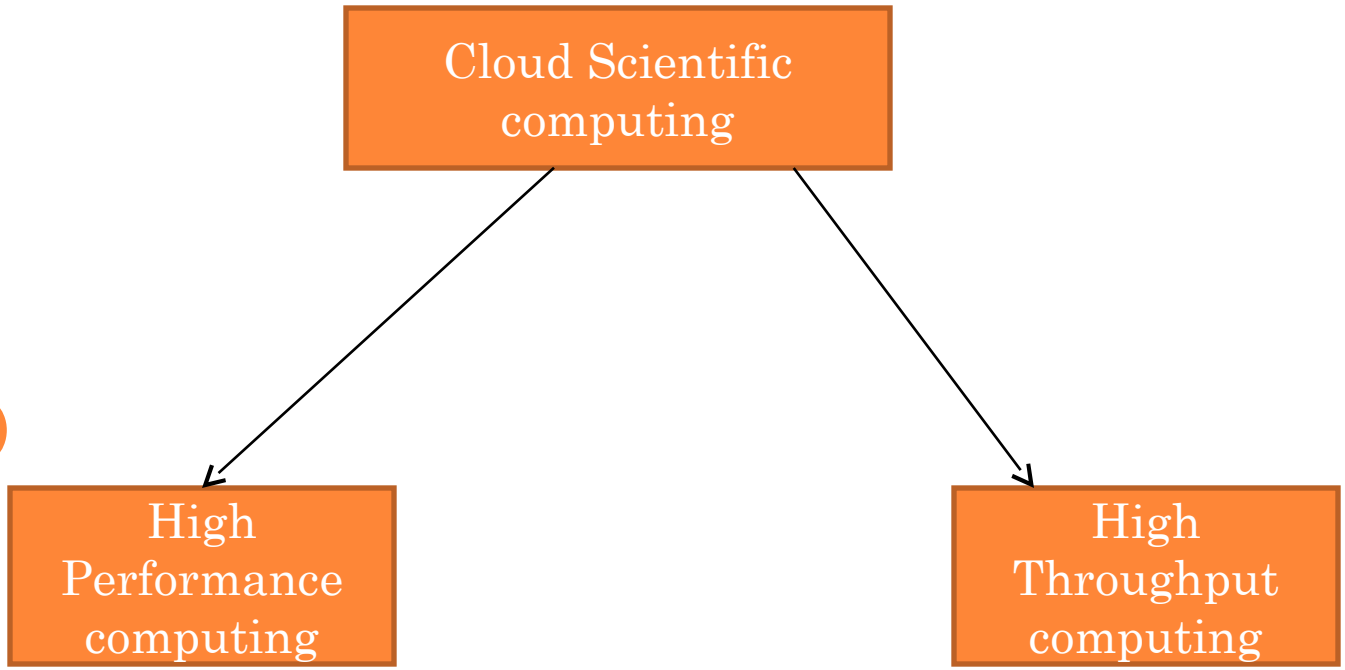
CLOUD

Scientific Applications➔

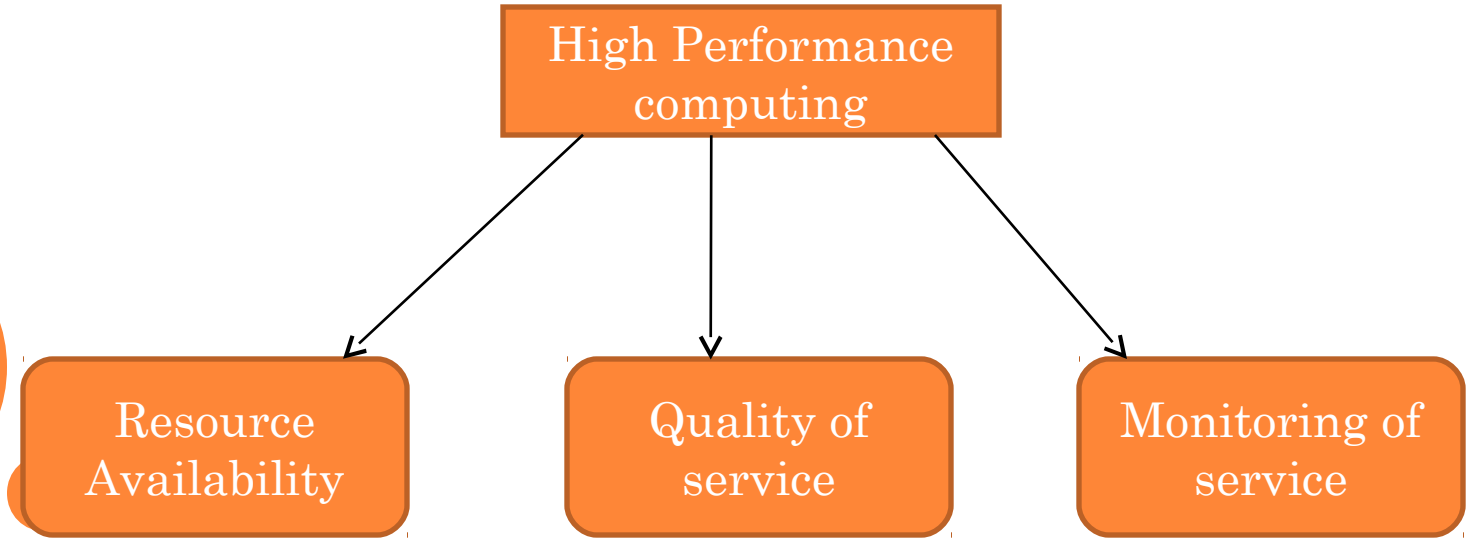
- Now the cloud computing is getting involved in the scientific applications.
- Because of this the resources and storage are got available infinitely at reasonable prices.



ECG ANALYSIS IN THE CLOUD

Scientific Applications➔

- High Performance Computing➔ Here this term represents that the computing with a high performance.
- High performance in terms of resource availability ,quality of service, monitoring of service etc.



- High Throughput Computing➔It means the users- requests will get processed within a span of time which is already decided by the cloud service providers.

ECG ANALYSIS IN THE CLOUD

- Healthcare: Ecg Analysis in cloud computing➔

- ✓ Healthcare is a field or domain or area or a region where the information technology has found many of the applications.

- ✓ These applications are getting involved to help business firms in assisting the scientists to develop solutions to prevent the diseases.

- ✓ Due to the invention of internet or we can say due to the availability of internet cloud computing has came into the picture and represent itself as a attractive option for developing health monitoring system.

- ✓ Example of health monitoring system is ECG machine which is used to measure the Heart-Beat of Human body and the output is get printed on the graph paper.

