Components of GIS: (Assignment)

1- Software: Software is the primary focus while setting up any of the systems. It relates to the processes used to define, store & manipulate the data. The software can be classified into two types, Licensed and Freeware.

→ Licensed Software → It requires heavy investments & have business subscriptions attached to it.

→ Freeware software → It is easily available on the internet marketplace with minimum or no fees.

Good software that handles a large amount of geospatial data, GUI for manipulating data & quering the env for analyzing & visualizing large data sets in a perfect fit for GIS

2- Hardware: Hardware is the second most imp part of any GIS components. It relates to device used by end user

Such as graphic devices or plotters and scanners. Data storage & manipulation is done using a range of processor. Hardware should be robust and should have the future potential to deal with heavy Software patches and updates. With the development of the internet & web based application, web servers have become part of many system's architecture.

3- Data: Geospatial data is like the blood of any GIS components. Data are basically divided into two main groups are vector and raster.
Vector data in GIS refers to discrete objects represented by points, lines and polygons. Lines are formed by connecting two or more points & polygons. Vector sources include digitized maps, features extracted from image surveys & many more. Raster data is a continous grid of cells in two dimension or the equivalent of cubic cells in three dimensions. It is the imagery files from dif camera-enabled Sources. They form like a Sheet covering dif layers that portray longitudinal, latitudinal & even topological maps.
Analysts and Database administrators work together to handle the databases and even sanitizing the irrelevant part.

People: People are an imp catalyst in doing a GIS compon- ends setup. With the help of proper management & technical expertise, all the known-unknown problem areas can be adressed. Project-Program Management is then used to understand any scope of a GIS project.

People with the right level of geology, information systems, & statics knowledge participate in the project setup's technical aspects. They also include cartographers and surveyors who create the maps & surveys the land & the geographical features. They collect, upload and data to system, manipulate the system & analyze the results.

5-Methods & Processes:
There should be a defined business process for any system to function to approximate the desired results efficiently. Orgs nowadays use various standardized process models to build a system that is still in a transition phase.

Above mentioned 5 components are the crucial ingredients to set up a GIS. As the organizations grows, the components acting as pillars for GIS also grows.