UNIVERSITY OF WESTMINSTER

Informatics Institute of Technology

Coursework-3 Project Proposal

Module: ECSI410 – Software Development Principles
Module Leader: Mr. Guganathan Poravi

Project Details

- Name of the Project – Arts Studio

- Team Members

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- Technologies and Architectures - Java

Abstract

There is significant value in having predictions for an item before deciding whether to invest time or money in consuming that item. In a web based scenario where the items are multimedia items such as audio, recommendations can be made to users based on an understanding of their previous consumption or their indications of likes and dislikes. We examine two types of recommendation: content based and non-content or collaborative recommendation. We then apply out thinking to the area of new internet services such as smart recognition slide transfer, smart equalizer, and smart song detector. And propose architecture for an intelligent music radio system. We then suggest the efficacy of using conceptual clustering techniques in such a paradigm.

What is the Problem?

Do you ever get interrupted on a presentation because of the background voice? Or wait and irritating time until the mic receive to your questioner? Or got lost a way of figuring out how to connect multiple music output devices (Portable Speakers) in a way the music become more realistic and surround. Many People face this problem day to day at work, In a lecture or even when in a party. For a possible scenario when some people get together they listen to music over a mobile phone speaker but some can't listen clearly due to a small range and clarity on a single speaker available in many phones, the unluckiest part Is these individual persons carry a smart phone with a great speaker with them but doesn't have a way to simultaneously stream music to each of their phones in a way the sound become Surround or realistic. Or in a lecture each and every student carry a smart phone but the lecturer doesn't has a way to simultaneously steam the lecture to their mobile phones individually so he has to use lecture room speakers and suffer from the background voice. Even when a small gathering is held Organizers have to hire professional crew to handle sound because there is no easy Solution to connect multiple portable speakers' available in many homes together and create a Great, Surround, industrial quality j Sound system.

Introduction

This System is capable of connecting multiple Devices (Over Bluetooth using Raspberry pi 3 Bluetooth adopter, over 3.5mm jack, over Wi-Fi using the mobile App) Stream music available on memory card or user assign input methods. This System auto assign the locations to connected devices using smart assign algorithm to make the Sound of the Multiple connected devices more realistic and surround. The Software on raspberry pi determines.

Why is that so significant

Arts Studio comes with many smart functions that can easy our lifestyle with sounds.

- Connect multiple devices over Bluetooth and Wi-Fi
- Stream music to all device simultaneously
- Smart equalizer
- Smart sound balancing
- Mobile app to connect multiple mobile speakers together
- Mobile app to hold a conference more advance and smart
- Smart recognition to slide transfer
- Smart song detection to tune up sound
- Smart playlists design over previous listen audio using a well-developed algorithm
- Unique keywords as voice command to easy access
- Well-developed user friendly mobile app
- Easy use with touch screen
- Intelligent volume and sound control over the speaker placemen

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