MUSIC PLAYER

A MINI PROJECT REPORT

Submitted by

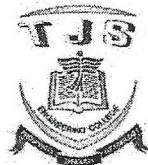|	
NAVEEN.S	(112819104033)
SANTHOSH SWAMY.V	(112819104044)
SIVA.M	(112819104054)
PRASHANTH.A	(112819104304)

In partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In

COMPUTER SCIENCE AND ENGINEERING

T.J.S. ENGINEERING COLLEGE, PERUVOYAL

ANNA UNIVERSITY: CHENNAI 600 025

APRIL 2022

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certificate that this project report **"MUSIC PLAYER"** bonafide work of the following students.

NAVEEN.S	(112819104033)
SANTHOSH SWAMY.V	(112819104044)
SIVA.M	(112819104054)
PRASHANTH.A	(112819104304)

Who carried out the project work under my supervision

SIGNATURE

Dr.S.ANBU,M.E.,Ph.D.,

HEAD OF THE DEPARTMENT

Department of Computer Science

and Engineering,

T.J.S. Engineering College,

Peruvoyal.

SIGNATURE

Mrs.S.V.PRIYANKA.,M.E(CSE).,

SUPERVISOR

Department of Computer Science

and Engineering,

T.J.S. Engineering College,

Peruvoyal.

Submitted for viva voce held on 18/06/2022 **at T.J.S. Engineering College, Peruvoyal.**

INTERNAL EXAMINER

PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
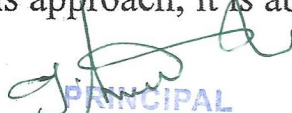Thiruvallur Dist - 601 206,

EXTERNAL EXAMINER

ABSTRACT

This project is about the mp3 music player application development using Android. The biggest difference between the music player and existing applications is that it is completely free for users to use. It will integrate the advantages of existing music players on the market, as far as possible to mining out the existing music players' function, and then do the filtering in order to eliminate function that not practical or low cost-effective. Also, it will be keep improved based on user feedback.

In addition, depending on the user's usage scenario, the music player will also add some modes, such as driving mode and night mode, to allow users to use the application in any situation or environment. Moreover, the music player will have audio trim features, allowing users to trim the best part of their favorite song into phone ringtone or alarm. On the other hand, the existing music players pay less attention to the control of gestures. Therefore, the music player will solve the limitation by adding more gestures and shake the phone feature for media control to make it more user-friendly and humanity.

In a nutshell, the methodology for developing the mp3 music application used in this project is the agile development cycle. The agile development cycle consists of six phases, which is requirements analysis, planning, design, implementation or development, testing, and deployment. Due to the iterative and flexible nature of this approach, it is able to effectively adapt to users with changing requirements.

| CS8392 | OBJECT ORIENTED PROGRAMMING | L T P C |
| | | 3 0 0 3 |

OBJECTIVES:
- To understand Object Oriented Programming concepts and basic characteristics of Java
- To know the principles of packages, inheritance and interfaces
- To define exceptions and use I/O streams
- To develop a java application with threads and generics classes
- To design and build simple Graphical User Interfaces

UNIT I   INTRODUCTION TO OOP AND JAVA FUNDAMENTALS   10

Object Oriented Programming - Abstraction – objects and classes - Encapsulation- Inheritance - Polymorphism- OOP in Java – Characteristics of Java – The Java Environment - Java Source File -Structure – Compilation. Fundamental Programming Structures in Java – Defining classes in Java – constructors, methods -access specifiers - static members -Comments, Data Types, Variables, Operators, Control Flow, Arrays , Packages - JavaDoc comments.

UNIT II   INHERITANCE AND INTERFACES   9

Inheritance – Super classes- sub classes –Protected members – constructors in sub classes- theObject class – abstract classes and methods- final methods and classes – Interfaces – defining aninterface, implementing interface, differences between classes and interfaces and extending interfaces - Object cloning -inner classes, Array Lists - Strings

UNIT III   EXCEPTION HANDLING AND I/O   9

Exceptions - exception hierarchy - throwing and catching exceptions – built-in exceptions, creating own exceptions, Stack Trace Elements. Input / Output Basics – Streams – Byte streams and Character streams – Reading and Writing Console – Reading and Writing Files

UNIT IV   MULTITHREADING AND GENERIC PROGRAMMING   8

Differences between multi-threading and multitasking, thread life cycle, creating threads,synchronizing threads, Inter-thread communication, daemon threads, thread groups. Generic Programming — Generic classes — generic methods — Bounded Types — Restrictions and
limitations.

UNIT V   EVENT DRIVEN PROGRAMMING   9

Graphics programming - Frame – Components - working with 2D shapes - Using color, fonts, andimages - Basics of event handling - event handlers - adapter classes - actions - mouse events -AWT event hierarchy - Introduction to Swing — layout management - Swing Components — Text
Fields , Text Areas — Buttons- Check Boxes — Radio Buttons — Lists- choices- Scrollbars — Windows —Menus — Dialog Boxes.

TOTAL: 45 PERIODS

OUTCOMES:
Upon completion of the course, students will be able to:
- Develop Java programs using OOP principles
- Develop Java programs with the concepts inheritance and interfaces
- Build Java applications using exceptions and I/O streams
- Develop Java applications with threads and generics classes
- Develop interactive Java programs using swings

TEXT BOOKS:
1. Herbert Schildt, —Java The complete reference‖, 8th Edition, McGraw Hill Education, 2011.
2. Cay S. Horstmann, Gary cornell, —Core Java Volume –I Fundamentals‖, 9th Edition, Prentice Hall, 2013.

PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.