TECHNISCHE
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DRESDEN
concept

Department of Computer Science

Institute for System Architecture, Chair for Computer Networks

Application Development for Mobile and Ubiquitous Computing

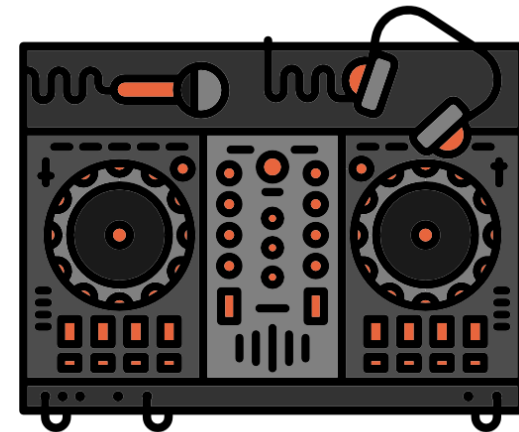# TRACKSETTER

First Presentation

Group 5: Felix Schmiedt, Jakub Letos
Dresden, 02. November 2017

Overview

If you like spinning real vinyl as a DJ, handling your whole music library can be quite tedious:

- Did you forget a track you wanted to play?
- What next track fits BPM- and/or genre-wise?

For that we propose
the app „TrackSetter" –
an electronic catalogue of your
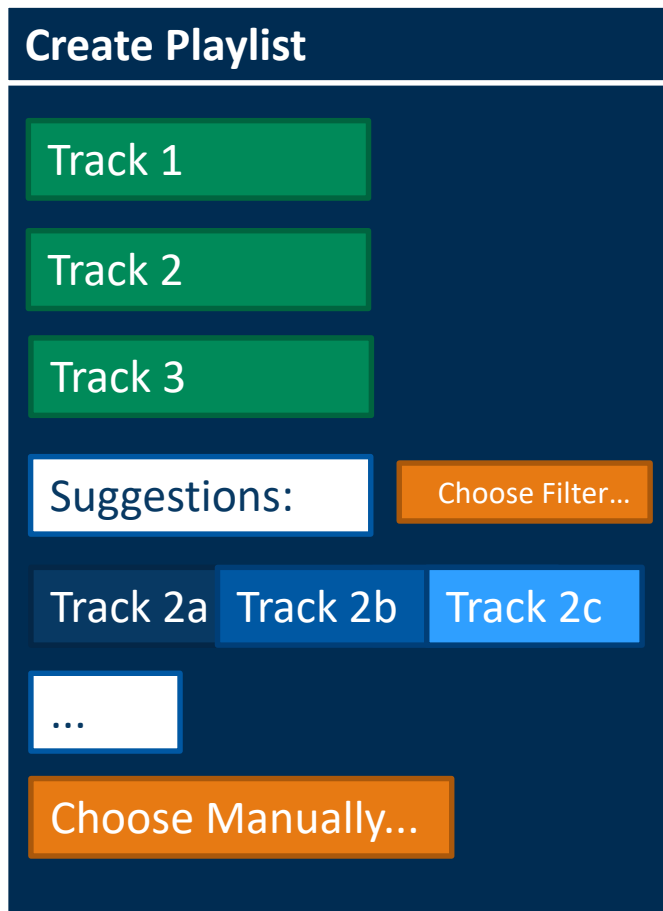music, with which you can also
create a playlist.

