

ITSP 2016

Project Abstract

Team Name: **The Fidgety Quadrupole**

Project Name: Enhanced Stereo

STAB ID of Leader : 1183

Team Members :

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Introduction:

We are moving towards a world where we want maximum work to be automated and done by Devices. Today, we demand maximum luxury and comfort in our lives.

Driven by this fact, We had an idea about how good it would be if one could listen to his/her favourite music whenever one takes a cab ride.

Motivation:

The above idea seems very promising. It needs a car stereo enabled with Wi-Fi detection and some processing power. Further, it needs an app that can access the favourites and Playlists of the user from a Music App used by the user (in his Phone or Computer) and then access those from the Music App's cloud and Play through the Car Stereo.

Requirements:

1. An Existing Car Stereo
2. Wi-Fi Module to be inserted
3. Arduino for processing power
4. A Cloud Service for Testing

Detailed Explanation:

A Wi-Fi enabled Car Stereo with some Processing Power would be the First thing to Work on. That would Require extensive Hardcore electrical and electronics Knowledge. This would be the First Major Milestone.

Then, we need a Cloud Service to Test this, that can be obtained easily from a Microsoft Azure Service (or something like that).

Next Milestone would be to develop an executable program to directly transfer data over Wi-Fi Network to the System to play the music.

Plan of Action:

1. To Study about the Implementation of Wi-Fi Module
2. To Work for Direct Inclusion of Wi-Fi in the Hardware
3. To Work for Processing Power to be given to Hardware
4. To Build An Executable Program That can Transfer Data over Wi-Fi Network
5. To test the work done using a demo cloud Service

Estimated Cost:

Existing Car Stereo: Free / INR 3000

Arduino Kit : INR 1500

Wi-Fi Module : INR 1500

Total Approx. Cost : INR 6000 - 6500