Cairo University

Faculty of Computing and Artificial Intelligence

Object-Oriented Programming
A-2

Second year

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The members

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work breakdown

Name	Task
Mohamed Ayman Mohamed	1,3,6,9,11
Omar Abd ElMonem Shaaban ElBadry	2,5,8,12
Mohamed Ahmed Arafat Khalil	4,7,10,14

[The repo](#)
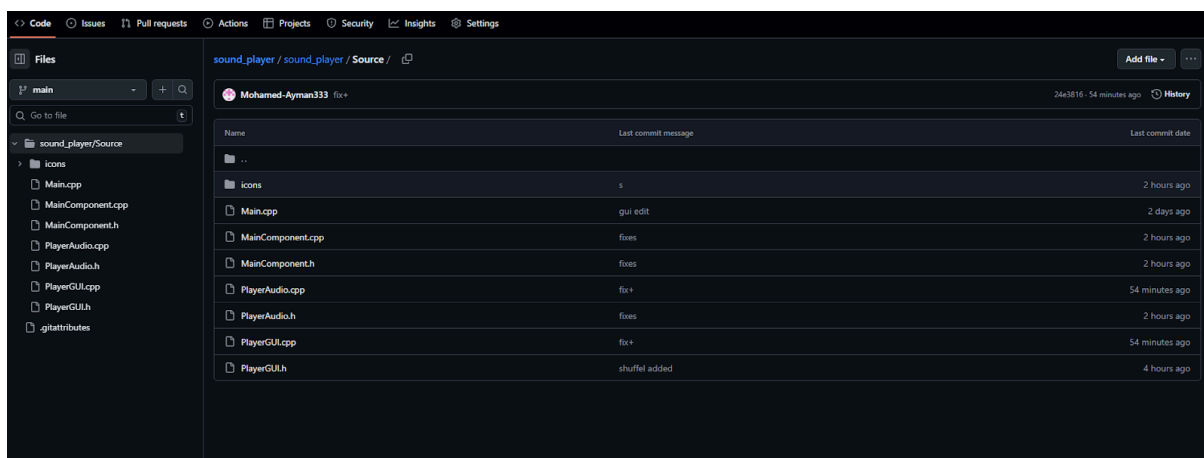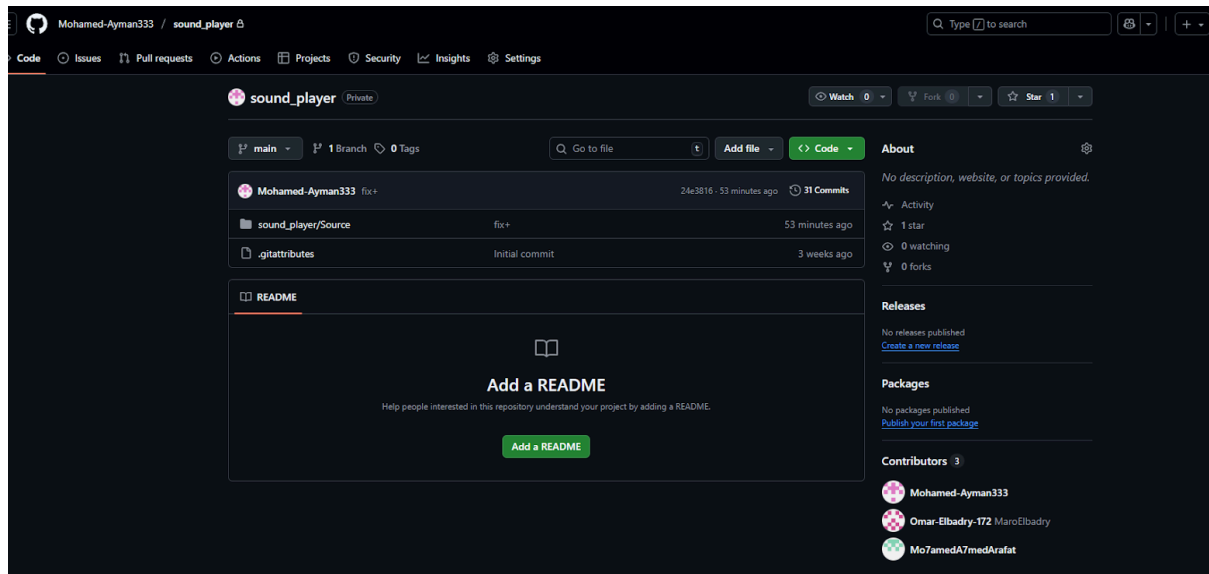
The system breakdown diagram
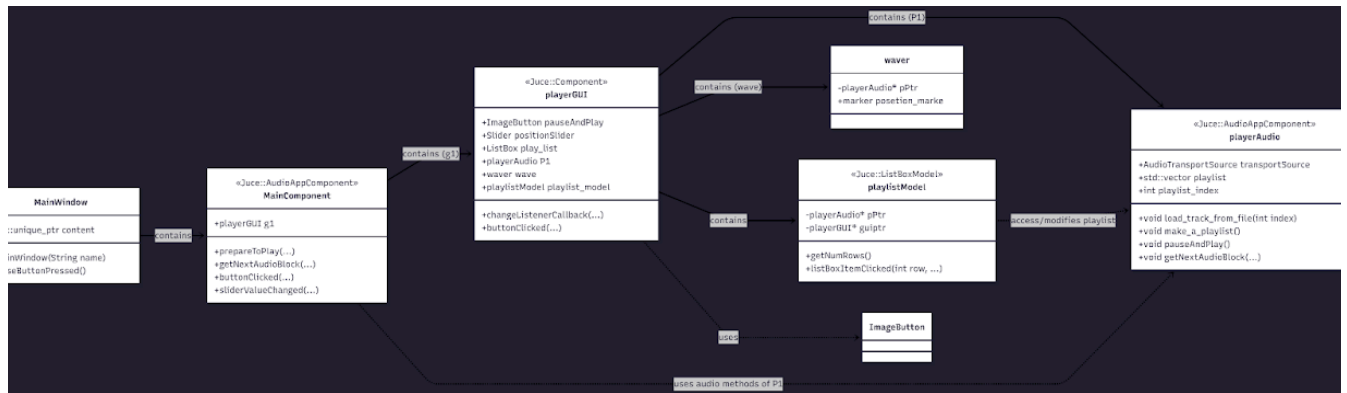
The running code

[The Video](#)

Our Classes

SimpleAudioPlayer: the app class

MainWindow: the app`s window

MainComponent: the main component of the app

playerGUI: the component for Grafex-related stuff

Waver: a class for drawing the audio`s waves

Marker: a marker that appears on the wave

playlistModel: a model for the playlist`s list box

marklistModel: a model for the markers` list box

playerAudio: the component for managing the audio

" A PIE "

Abstraction: we used abstraction to break the app into small general parts like (marker, waver,playerGUI)

Polymorphism: We used Polymorphism to override the functions in the base classes in the Juce library

Inheritance: we used inheritance on the Juse classes to get the functions necessary for the project

Encapsulation: we used encapsulation to combine all the functions and their related data in one class, like in (playerGUI)