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Liquid Galaxy Use Case For Engineering

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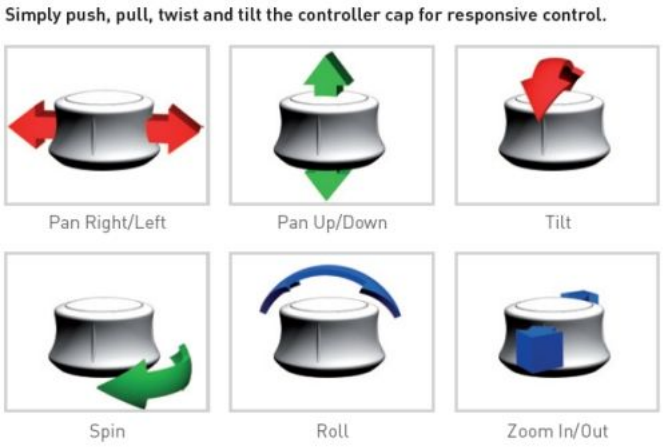
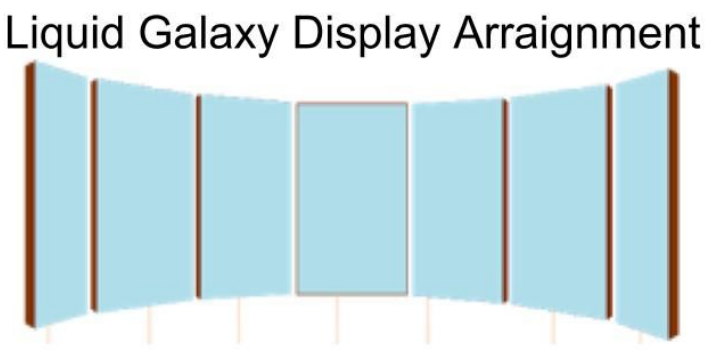
In today's world, we rely on Engineers to be the 'design' the world. Engineers are the mechanical masterminds. They are similar to 'archetects' both have to plan and design, the object they are working on. However, the engineer has to actually build it. There many types of Engineers - Electrical Engineers, Mechanical Engineers, Civil Engineering, Environmental Engineering, Geotechnical Engineering, Architectural Engineering and many more. Mechanical Engineers will be the focus of this piece, the reason behind this is that Mechanical Engineering is one of the oldest and broadest of the engineering disciplines. Mechanical Engineering is applies engineering, physics, and materials science principles to design, analyze, manufacture, and maintain mechanical systems. They use mechanical engineers use tools such as computer-aided design (CAD). Their job, is extremely hard and sometimes tedious, as they have to make sure everything, is perfectly measured - the slightest of differences will make a great difference. With Liquid Galaxy, their job can become a lot less tedious and will be a lot easier for the engineer. Liquid Galaxy, in plane, is a virtual like experience. To do this, it combines high-definition displays(as seen in the image below) and to the viewer, Liquid Galaxy spans across all the screens, curves around to fill the user's peripheral vision. They use a multi-axis Space Navigator(as seen in the image above), which





in essence is a 3D mouse, which allows the user to turn, push and pull the button. Liquid Galaxy will help Mechanical Engineers learn what is needed to become a Mechanical Engineer and will help current Mechanical Engineers design a working model.

Like many other occupations, to become an Engineer takes years of hard work and determination. Mechanical engineers typically need a bachelor's degree in mechanical engineering or mechanical engineering technology. The mathematics needed is calculus and linear algebra, the science they need to know is physics and chemistry. They need to know a lot, the entire list can be found on my site: https://www.myworldrules.com/EducationGALAXY.html. To sum up, their is a lot needed to learn. It is understandable why they need to know so much, they need be able to create complex functional prototypes, which can do something new. They have to understand and change tiny parts, they need to be extremely precise, if not the entire thing could break. To do this they need to be able to operate complex tools, like Scanning Microscopes and Vibration Isolators, soldering iron and others. Currently, teachers teach these concepts by using big bulky books, filled with lectures and few pictures. However this can't show the entire picture. With Liquid Galaxy, pictures and diagrams could come to life, the student could interact with it - moving it around. You could see 'science' - students could learn about science by doing virtual like labs, they could view up close expensive tools, and understand how it works. This technology could revolutionize education.

Even though learning, is extremely stressful, it does not even come close to the stress of jobs. When learning, you learn about hypothetical scenarios while when you are actually working, it's more hands-on and less hypothetical. Mechanical engineers swim in uncharted waters, with sometimes unpredictable results. Their work is extremely hard, they use many tools to aid them, like Coordinate Measuring Machine, Strain Gages, Acceleration and Torque

Measuring Devices, Scanning Microscopes and Vibration Isolators and many others. The tools just mentioned relying on computers to display the information. However, typical computers are not too sophisticated. However with Liquid Galaxy, that all could change. When this information is transferred into Liquid Galaxy, it could display rich sharp images with extreme detail, in addition, the engineer will have tons of workroom, to research. A more precise example is that one of the tools mentioned above - Scanning Microscope, will allow the user to see immensely small details. These can be displayed in Liquid Galaxy, in extreme detail. Then with the multi-axis Space Navigator (seen in the image in page one) can be used to move around the frame, allowing the user to see more sharp are clear frames. This will allow the engineer more precision as they can more easily see the object.

Overall, with Liquid Galaxy Mechanical Engineers can have a better less stressful work day. Liquid Galaxy will help Mechanical Engineers learn what is needed to become a Mechanical Engineer and will help current Mechanical Engineers design a working model.