

## **AUTHORS/RESEARCHERS:**

Nana Yaw Asabere<sup>1</sup>, Gare Lawson<sup>1,2</sup>, Godwin Badu-Marfo<sup>2</sup>, Lydia Kwofie<sup>1</sup>, Daniel Opoku Mensah<sup>2</sup> and Reginald Lartey<sup>1</sup>

<sup>1</sup> Department of Computer Science, Faculty of Applied Sciences, Accra Technical University (ATU), Accra, Ghana.

<sup>2</sup> DexAfrica Limited, Accra, Ghana.

**Correspondence E-Mail:** [yawasabere2005@yahoo.com](mailto:yawasabere2005@yahoo.com); [yawasbere2011@gmail.com](mailto:yawasbere2011@gmail.com)

**RESEARCH ARTICLE:** Classification of Public Health Centres in Accra Through a Web-Based Portal Integrated with Geographical Information System (GIS)

**DATASET: Pictorial-Representation-of-the-Variou-Components-of-the-GEOHEALTH-System**

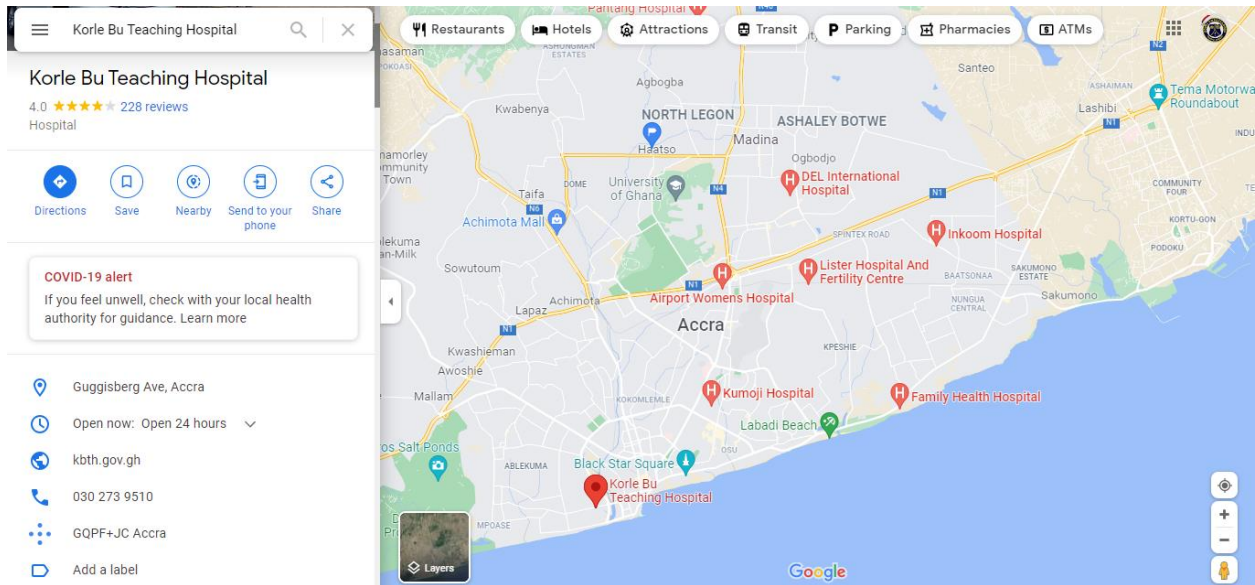
We utilized and interconnected various components of data set and feature classes namely: GeohealthOnline.csv, GeoHealthOnline.mxd, GeoHealth.diagram, GeohealthOnline.xml, which is available in Google Drive at:

[https://drive.google.com/drive/folders/1iC17q\\_tbGlvKzKZ9nMVDeoO2RVSDGipu?usp=sharing](https://drive.google.com/drive/folders/1iC17q_tbGlvKzKZ9nMVDeoO2RVSDGipu?usp=sharing)

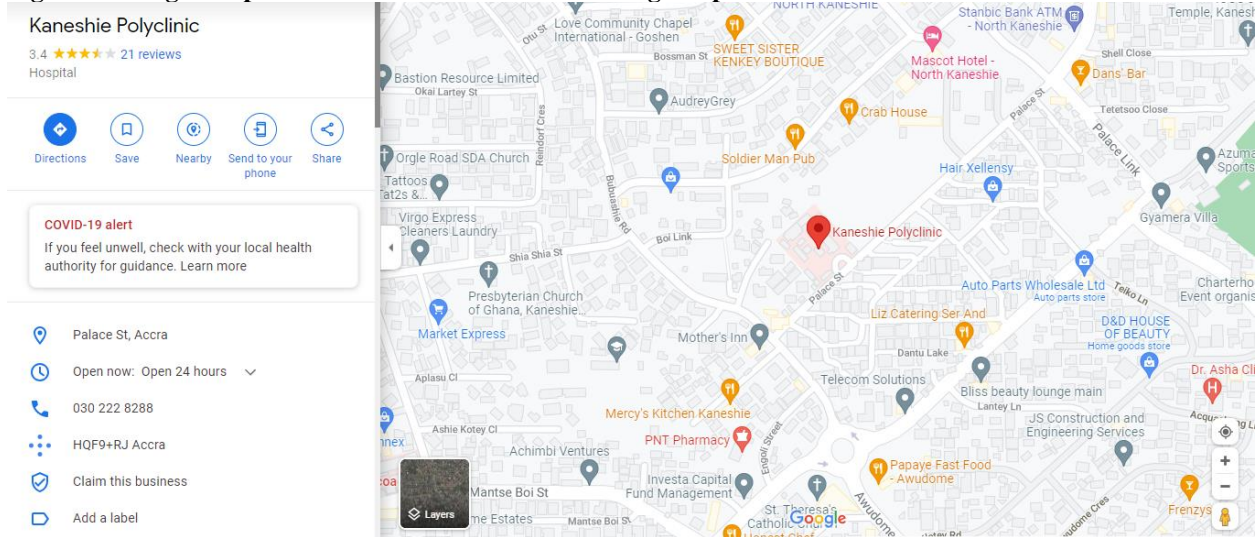
and the

Responses from respondents in Google form available at <https://forms.gle/44rDwLGu4L5xuzwB8>

