



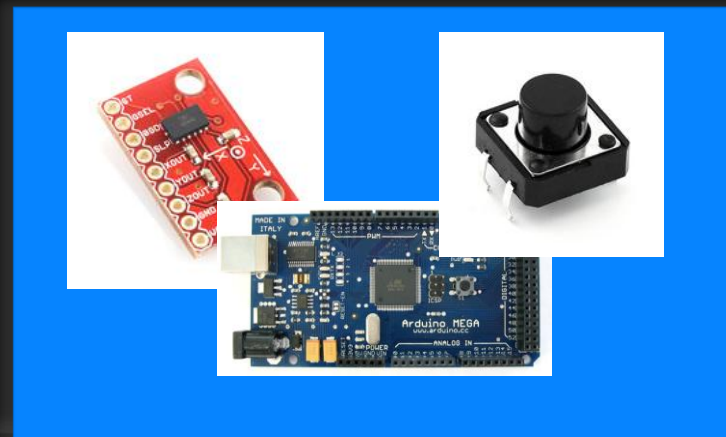
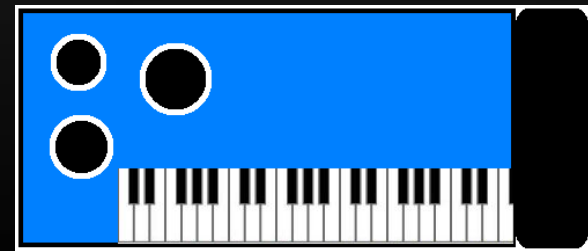
Symphonic Harmonics

- ♪ Neereja Sundaresan
- ♪ Surekha Muralidharan
- ♪ Vikram Rajkumar
- ♪ Wayne Chiang

