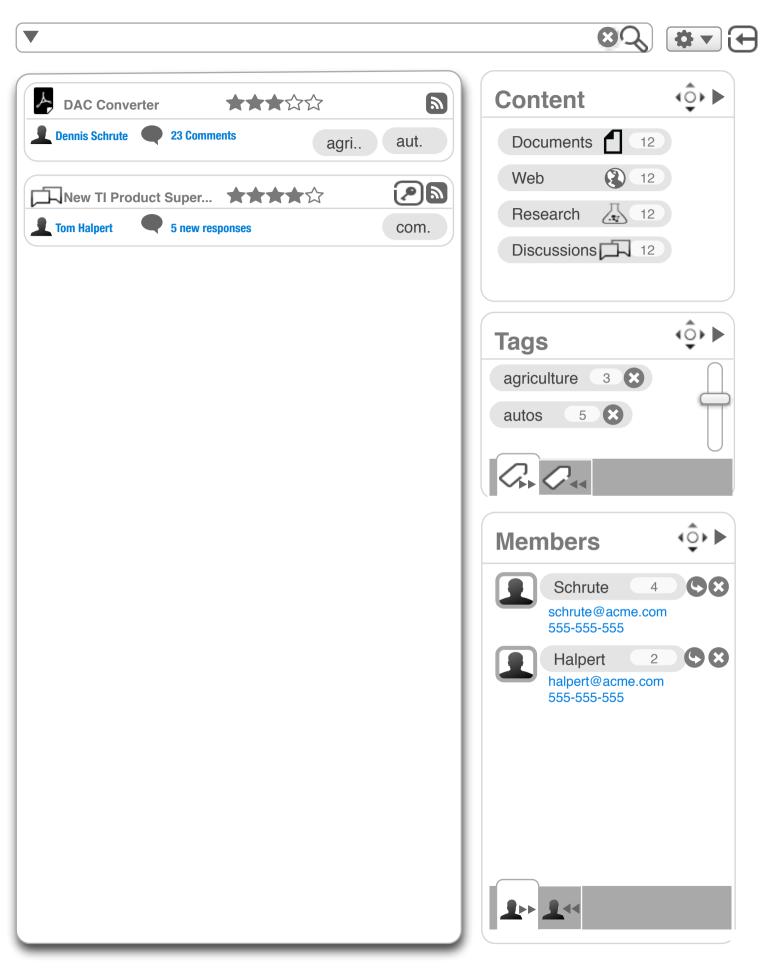
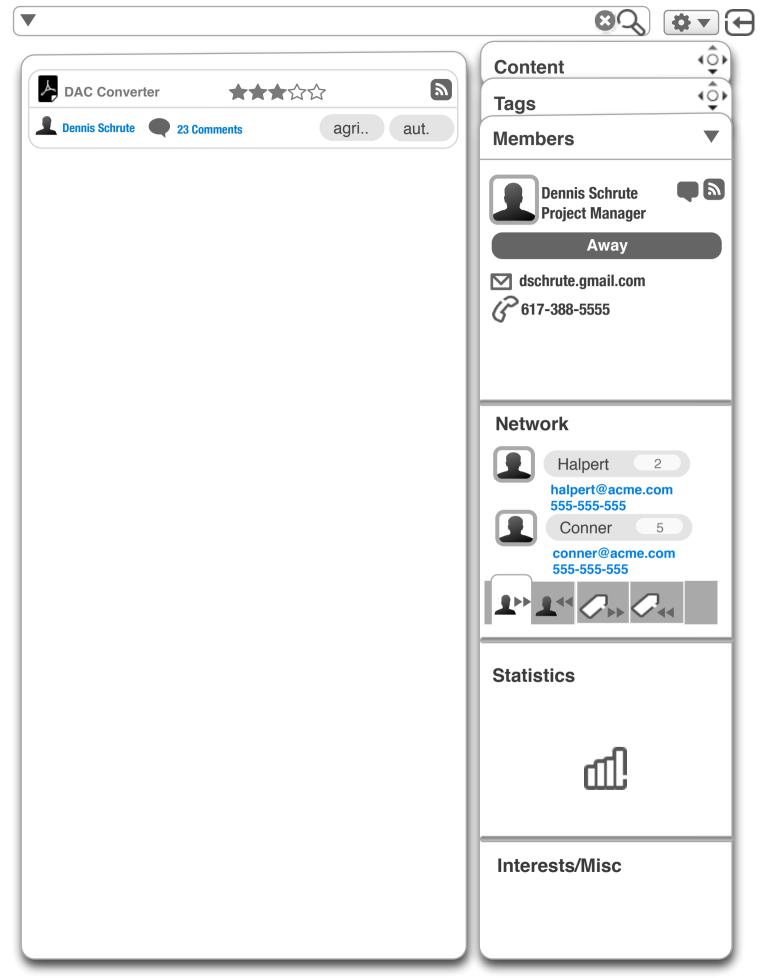