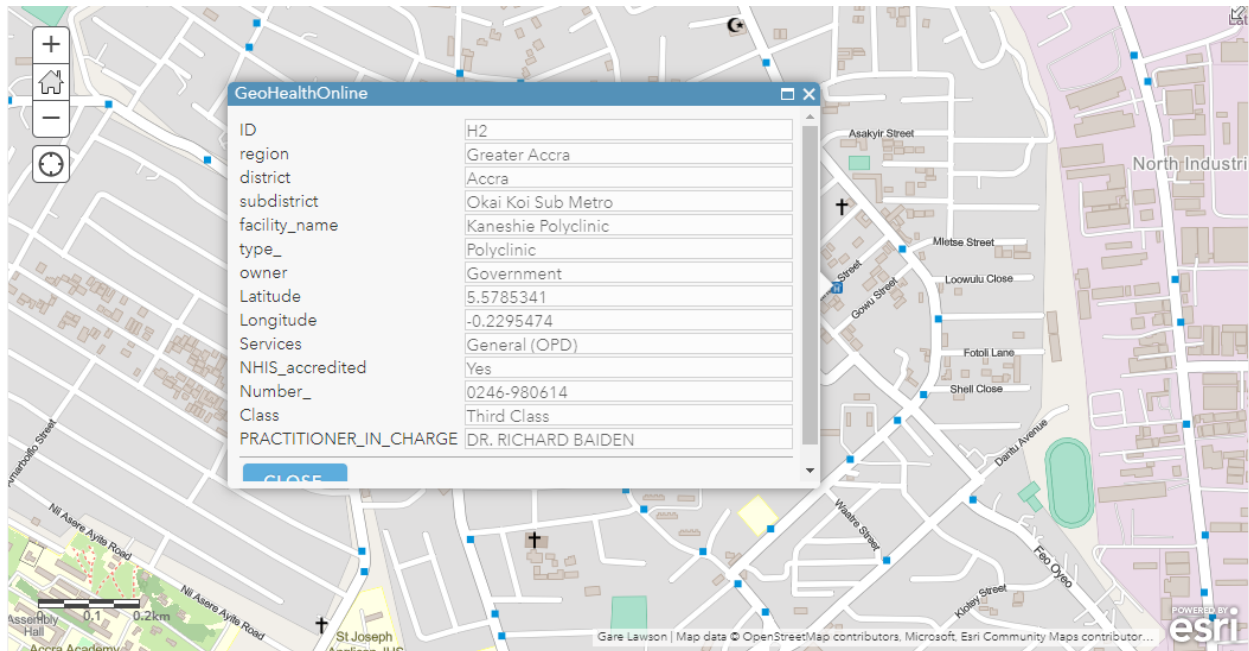
In this section of the study some noteworthy points of importance which tends to differentiate the Geohealth system from the traditional google map of accessing information on public health centers in Accra. The first is that the method of data gathering for health centers employing the Geohealth system differs from that of the Google Maps data collecting procedure. A complicated link between the various entities, data collection, classification, data processing technique, and data components Second, there are both direct and indirect variables that influence the data gathered by different systems. The factors affecting direct providers are shown in the figures below.



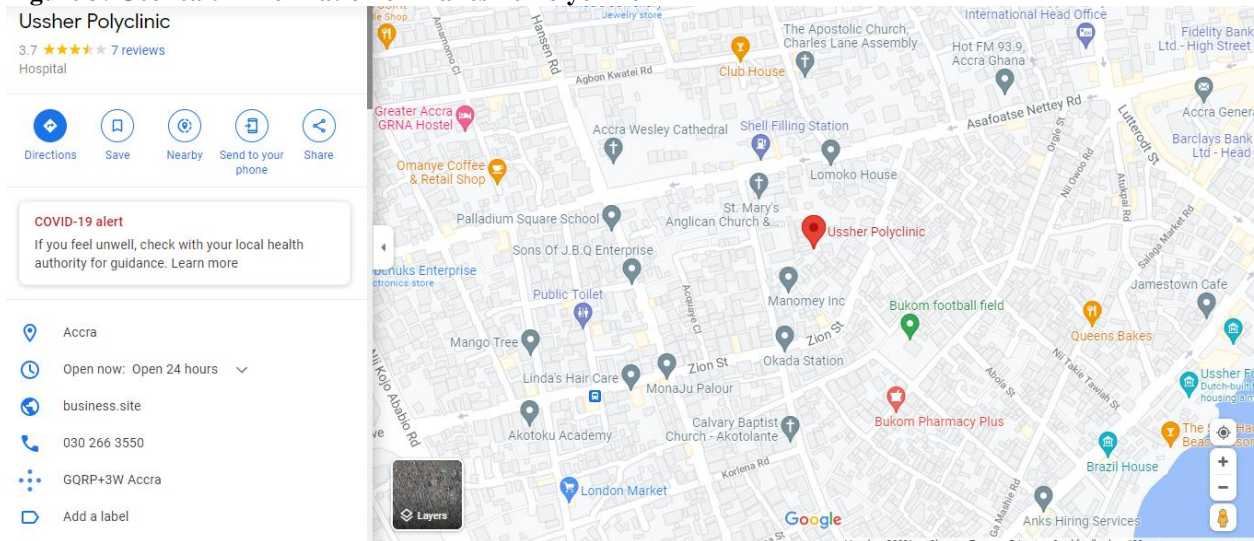
**Figure 1: Google Map information on Korle-Bu Teaching Hospital**



