Customizable Surround Sound Router with Raspberry Pi
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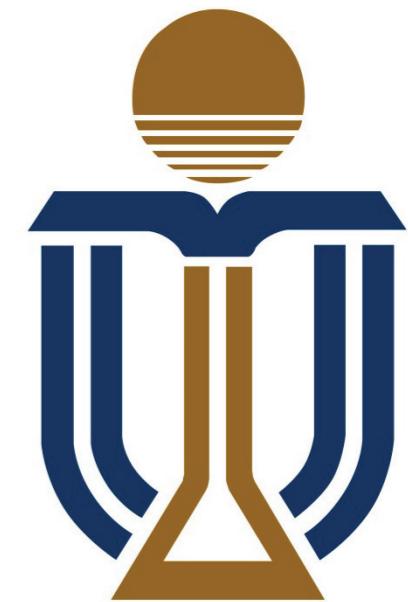
Introduction

In this era of Internet of things, many devices offer great features to individuals. But what happens if you want to take control of your devices? In this project, we try to give control to the user, in an environment of connected speakers and phone/tablets

Typical 5.1 Surround Sound layout
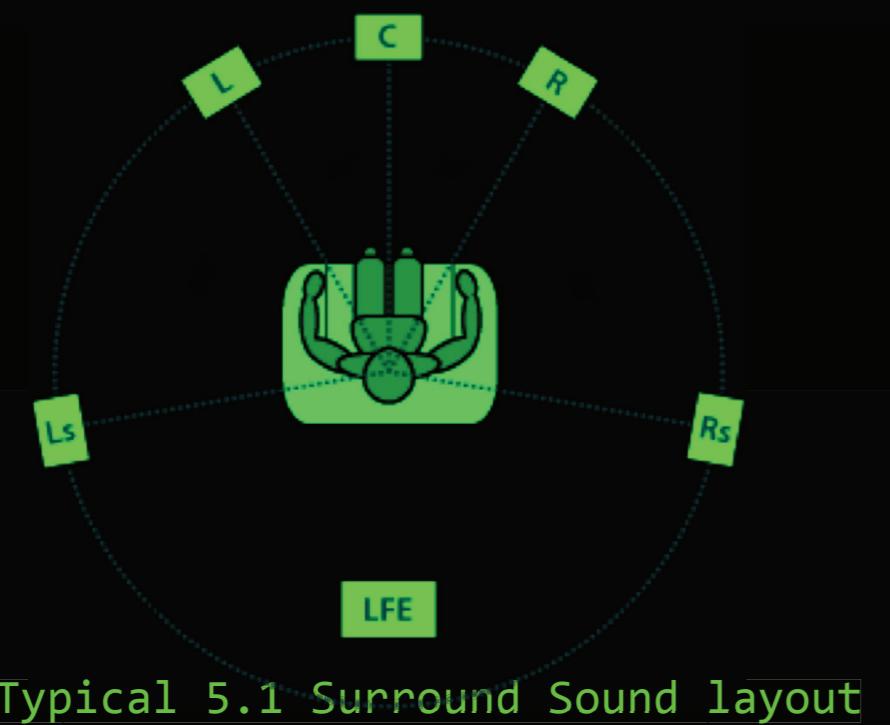
Features

The Rasptooth (**Rasp**berry Pi + Blue**tooth**) is a stand-alone speaker with a touch screen. It allows you to control specifically which device is playing on what speaker. Rasptooth supports Wifi and Bluetooth.

