Specifications - Android Practice App

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Chapter 1

Overview

1.1 Purpose and Goal of the Application

The App should help with organizing and following a structured musical practice routine. It should allow for planning practicing sessions and guiding the user through practices.

In future development a web-app version could be added and also extend the app to iOS. The web-app focus would be on building custom practices and letting teachers manage students practices.

1.2 Users and Target Groups

For the first iteration of the app the target groups would be musicians, be it students, professionals or teachers.

In the case that the extended web-app feature mentioned in 1.1 be implemented, a second main target group would be the teachers.

Chapter 2

Product Specifications

2.1 Assumptions and Dependencies

2.1.1 Target Platform

Target platform for the application are Android mobile devices. In the feature the app should also be built for iOS devices.

2.1.2 Operating System

The app will be developed to run on devices running Android 4.5 and above.

2.1.3 Input Devices

Input devices will be touchscreen

2.1.4 Output Devices

For output the screen and speakers of the device will be used.

Table 1: Languages used for application and development

Interface:	English
User Documentation:	English
Implementation:	Kotlin
Code Comments:	Englisch
Specifications:	English
Design Documentation:	English
Testplan:	English
Test Protocols:	English

2.1.5 Language

2.2 Functional Specifications

The system needs to:

- Include a metronome
- Give push notifications for practice hours
- Save events to calendar
- Track progress
- Track practicing time
- Guide through exercises

2.3 Non-functional Specifications

The system should:

- Be operable intuitively
- Be operable through touchscreen
- Work without a server

Chapter 3

Use Case Analysis

3.1 User Stories

- As a user I want to pick an exercise so I can practice it
- As a user I want to practice with a metronome which is set according to the exercise
- As a user I want to create custom exercises so I can individualize my practice
- As a user I want to structure an exercise with multiple speeds and durations
- As a user I want to increase an exercises intensity and duration dependent on my progress
- As a user I want to see an overview of my progress with practice
- As a user I want to see how much I practice
- As a user I want to be reminded to practice so I practice regularly (only with my consent)
- As a user I want to set practice times in my calendar
- As a user I want to plan out practice for future gigs so I can meet my "practice deadline"

3.2 Use Cases

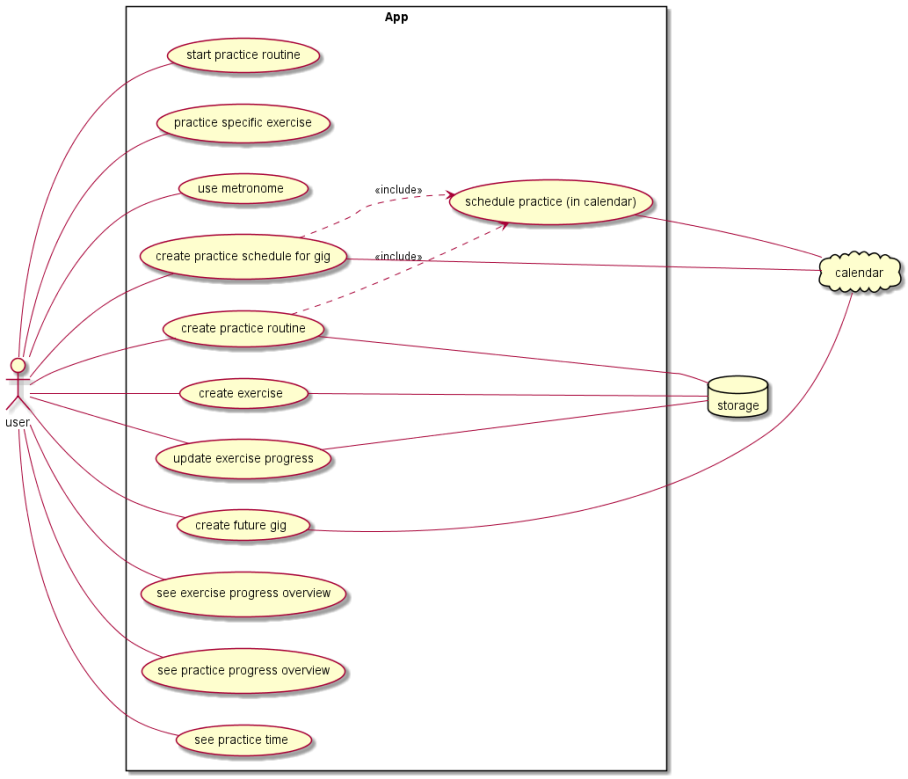

Figure 1: Usecase diagram

Table 2: Use Case (ID: U-01): Usecase Name

Title:	Usecase Name
Primary Actor:	Bikefitter user
Success Scenario:	1. Benutzer wählt Datenverzeichnis
	2. Benutzer wählt durzuführende Analysen
	3. Benutzer wählt Ergebnisverzeichnis
	4. System berechnet Werte
	5. System plottet Grafiken
	6. System speichert Ergebnisse in Ergebnisverzeichnis
Requirement:	Anwendung gestartet

List of Tables