**Figure 2: Google map information Kaneshie Polyclinic**



**Figure 3: Geohealth information on Kaneshie Polyclinic**



**Figure 4: Google map information on Ussher Polyclinic**

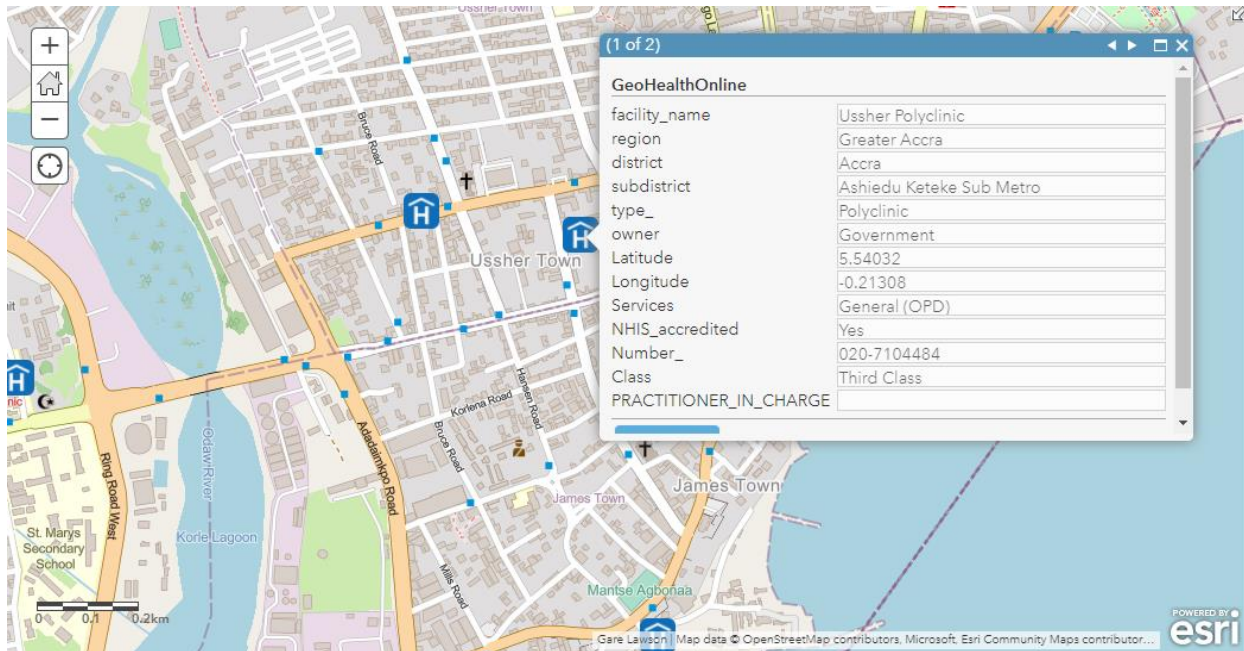


Figure 5: Geohealth Information on Ussher Polyclinic

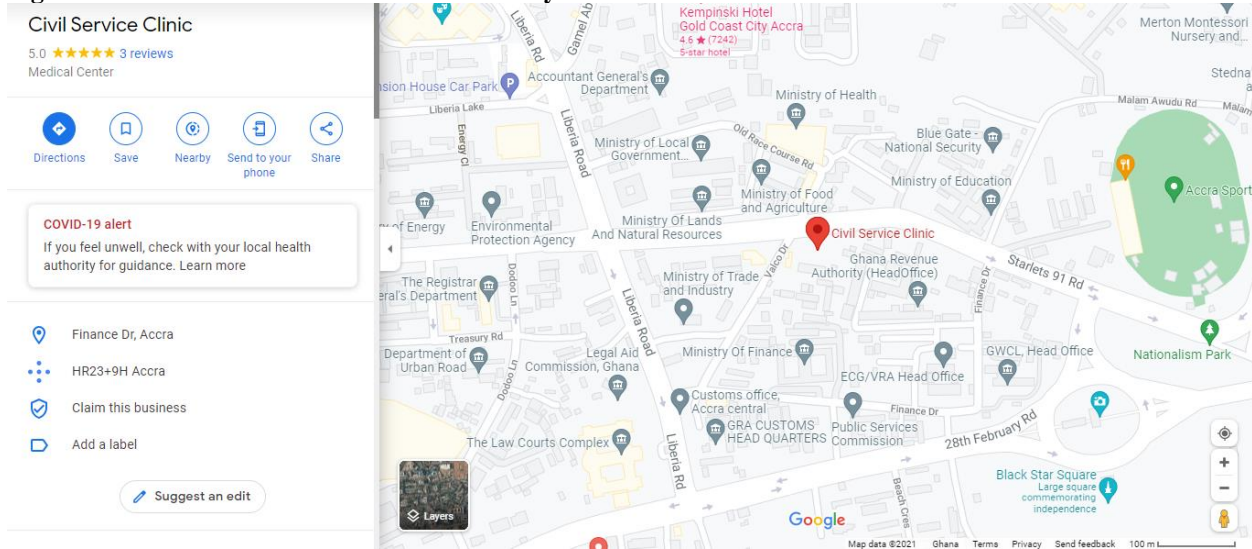
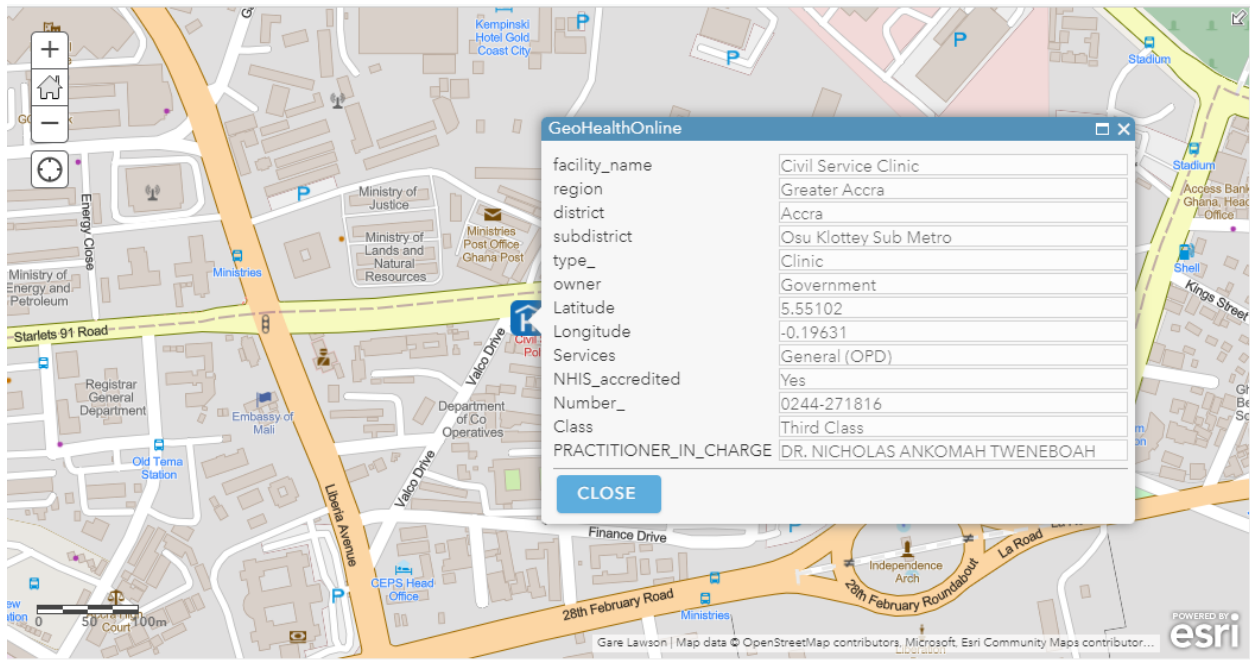
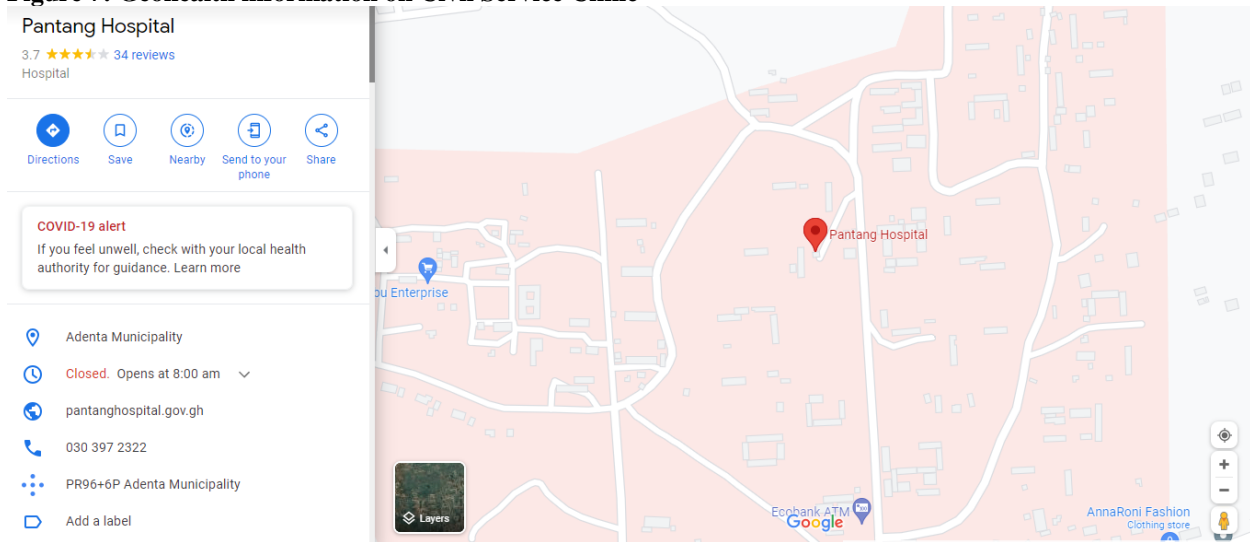