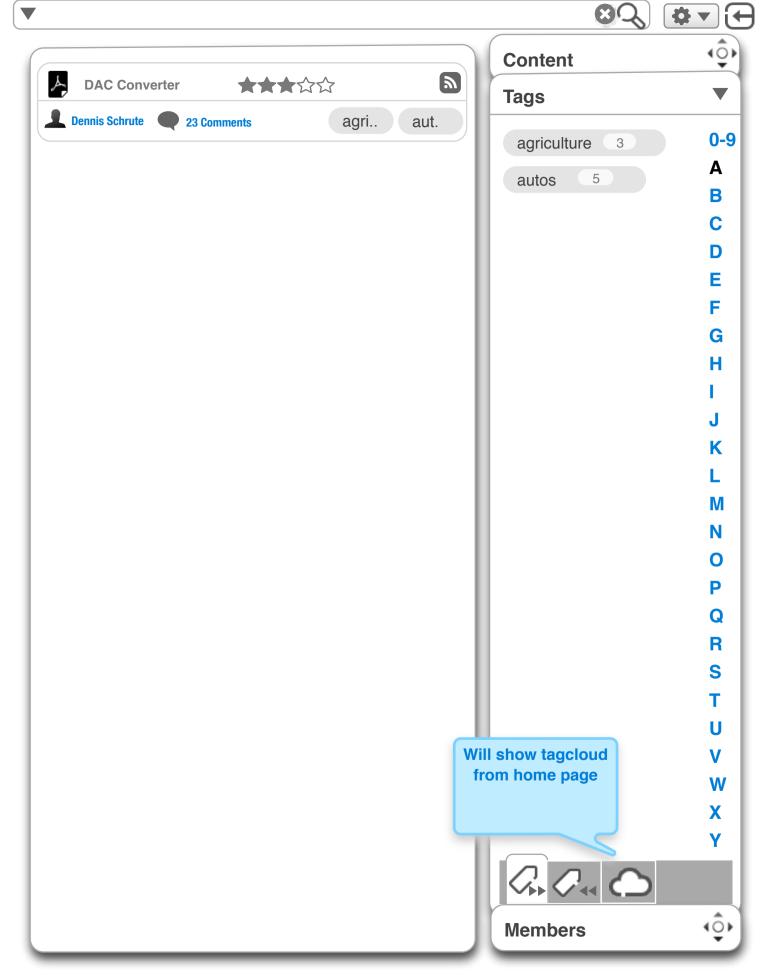


Once hidden, should show a small icon, when clicked, it will slide back

Shows sub boxes. Can have any controls in



















## 







**30 Content Types** 



3 Programs

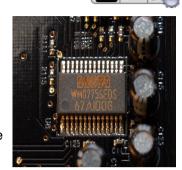


5 Contributors

## Summary

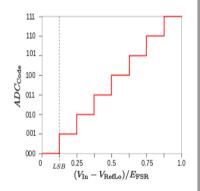
Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean.

A small river named Duden flows by their place and supplies it with the necessary regelialia. It is a paradisematic country, in which roasted parts of sentences fly into your mouth.

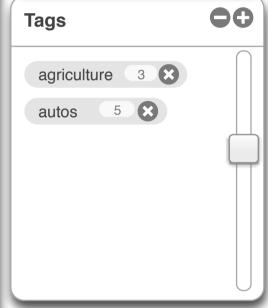


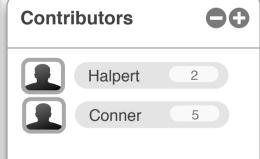
## Concepts

The resolution of the converter indicates the number of discrete values it can produce over the range of analog values. The values are usually stored electronically inbinary form, so the resolution is usually expressed in bits. In consequence, the number of discrete values available, or "levels", is a power of two. For example, an ADC with a resolution of 8 bits can encode an analog input to one in 256 different levels, since  $2^8 = 256$ . The values can represent the ranges from 0 to 255 (i.e. unsigned integer) or from -128 to 127 (i.e. signed integer), depending on the application.









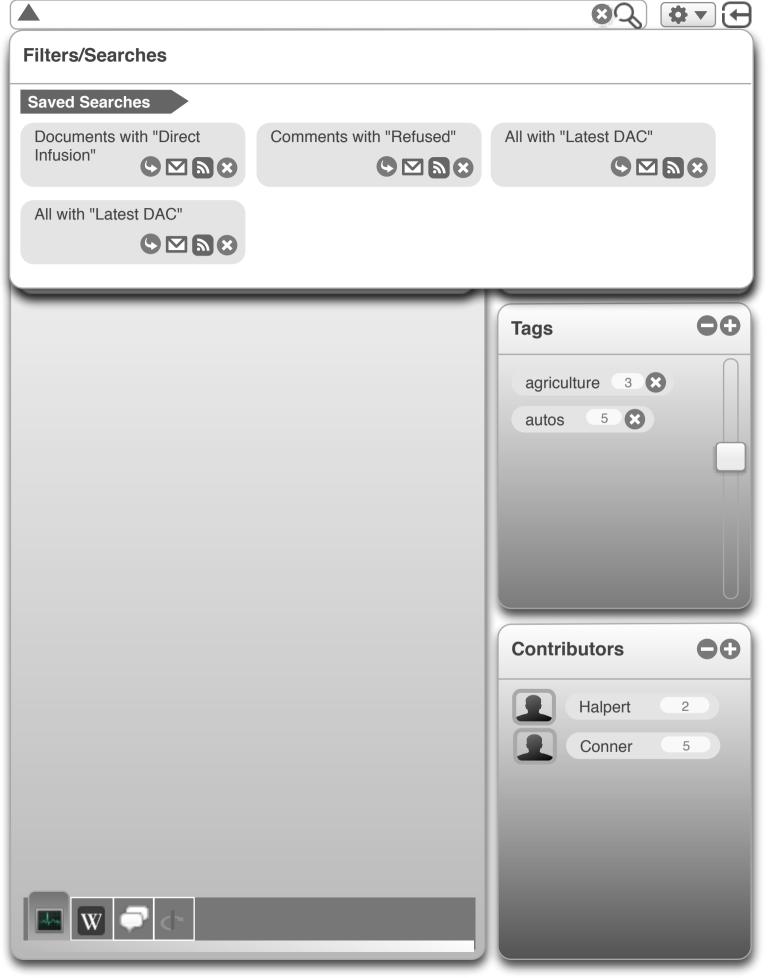


























23 Comments



Dennis Schrute

## **Preface**



The personal computer brought in a whole new era of electronic sophistication. With it, we have immense amounts of digital computing power located right at our desk.

Computers work well when they are connected to each other, and digital data can be transferred quite reliably from machine to machine.

However, the minute you wish to connect a digital computer to some "real world" device (such as a wind speed indicator or fuel level sensor) you need to design a circuit that interfaces an analog device to the digital computer. In many cases, this involves the conversion from an analog voltage to a digital representation of that voltage.

This set of Stamps in Class experiments will explore many of the basic principles of interfacing analog devices to digital microcontrollers. Many times this involves the use of easy-to-use commands built right into the BASIC Stamp, and at other times requires the use of a an "analog to digital converter".

Why should we be interested in converting from analog to digital? Many different aspects of our lives are dependent upon this conversion process. Some are not too critical to our survival like compact disc players, telephone systems, and music. Others, however, might be critical. Medical equipment and sensors often require analog to digital and digital to analog conversion.









