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QuakeMap

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QuakeMap

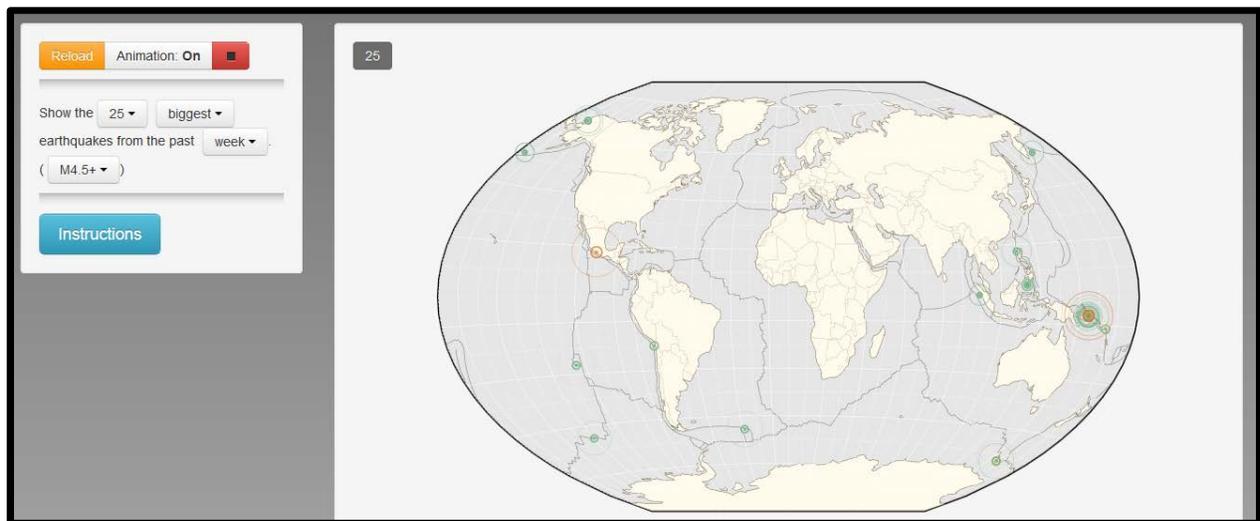
An Engaged Learning Project by Richard Braxton, SMU '14

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[QuakeMap](#) is a web application that was built to allow people to view earthquakes around the world as they occur. This project was fueled by a desire to spread knowledge about geology/plate tectonics and also to produce something useable by the average person, or someone that is not knowledgeable about the intricacies of our planet.

Earthquake tracking applications are nothing new, but the majority of them don't factor in the depth of an earthquake. This is extremely important when considering the effect an earthquake will have on a region – earthquakes that occur at great depths need to pass through large amounts of material before their shock waves reach the surface. Shallow earthquakes pass through less ground material, and thus present more of a risk. Considering this, one can see that both magnitude and depth are necessary to judging an earthquake's effect on our world.



To convey all of this information easily, QuakeMap consists of two small windows – one for controls, and one with a map. The controls let a person choose how many earthquakes they'd like to search for, and if they want them sorted by magnitude or date of occurrence. They can also select to only search for earthquakes of a certain size, and within a certain frame.

When initiating their search, the map displays the earthquakes requested. Each one is shown by an animated circle that radiates outwards. The color of the

circle is based on the magnitude, and the speed of the animation is based on the depth – i.e., slow moving circles occur deep in the ground, and fast ones occur near the surface. By clicking on a circle, it will display the details of that earthquake, which can be clicked to navigate to a website with more in-depth detail.

This is especially useful for people who are curious about seismic activity in certain regions, and also for people who want to monitor the aftershocks of significant earthquakes when they occur. By utilizing an interface that is simple to read and understand, QuakeMap is able to become a tool for the masses.