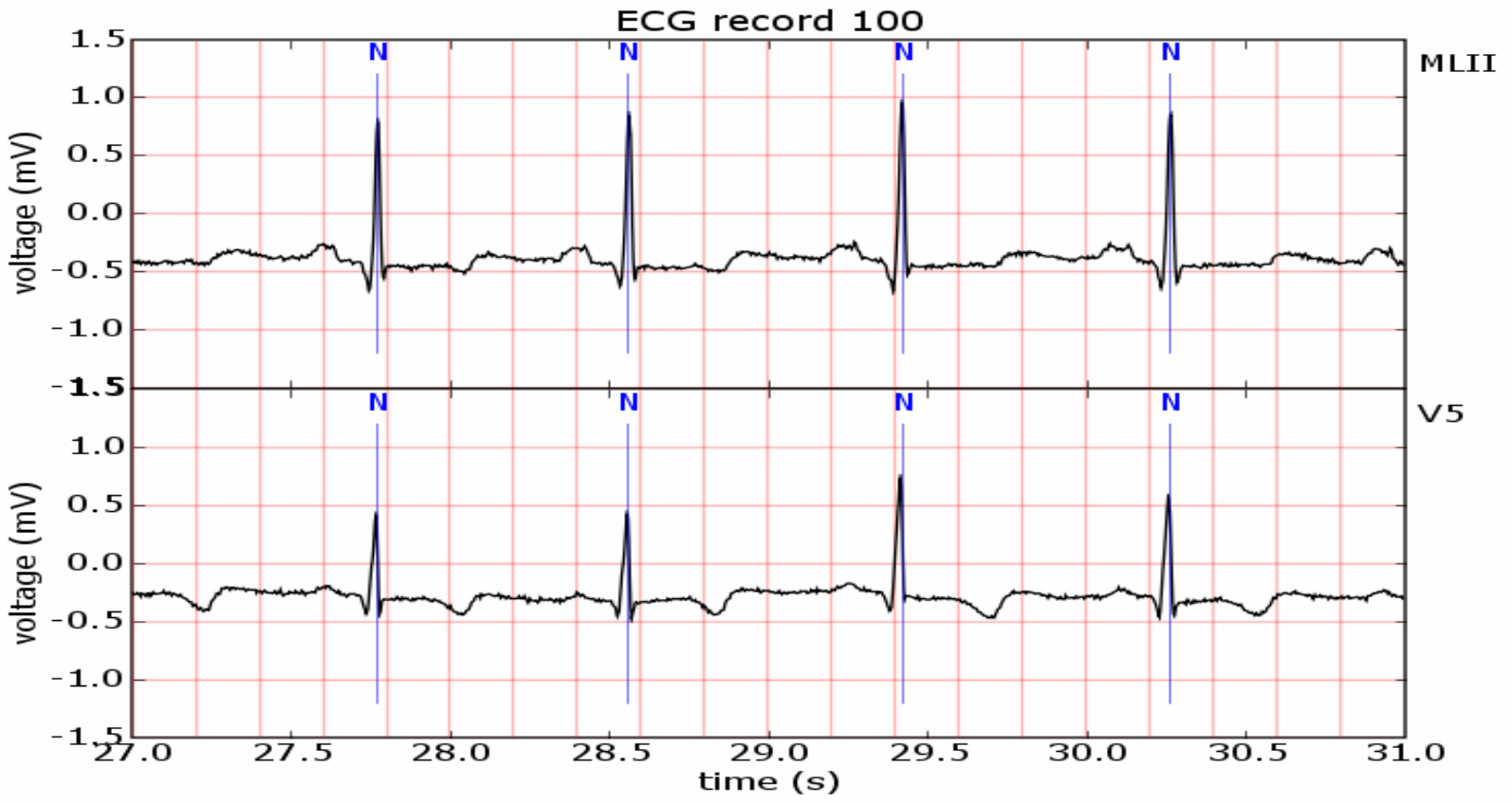
- ✓ The full form of ECG is ElectroCardiogram.

ECG ANALYSIS IN THE CLOUD

Healthcare: Ecg Analysis in cloud computing➔

✓ECG is the electrical activity of the heart cardium.

✓Due to this activity an waveform is produced a specific waveform that is repeated overtime and that represents the heartbeat.



ECG ANALYSIS IN THE CLOUD

- The analysis of the shape is used to identify arrhythmias, and it is the most common way of detecting the heart diseases.(see the fig of previous slide).

