Assessment

Module 15) Python - Advance python programming

Case Overview

You've been hired as a **Junior Python Developer** to build a desktop-based application called **MusicBox**. The goal is to help users manage their local music collection by creating, viewing, and saving custom playlists using a simple graphical interface.

This app will reinforce key programming concepts including **file handling**, **exception handling**, **object-oriented programming**, and **Tkinter GUI development**.

Core Features	

• Create New Playlist	• User enters:
	  ○ Playlist Name
	  ○ Song Titles (one per line in a Text widget)
	• Save via Button click

• Save Playlist to File	• Each playlist is saved in .txt format as: playlist_<name>.txt • Stored in a "playlists" directory • File contains song titles listed line by line
• View Existing Playlists	• List all saved playlists in a Listbox • On selection, show songs inside the playlist using the Text area or Label

• Basic Error Handling	• Handle:
	  ○ Empty playlist name or song list
	  ○ File not found
	  ○ Duplicate playlist name
	• Use messagebox to show success or error messages

Skills Tested

- **Tkinter GUI**: Entry, Text, Label, Button, Listbox
- **File Handling**: Open, write, read
- **Classes & Objects**: Playlist class
- **Exception Handling**: Try-Except blocks