# Emotion Based Categorization of Music Using Low Level Features and Agglomerative Clustering

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- **Research Goals:**
  - Design a feature set considering the perception of emotion by human being and respective music signal properties.
  - End goal is to categorize music collection according to their emotional properties.
- **Feature Design Criteria:**
  - The way musical accents are patterned through time leads listeners to anticipate the emotional essence.
  - Feature set is designed considering the relation between emotional response and musical structure.
- **Features Considered:**
  - RMS Energy, ZCR, Linear prediction cepstral coefficients (LPCC), Spectral Features (Flux, Rolloff, Flatness Measure and Crest Factor)
- A bottom-up hierarchical clustering approach (Agglomerative clustering) is used.
- Proposed system achieved an accuracy of 63.63% on *Soundtracks* dataset.