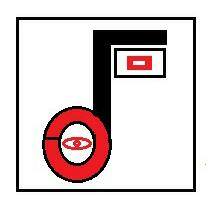
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**Weekly Report (WEEK 5)**

**Company Name:** OJO **2/11/2017**

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This week, we focused on exploring possible hardware components which we should use in our project. Our main concern to achieve in this project is simplicity and while choosing the components this is our priority as well.

**Power supply**

There are several options to power up the robot and one of the suitable solution is power banks. They are widely used for charging phones, but when its features is explored, it turns out that power banks actually a very good power supply for do it yourself (DIY) electronics projects. Medium size power bank has about 10 000 mAh capacity, 5V output with mostly 2A current rating. This means, it can deliver 10W maximum power to the circuit for 5 hours continuosly, which is more than enough for our purpose. Thanks to high energy density of 18650 li-ion batteries inside a power bank, its weight and physical volume is small enough to place it on the board. The only problem we can face with this kind of supply, is its output current rating. If our circuit should require more than 2 amper at any instance, we have to make some changes in the power supply circuit. We can still use power banks and its build in circuit to charge the batteries, but while discharging we should bypass the original circuit and control the battery voltage somehow. Because, li-ion battery voltages should never go to below some value (approximately 2.5 volts), we can add li ion buzzer circuit to the battery and observe the voltage.