Figure 6: Google map information on Civil Service Clinic



**Figure 7: Geohealth information on Civil Service Clinic**



**Figure 8: Google Map Information on Pantang Hospital**

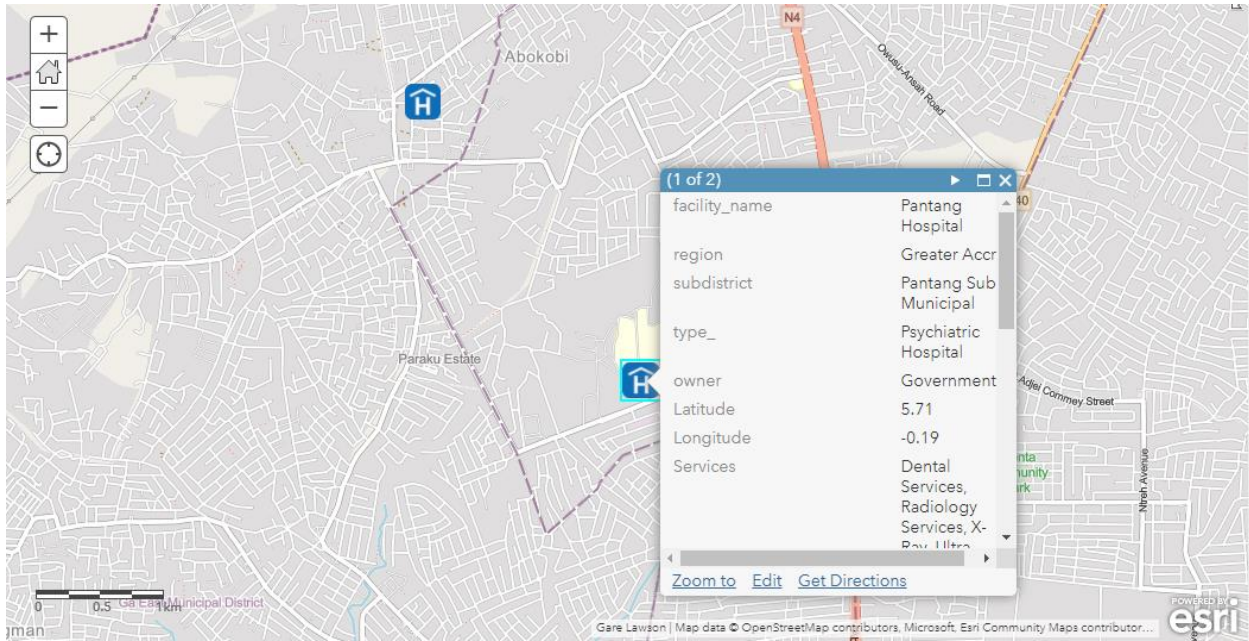


Figure 9: Geohealth Information on Pantang Hospital

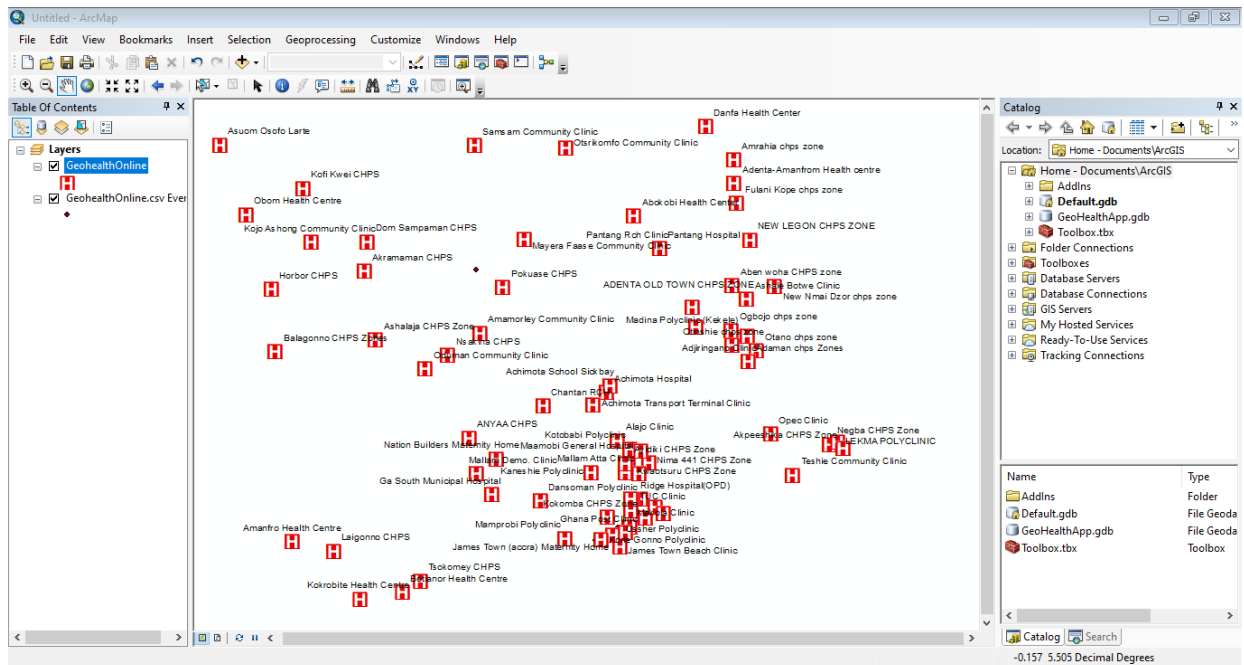
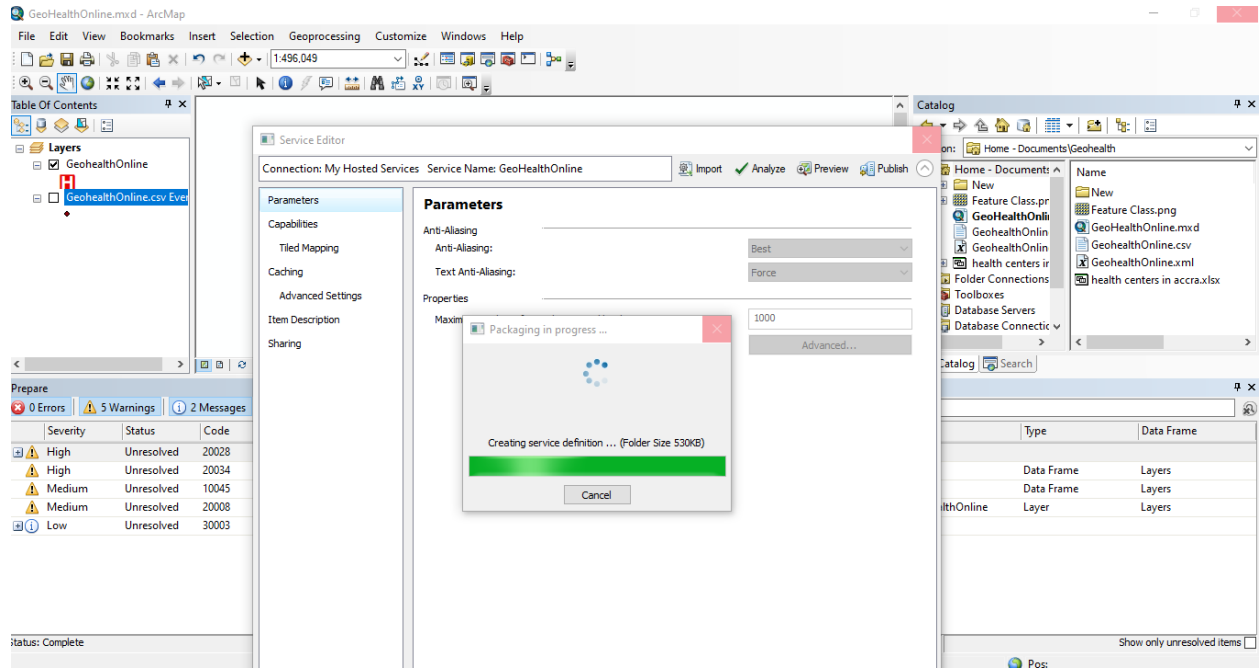