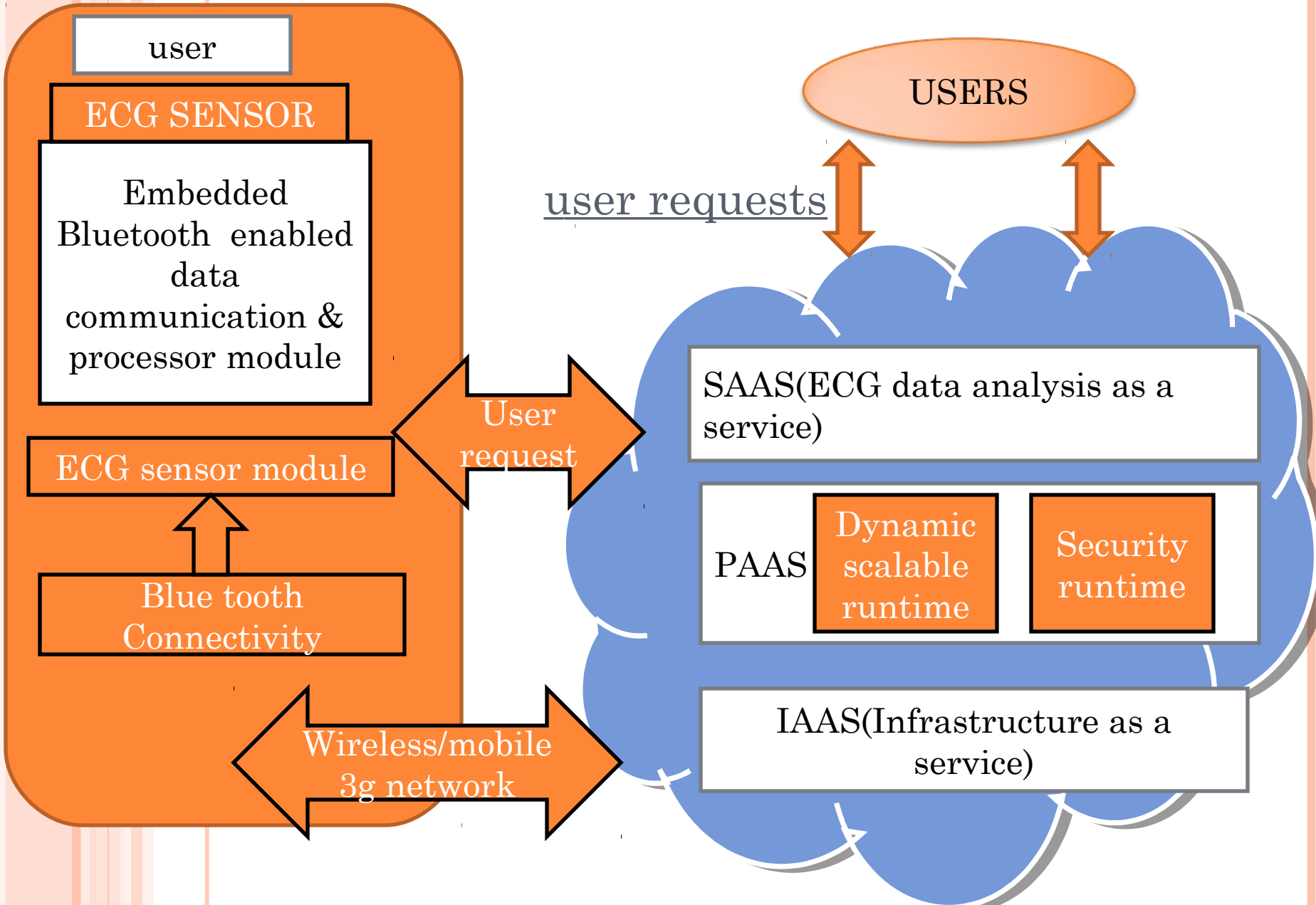
- Here the meaning of arrhythmias means “not having a steady rhythm”, “an arrhythmic heartbeat” means a heart beat which is not in it’s rhythm.

- Now we will let this concept enter into the cloud computing.

ECG ANALYSIS IN THE CLOUD

- Cloud computing technologies allows the remote monitoring of a patient's heart beat data.
- Through this way the patient at risk can be constantly monitored without going to the hospital for ECG analysis.
- At the same time the Doctor's can instantly be notified with cases that need's their attention.

ECG ANALYSIS IN THE CLOUD



CLOUD

- Here in this fig there are different types of computing devices equipped with ECG sensors to constantly monitor the patient's heart beat.

- The respective information is transmitted to the patient's mobile device that will immediately forwarded to the cloud- hosted web services for analysis.

- The entire web services from the front end of a platform that is completely hosted in the cloud that consist of three layers:Saas,Paas,Iaas.

ECG ANALYSIS IN THE CLOUD

- ADVANTAGES➔ In this concept the cloud computing introduces opportunities that would be otherwise hardly achievable.

- The first advantage is elasticity of the cloud infrastructure that can minimize and maximize according to the requests served.

- