

When putting together a proper Digital Physical system, one of the first things that need to be considered is the need or purpose that it is fulfilling. What kind of space shall it occupy? Who will be involved and affected from using it? How can you make the device approachable and easy to use for all ranges of experience? One may have one of the best functioning devices available, but without a proper usable interface, the point of its creation becomes moot.

The physical design of the product is just as much important to the device and the internal software and coding. Some groups of people would much rather have a more subtle, subdued appearance to the device, one that is able to transmit its data and information discreetly, most likely through some ambient form. Other devices call for more detailed information to be displayed, but with proper presentation and layout, it can present itself just as discreetly as the other products.

Continuing the discussion of ambient systems, it must be realized that there are very harsh limitations to a system that can only display information through limited channels. For example, a device that shares information about the weather through traditional means can appear to be [rather complicated and confusing](#), despite it showing all of the relevant information about the weather. But a simpler device, for example the soft glowing ball that we were shown in class through one of the presentations, was able to give basic weather forecasts through its changing glowing center. In essence, it was displaying the same information that the more complex meters were, but its form and presentation was packaged in a much more approachable format. The simplicity would allow someone, who perhaps doesn't have the experience or knowledge to interpret the other device's information, to be able to quickly and easily read and interpret the simplified data, perhaps informing him that the day will be cold, there might be rain, on a chance of light snowfall during the day.

Aside from the display function of the device, the form should get just as much attention, of not more. While there are some that may prefer a more harsh, technical presentation to their items, the majority of people would have an easier time living with a device that melded and blended into their everyday routines and habits, going nearly unnoticed.

The [ambient ball](#) becomes another great example of this point. The form is a near perfect sphere, save for a flattened surface at the bottom of the device to keep it standing. Whether it is placed on a nightstand in the bedroom, an end table in the hallway, or a counter in the kitchen, the basic and simple form and appearance allow it to sit properly, whether it be amongst an array of other objects or standing alone.

Those things were considered for our final group project. The goal of the project was to create a system that gave a car more of a personality by allowing it to create a simple Facebook page for itself, complete with the ability for it to upload data and create it's own content. By tracing your location and identifying a driver's habits, it can quickly find patterns about your route to work, unique spots that you might frequent, and special, out of the way spots that you end up going to. All of the digital information is displayed on the Facebook page, which already has a tried and proven presentation method.

The actual physical device received much consideration, however. We were aware that the device has to be small and discreet enough to not be obstructive or distracting in any way to the driver, but still large enough to be relatively useful and approachable. The basic unit contains a screen with its own user interface, and the same considerations have to be present there, as well. Large, simple buttons took you to specific screens that only displayed the vital information and nothing more; nothing of excess. All of the screens were to be easily navigated with simple touch commands that people would be familiar with on their other devices. There was no need to try and create something new, when existing approaches would have more than sufficed for the required task.

The unit itself had future considerations as well. The first device will be a dash mounted solution, much to the same affect that a current portable GPS has. Given that the vast majority of cars yet have a proper interactive computer system, this was the best approach. We were also aware that in time, more and more cars will have a dash mounted display of some kind, so we had planned for the product to evolve.

In time, cars will have a more unified and proprietary display, so the project would evolve from a physical until, down to mere software, fitting to the screen of the car and completely eliminating the need for the physical device. The consumer would have much more comfort using a program that is already built into their car, rather than having to deal with a device mounted on the dash.

Keeping in consideration all of what we learned on how to build a proper Digital Physical system, from the attention to form, the importance of function, expandability, adaptability, and approachability, we were able to get the project together for the DC Showcase, and it was there that we introduced [Auto's Life](#).