Design

Main components of Rasptooth:

Raspberry Pi

Touchscreen

Speaker
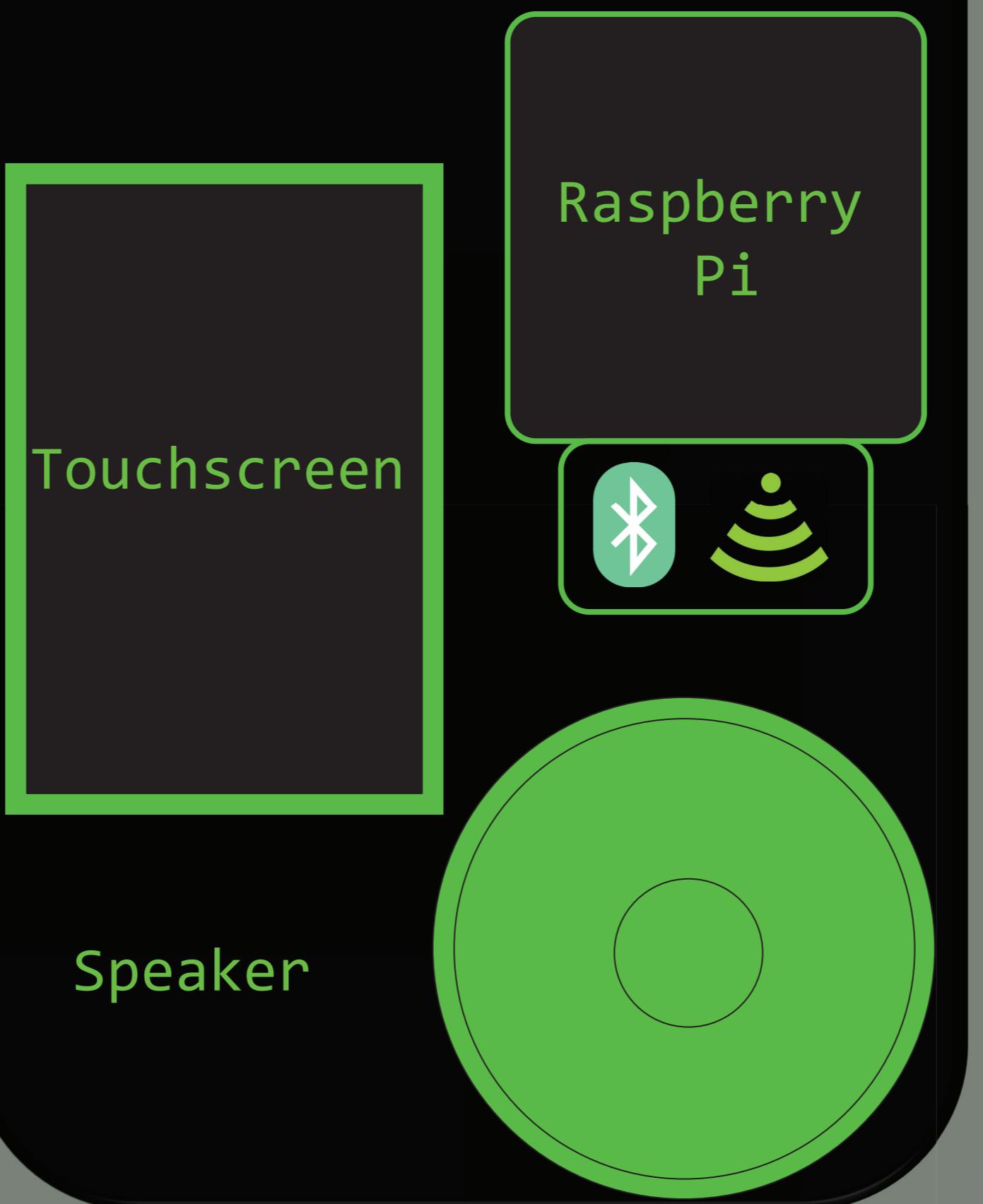
Implementation

During Implementation, we installed drivers for the touchscreen and network dongles.
The main challenges we faced involved controlling the hardware from the Raspbian Wheezy distribution.
Finally, implementing the user-friendly application was the final touch, granting Rasptooth full functionality.

Testing

Testing has been conducted along the year and on a regular basis to ensure quality at all levels of the project.