

# Integrated Flutter App with Python API for Beats Per Minute Calculation

This documentation provides an overview of the current status of the integration between a Flutter app and a Python API for Beats Per Minute (BPM) calculation.

## Overview:

The goal of this integration is to enable users to select or record audio files within a Flutter app, which communicates with a locally hosted Python API. The Python API leverages a ChatGPT-powered algorithm to calculate and return the Beats Per Minute.

## Project Components:

### 1. Python API:

- The Python API is set up locally on the developer's machine.
- It exposes an endpoint to accept audio files for BPM calculation.
- BPM is calculated using an algorithm powered by ChatGPT.

### 2. Flutter App:

- A Flutter app has been created with a single screen to facilitate user interaction.
- Users can choose an audio file from their device or record one directly within the app.

## Current Status:

### 1. Python API Testing:

- The Python API has been successfully tested using Postman, confirming its ability to calculate BPM accurately.

### 2. Flutter App Development:

- A Flutter app has been developed, featuring a user interface allowing users to choose or record audio files.

### 3. Integration Implementation:

- The Flutter app has been integrated with the Python API using the `http` package.
- The integration enables the app to send audio files to the Python API and receive BPM calculation results.