Figure 10: Feature Classes of the Health Centers imported onto ArcMap



**Figure 11: Published Service of the Health Centers onto ArcGIS Online**

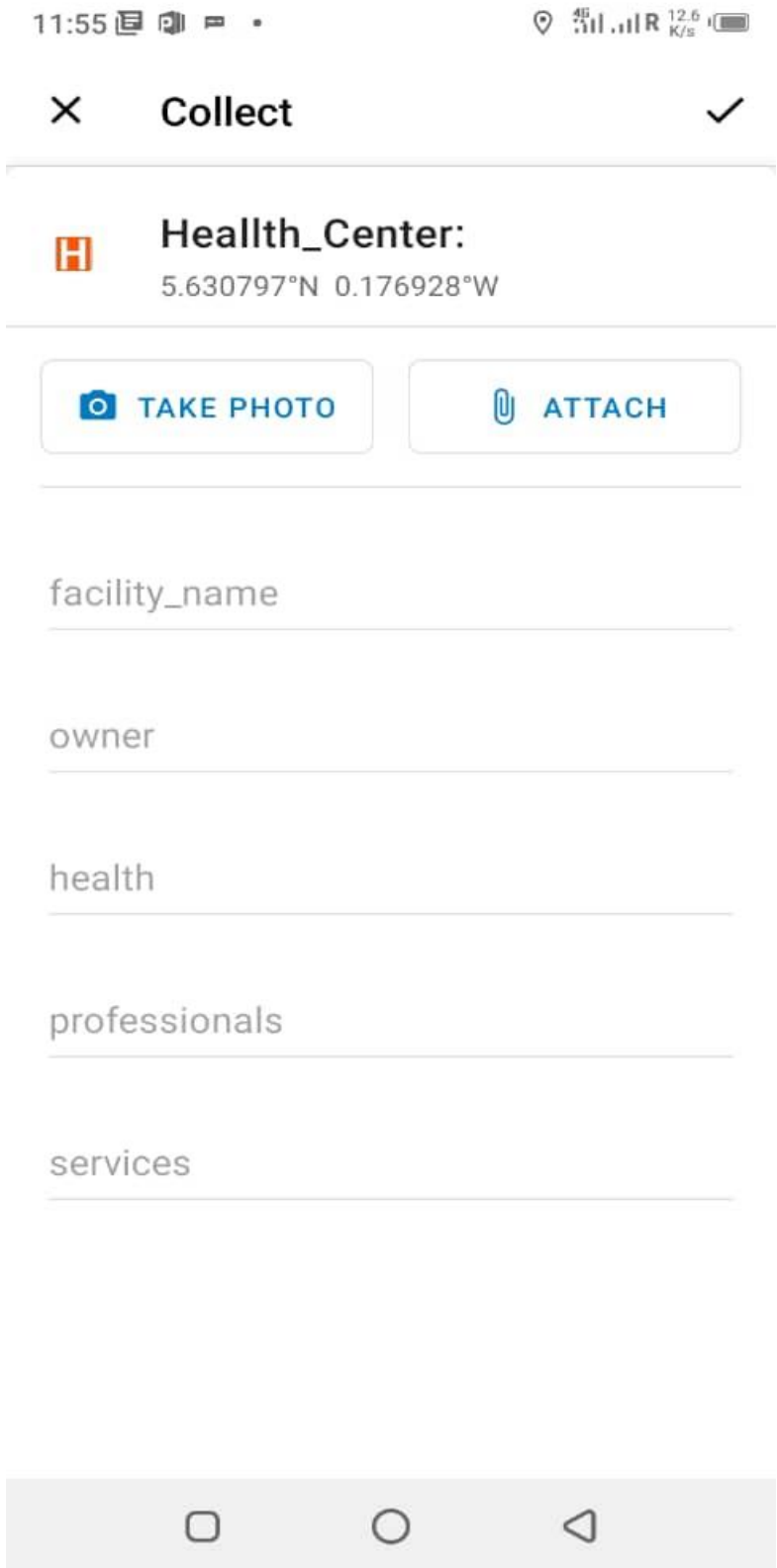


Figure 12: ArcGIS Mobile Collector App for Geohealth



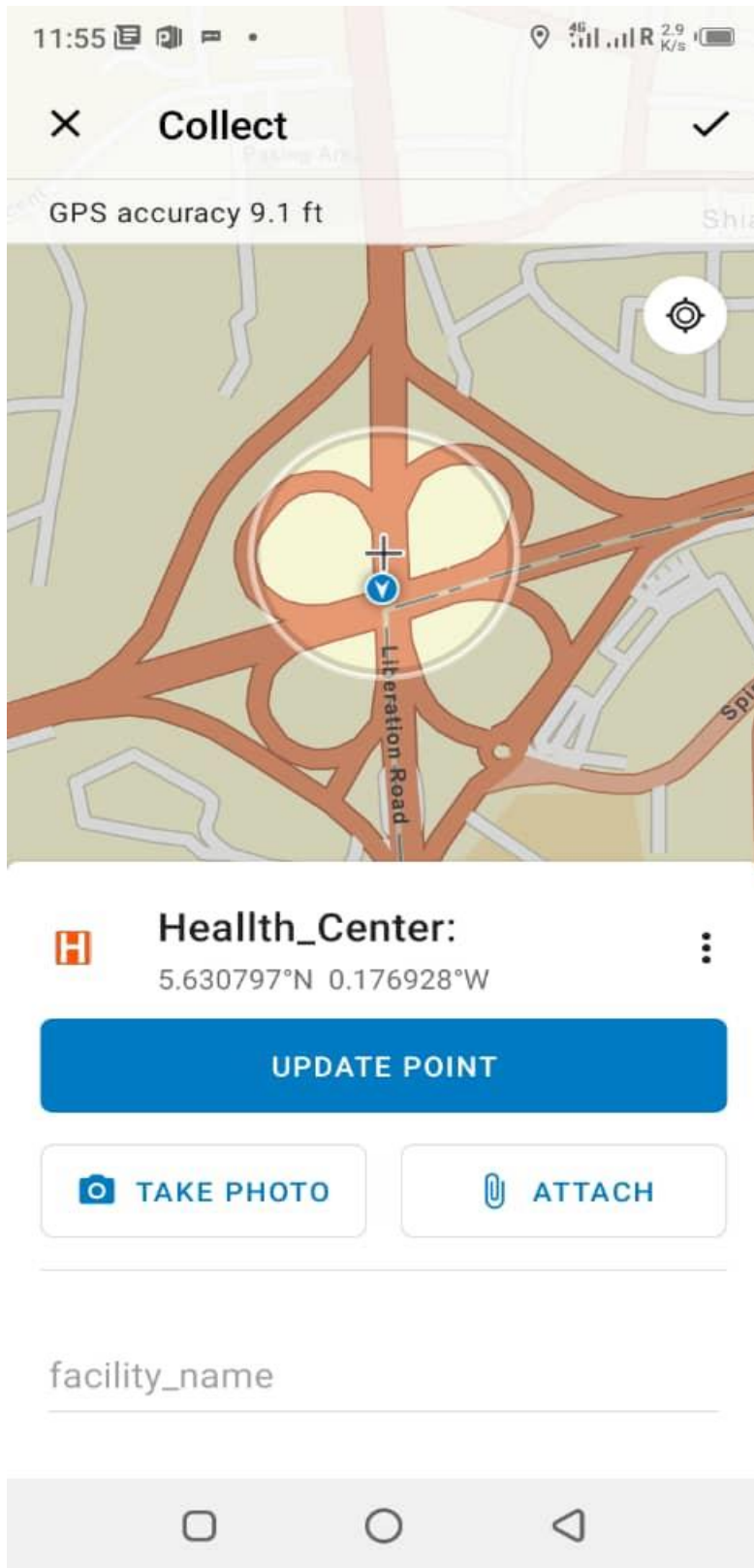


Figure 13: ArcGIS Mobile Collector App depicting how to pick Geolocation (Latitude and Longitude)

