components of hadoop 2.x:

1.Resource Manager:

it is a schedular that allocates available resource in the cluster to the competing applications   
like map-reduce ,pig,hive etc.

2.Node Manager:   
it runs on each node in the cluster and takes direction from the ResourceManager and It is responsible for managing resources available on a single node.

3.ApplicationMaster:  
it is an instance of a framework-specific library, it runs a specific YARN job and is responsible for negotiating resources from the ResourceManager and also working with the NodeManager to execute and monitor Containers.

The actual data processing occurs within the Containers executed by the ApplicationMaster.