

Arduino project : Friends on board

1. Research

There's a lot of DIY project I would craft, among them :

- A multi-media platform to watch movies, select some music and first of all can switch through different video game consoles (all plugged).
- A way to interpret my wallpaper's dominant color and automatically match with it all my peripheral's LED (keyboard, mouse, joypad etc...).
- An unexpensive multi-touch table with FTIR screen (FTIR for Frustrated Total Internal Reflection), a wonderful project with a projector and infrared!



But these ones can or must be done with a "regular" computer. This new idea came directly from the internet. Do you remember this lovely bunny face? Since 2011 its servers have been shutted down but the source code was released, an opportunity for the community and some hacks have been done of course. Originally it was designed to alerts you when you receive e-mails, be a clock alarm, streams-MP3 and lot of other things by speaking or using indicative lights. But now community turned it into home automation, webradio or just made new servers. The project I have in mind doesn't use it but the Nabaztag illustrate my point, a nice device transmitting informations in liminous alerts.

2. My Idea

I want to make a simple device showing you if one of your friend is actually playing a game you can join too. The board looks like a battleship game grid and a LED lights when someone join a server. All the following text remains theoretical. I think this is entirely possible, but I didn't have enough knowledge so I can't explain the details. We could use Nabaztag too for this project but I will return to this point later.

1-Servers

I love playing video game with my friends and I'd like to host private servers for several reasons :

- Some games are too old and it's not easing finding a sever.
- For some of them we could use hamachi but my friends don't want to.
- And sometimes we only want to play between us.

2-A box

As I said our board looks like a battleship grid, vertically we place our friends portrait and horizontaly game's logo. All the junctions between both is filed with a LED. We want something neat and movable so we turn it into a box including holes for ethernet and power jack. That box won't be too thick we only need space to place an Arduino. Here is the design I have in mind but this only one possibility, Nazbatag can read email and emits light it could do the job too, saying out loud who is connecting.



3-Arduino !

Like Botanicalls this project needs ethernet too, so we add a module for that and plug it to our computer (where servers are running). When you're host you can observe what happened on the server, most important for us is to see who is connecting or disconnecting. It will be great to illuminate a specific LED just by memorizing keywords and specifying from wich server that came. For exemple if "Antoine" and "joined the game" appears in Minecraft server's log it will light the right LED until "Antoine" and "disconnect" switch off the light.