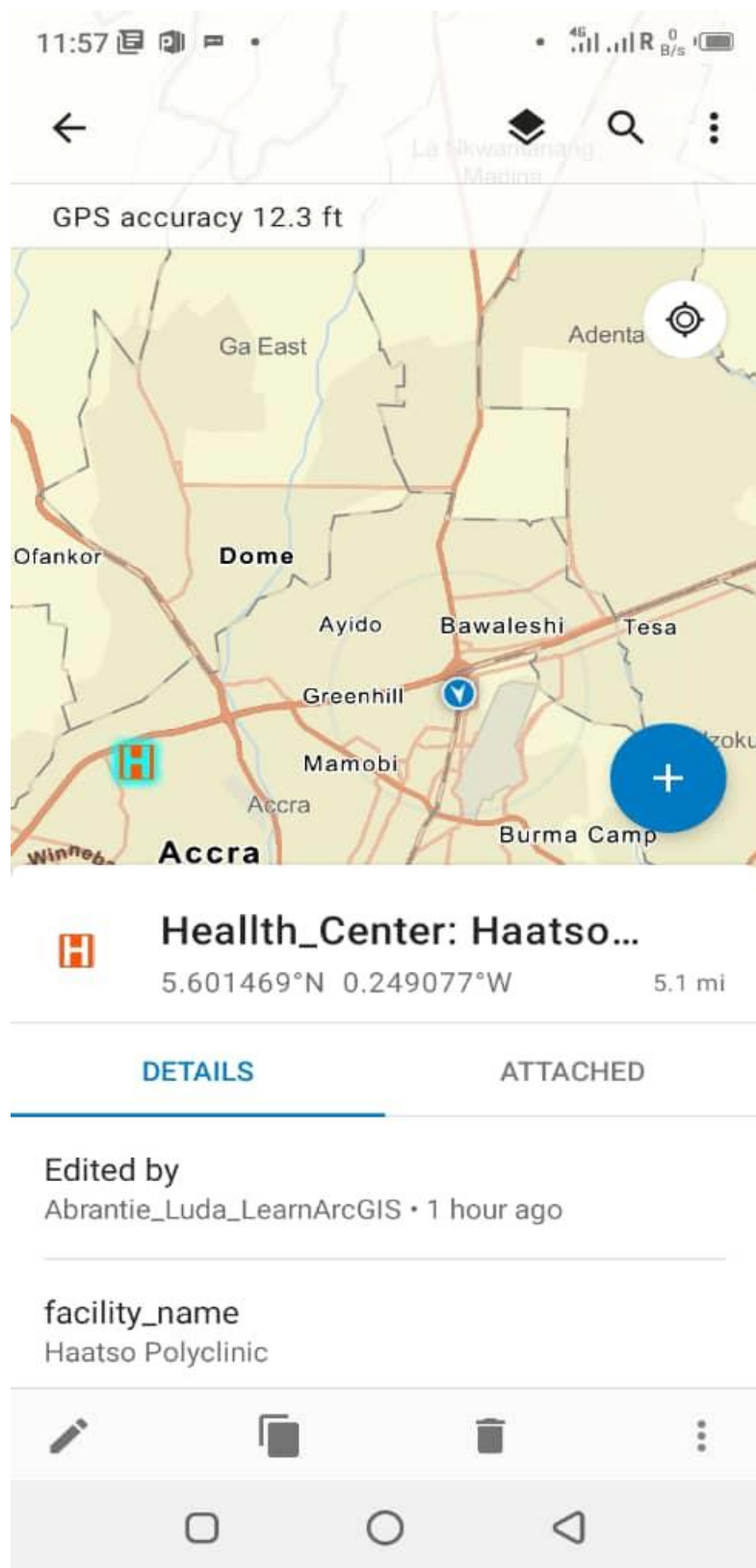


Figure 14: Sample Data of an Health Center Collected Using the ArcGIS Mobile Collector