Mockups

Music Library / Show Playlist

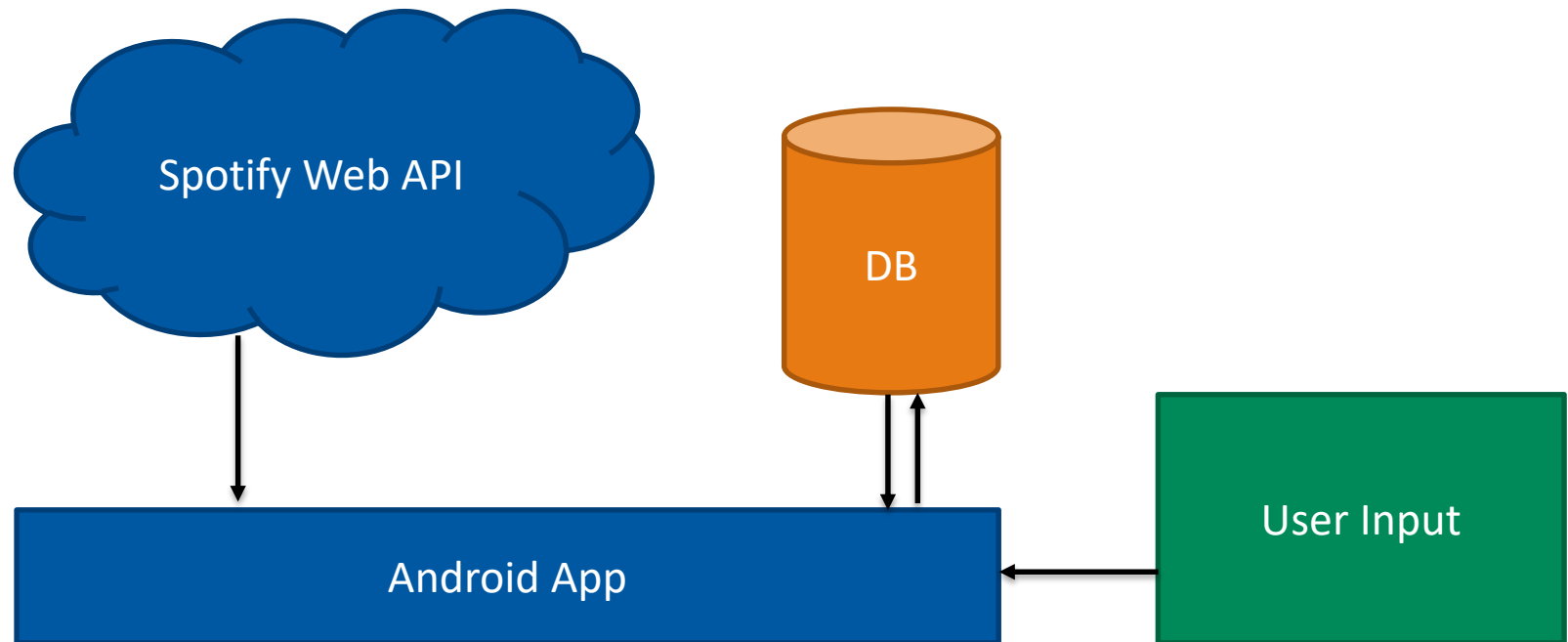| Artist	Trackname
Artist 1	Track 1
Artist 2	Track 2
Artist 3	Track 3
Artist 4	Track 4
Artist 5	Track 5
Artist 6	Track 6

+

- You have a sortable List-View of your current library.

- In which you can also add a track.

- The track can be added via an API (Spotify Web API)

- Or manually (when offline / no track was found).

- All the info & parameters are then gonna be stored locally in a database.

Mockups II

Create Playlist

Track 1

Track 2

Track 3

Suggestions: Choose Filter…

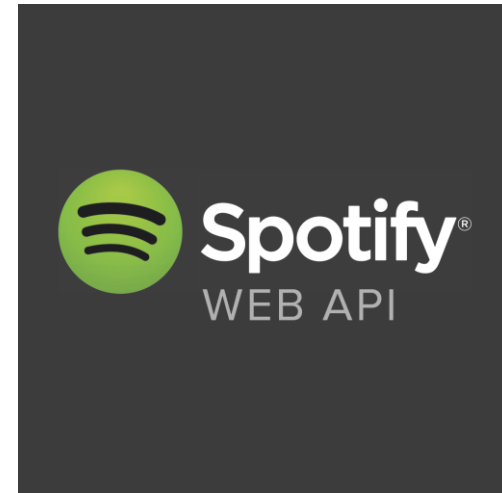Track 2a   Track 2b   Track 2c

…

Choose Manually…

- With the 2nd View you can create a playlist.

- The app automatically suggests tracks from your library, based on close:

  - tempo (BPM)

  - energy

  - genre

  - *Optional parameters*: danceability, valence, similar artists

- You can also choose manually here

Architecture

Technologies

Challenges

- **Usability Challenge:**

  - providing color differentiation (lighter to stronger colors) for intuitive selection of more suitable tracks

  - offering a filter to easily narrow down the proposed tracks to the desired main selection criteria

- **Offline Challenge**

  - usable in offline mode with manual insertion of track information

Timeline

- **First Presentation: today, 03.11.2017**
  - November:
    - Mockups, Setup development environment, UI Design
    - Project Prototype:
      - └ 15.11.2017: implement Mockup I and establish API support
      - └ 30.11.2017: Start with Mockup II
- **Adaptation concept presentation: 15.12.2017**
  - └ Mid-December: Finish Mockup II
  - └ End of December: testing and fine tuning
  - January: buffer, fixing the last bugs, implement additional ideas
  - Final Product
- **Final Presentation: 26.01.2018**

Additional Development Options

- Make the playlist deletable and editable.

- Automatic choice of the best suited filter (*out of*: all parameters, bpm/tempo, energy, danceability, valence)

- *Formula*: the additive amount of all parameter values / the number of parameters

Thank you for your attention.

☺