Final Project Write-up
myGeoFinder

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For my final project in SWDV-665 Advanced Topics in Software Development, I plan to implement "myGeoFinder", which is a "search" app to help find geocaches.

Background for those who don't know: A geocache is a cache of some kind that someone has hidden somewhere in the world. The person that hides a cache often leave something special for the first person to find the cache (could be a gift card to a nearby restaurant, money, special geocache coins or something like that). When hiding the cache, the person who hides it notes the location of the cache and will publish the longitude and latitude and most often a little description of the cache, its contents or the reason for hiding it in the first place. Other people will then try to find this cache using GPS devices to get close and then they start fine combing the area within the right coordinates. Sometimes the cache may be a large Tupperware bowl and sometimes it may be a tiny pill container or even smaller (most often a dry container if not in a dry location). When a cache is found, the finder(s) usually have the opportunity to write their name in a log inside the cache and sometimes grab some item or leave some item in

the cache. The finder must put the cache back in the same exact location and not make it obvious they were there or any more obvious to find it. Caches are ALL over the place. There are supposedly more than 3 million active geocaches in 191 different countries.

My app will help geocache finders locate geocaches by showing the mobile device's longitude and latitude as well as a compass on the user's screen. As the mobile device travel in some direction, the longitude and latitude will update. I also plan on the app to have the possibility for the user to take pictures of the caches they find and store these in a database along with descriptions of who they were with, the date, what they found, the conditions, etc. – whatever the user would like to write.

The phone's geolocation and compass as well as the camera are all native mobile device features where I can utilize Cordova to implement the features cross platform.