### Health\_Center: Haatso...

5.601469°N 0.249077°W

5.1 mi

DETAILS

ATTACHED



e4c7c385-3f04...94c7a58cd.jpg

33.9 KB



Figure 15: Sample of Image of the sampled Health Center Collected

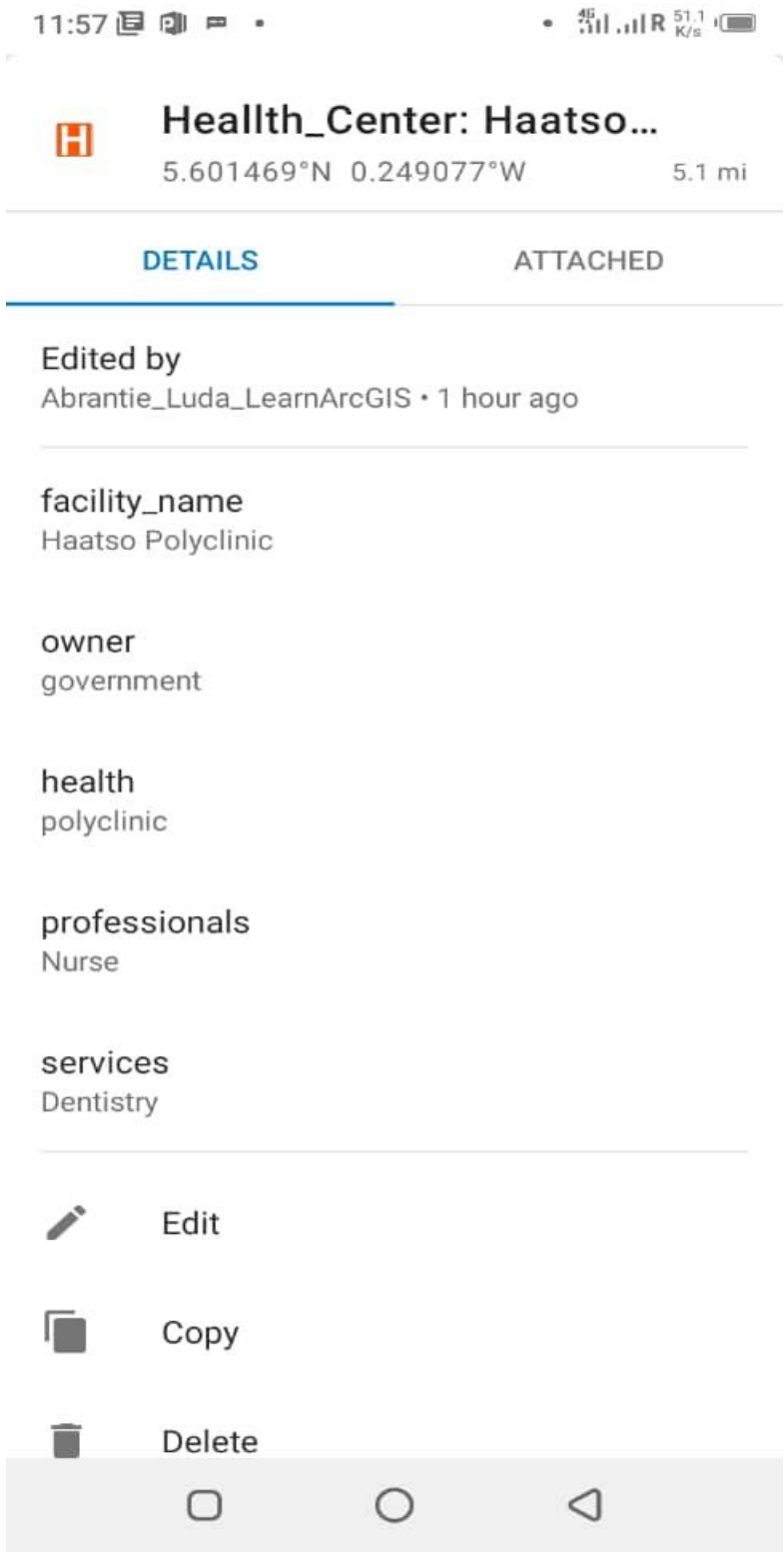


Figure 16: Visual Presentation of the Sample Data of Health Center Collected.