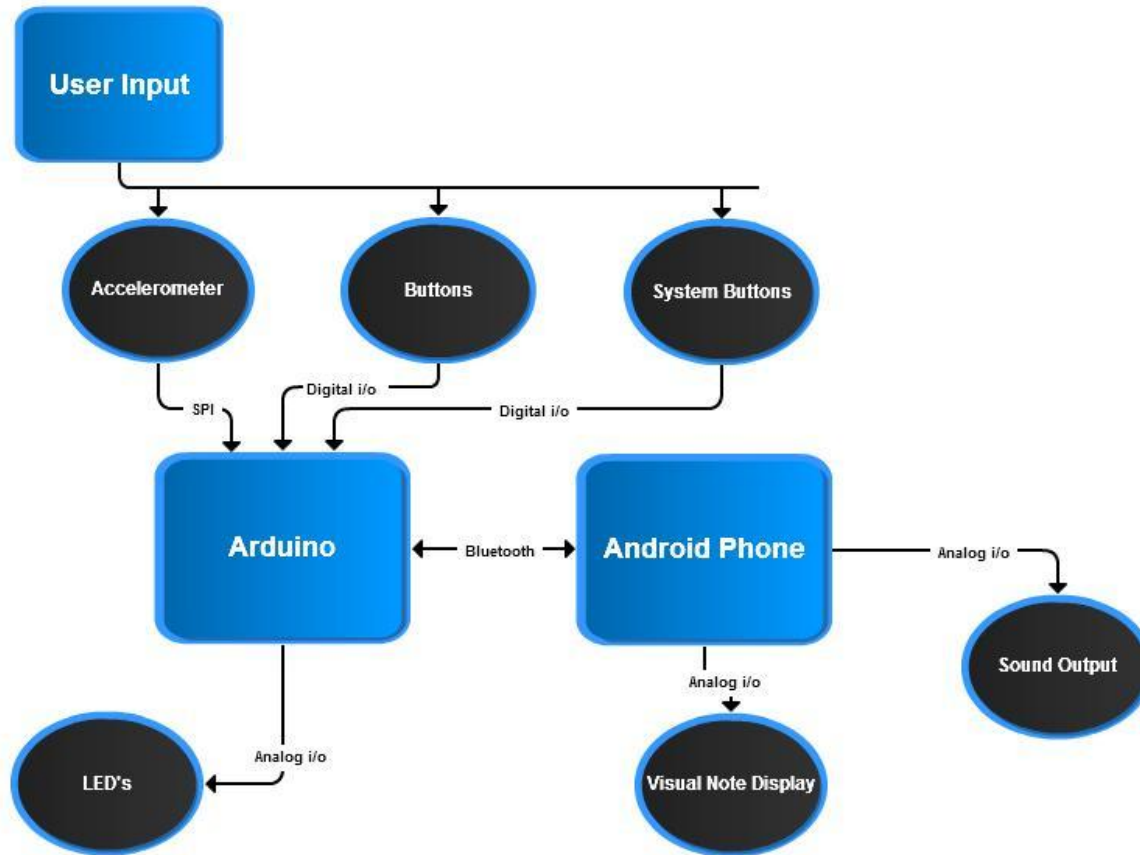


Status Update

- # Concept : Portable, flexible, and interactive composing tool that interfaces with the Android to display and playback scores.
- # Parts Ordered:
 - # Arduino Mega
 - # Bluetooth Extension
 - # Accelerometer with Breakout Board
 - # Buttons
 - # Multicolor LED's
 - # Android Phone

