聲音節奏遊戲

資工四 王　凡
資工四 黃冠豪
資工四 江建德

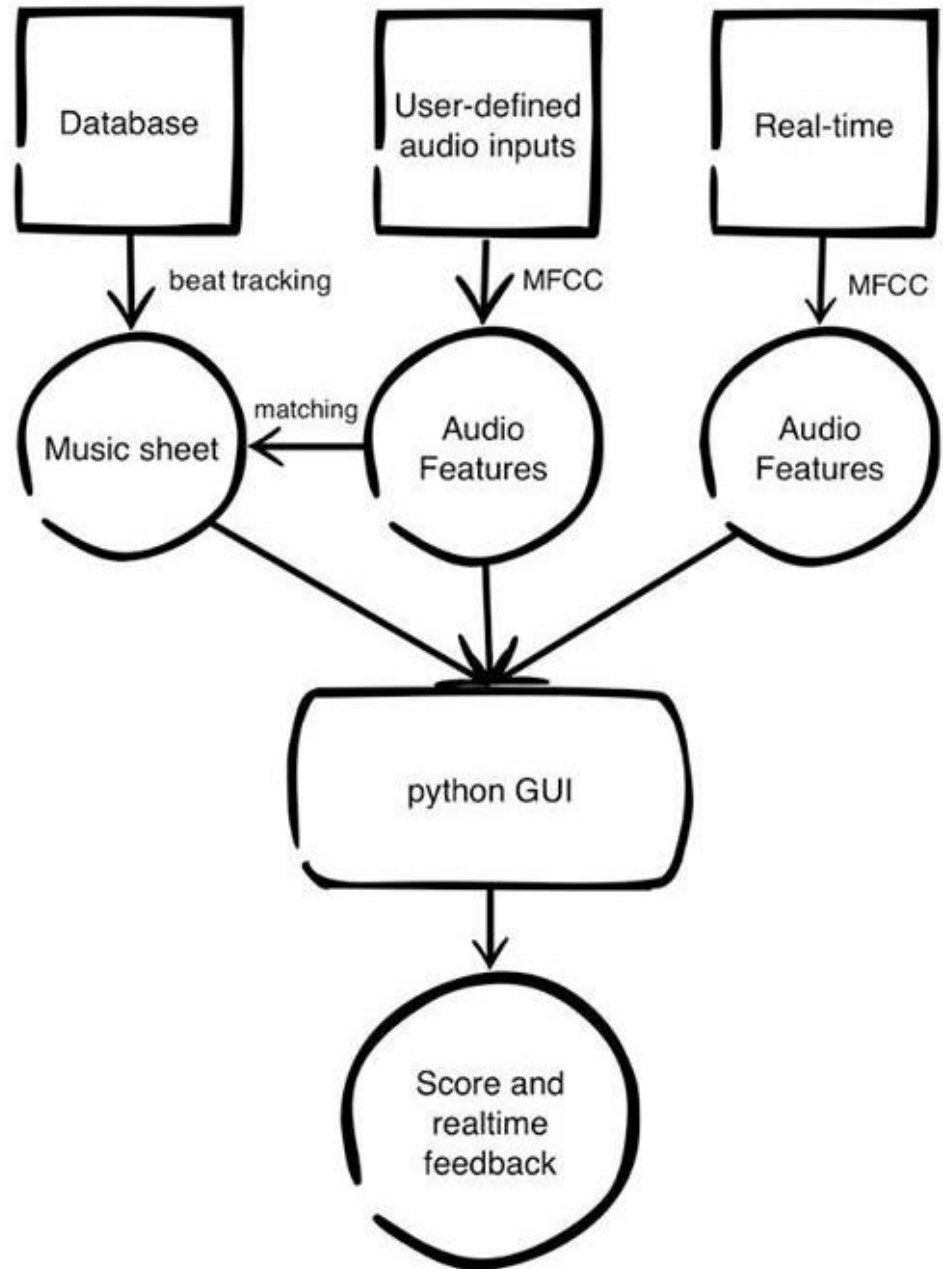# Outline

- Introduction
- System
- Technique
- Problem
- Future Work
- Demo

Introduction

" 音樂節奏遊戲

" 自訂敲擊聲音

" 身歷其境的使用者經驗

http://moonpsp.pixnet.net/album

System

Technique

- Audio Recognition
- Beat Tracking
- Audio Matching
- Handle Input Stream

Technique
Audio Recognition

- " Recording
- " End Point Detection
- " MFCC Feature Extraction

Technique
Beat Tracking

" For preparing database

" Use Library from professor Roger

Technique
Audio Matching

" For preparing database

" MFCC Feature Distance

Technique
Handle Input Stream

" Get input stream around beat

Problem

" 邊放歌邊玩會影響判斷

" 無法偵測同時敲擊

" 遊戲畫面更新速度與聲音
會有差異

" 聲音準確度

Future Work

" Battle System

" Higher accuracy

" Detect different sounds at same time

" Noisy removed