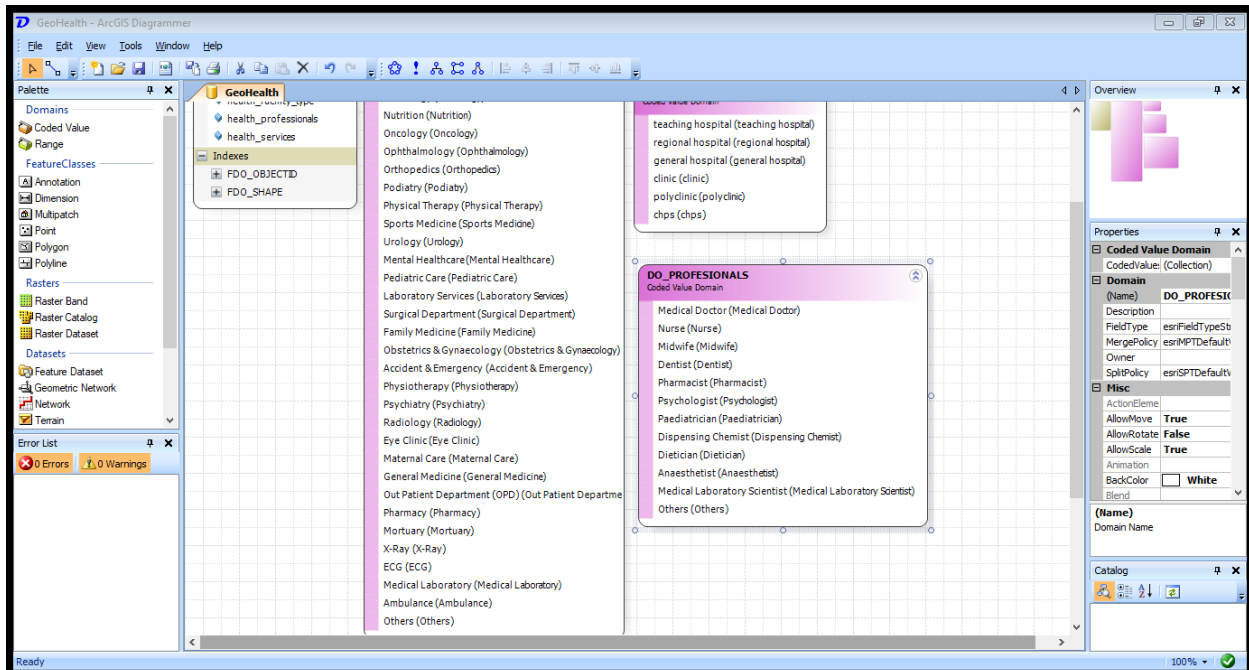


Figure 17: Geohealth ArcGIS Diagrammer XML File

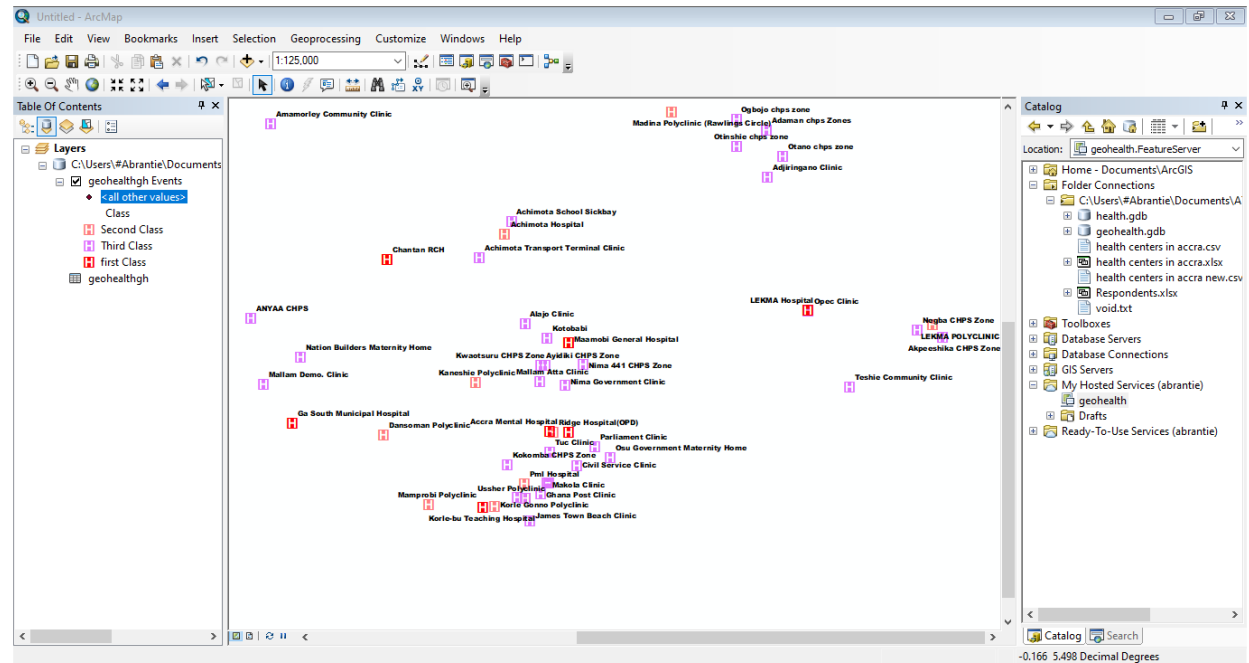
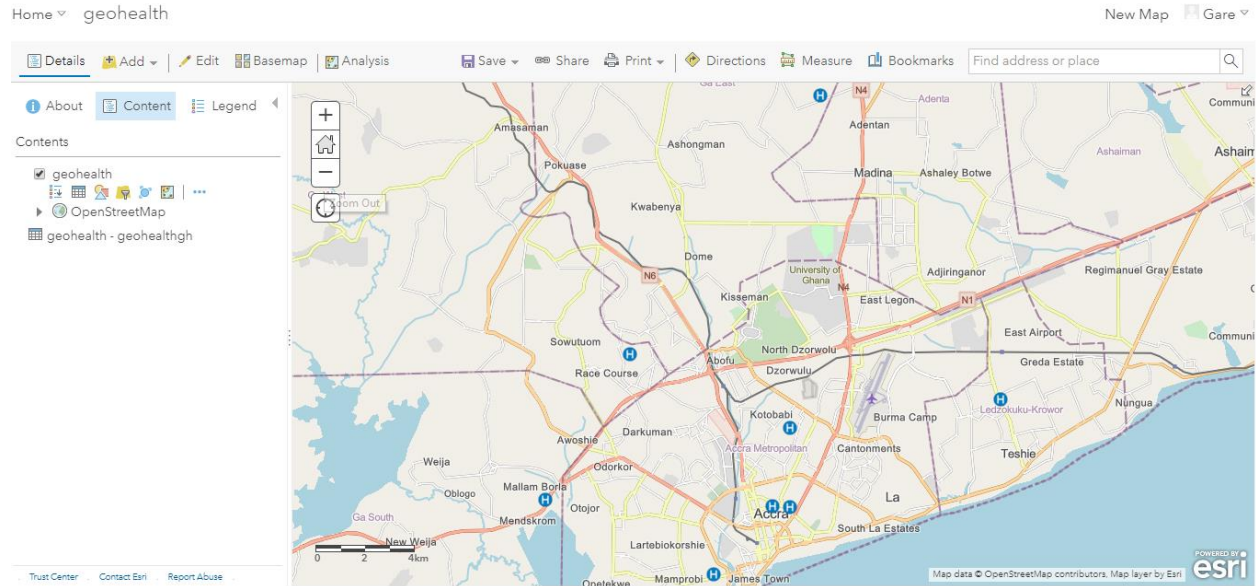
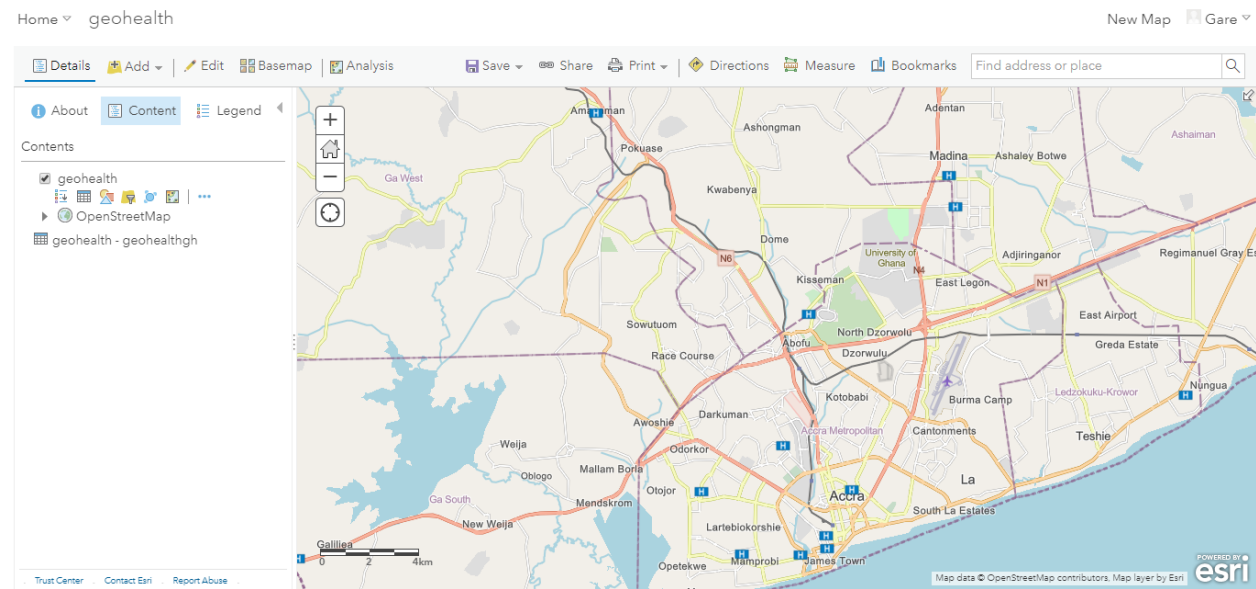


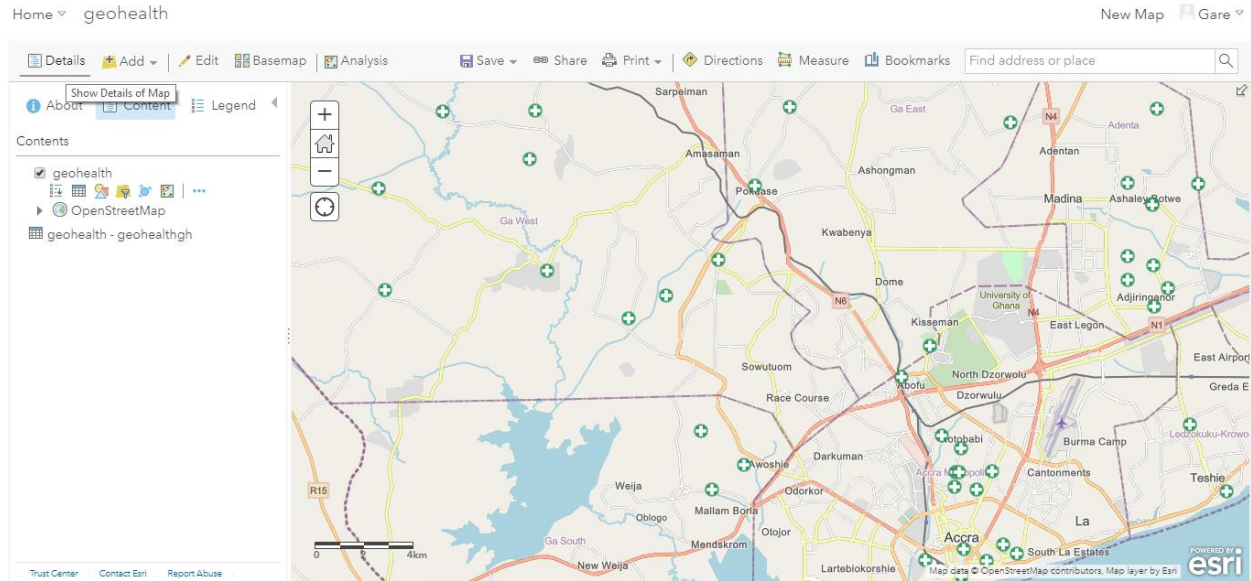
Figure 18: Geohealth File Geodatabase With all Attributes



**Figure 19: Spatial Analysis of First-Class Health Centers**



**Figure 20: Spatial Analysis of Second-Class Health Centers**



**Figure 21: Spatial Analysis of Third-Class Health Centers**

**LINKS TO ATTACHED FILES OF GEOHEALTH**

1. <https://forms.gle/44rDwLGu4L5xuzwB8>
2. [https://drive.google.com/drive/folders/1iC17q\\_tbGlvKzKZ9nMVDeoO2RVSDGipu?usp=sharing](https://drive.google.com/drive/folders/1iC17q_tbGlvKzKZ9nMVDeoO2RVSDGipu?usp=sharing)