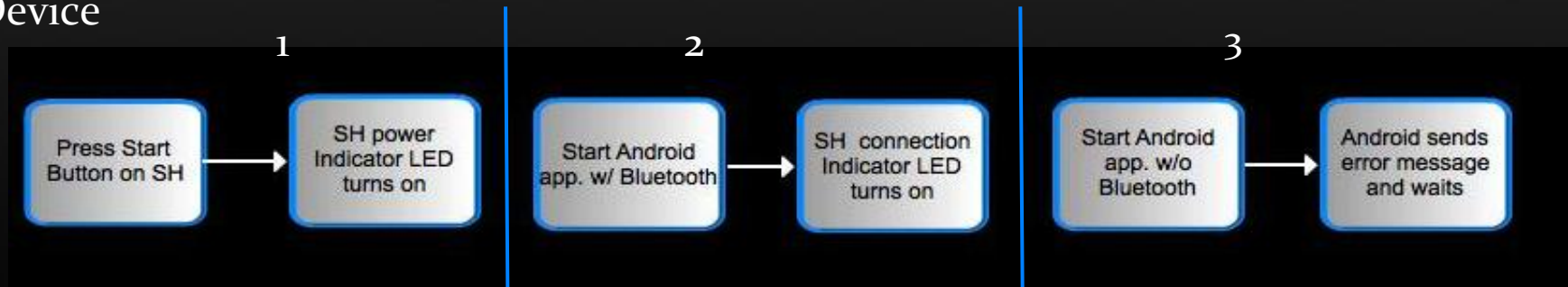


Architecture

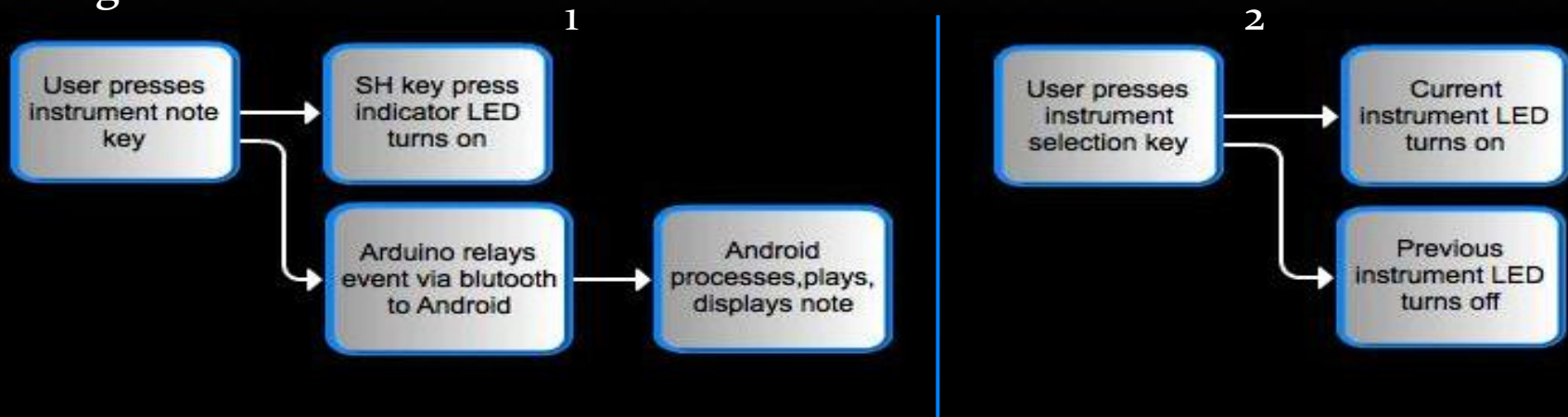


UseCases

Starting Device



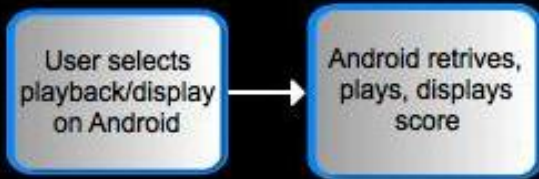
Using SH



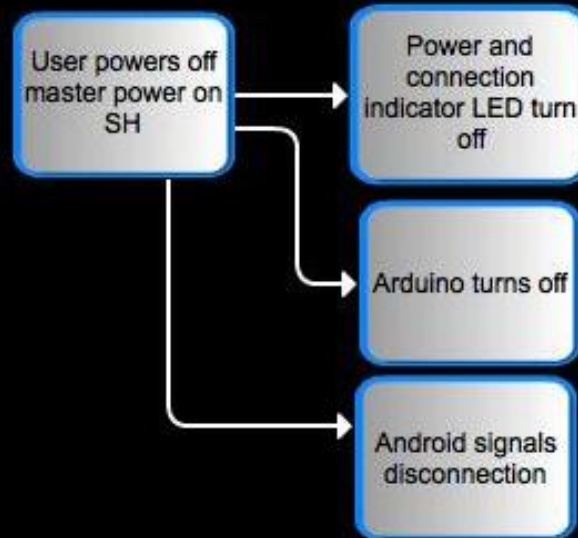
UseCases cont...

Using Android

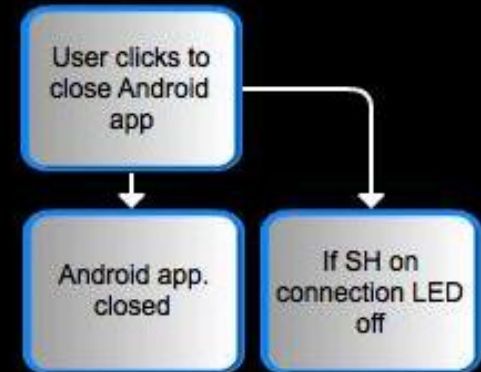
1



2



3



Risks Mitigations

Risks	Mitigations
Loss of bluetooth connection	Re-establish bluetooth connection, use back-up speaker on device
Too much delay between Android and Arduino (bluetooth)	Attempt to reconnect until timeout, show connection problems by turning connection indicator LED off. Use back-up speaker on device
Rough usage damages hardware	Thorough testing of hardware, build secure padding for Arduino and other critical components. Select hardware components that are durable
Loss of battery life	Replace battery
Music played on keyboard does not reach Android	Arduino error light turns on: Arduino has not received acknowledgement from Android and therefore alerts user that the notes being played are not being saved.