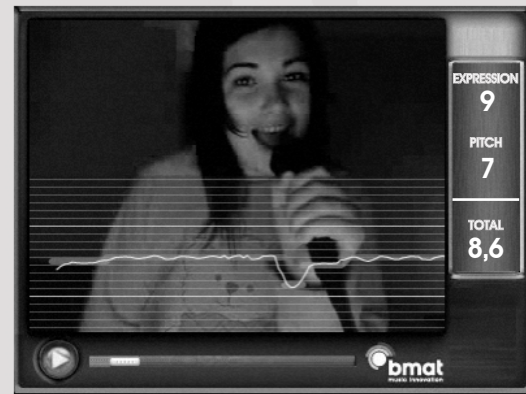
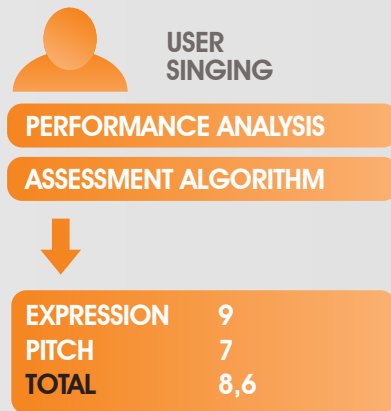


BMAT creates “virtual singing judge”

For television networks, the internet is the perfect environment to reach and talk to young audiences. In February 2008, **BMAT** was asked to design an innovative approach for the casting of the most popular singing contest TV show in Spain, “Operación Triunfo”. **BMAT** proposed using Skore technology to set up an online webcam-based casting that would allow any singer to audition from home. **Skore** was proven to be an effective, precise, impartial and yet entertaining way to select contestants.

Skore works as a musically-educated virtual judge that can analyze a singer’s performance and provide a score based on pitch, expression and musicality. It is the only solution available in the world that is able to rate the singing skills regardless of the song chosen and without the necessity of a background music track, going beyond the limitations of conventional pitch tracking used by other systems.

BMAT’s solution displays vocal analysis (e.g. pitch contour, scale estimation, note segmentation, vibrato and portamento detection) over a cool and intuitive graphical interface, making Skore feedback extremely simple to understand.



SOLUTION

BMAT developed a cross-platform solution consisting of the following modules:

- **The Frontend:** A flash component which allows users to record (using Flash Media Streaming Server 3.0) their performances and submit them for analysis and score. Once analyzed, the front-end displays key musical characteristics and final score.
- **The Backend:** A Binary module developed using Microsoft Development Tools which analyzes the performance and generates a portable XML file containing the pitch curve values, the note values and three main scores: Pitch, Expression and Total.

KEY BENEFITS

- Accurate scientific-based evaluation of the performances
- Builds large online community rapidly
- Supports high volume of simultaneous uploads
- Offline processing
- Rates pitch, expression and musicality

SYSTEM TOOLKIT

- Adobe Creative Suite 3
- Flash Media Streaming Server 3.0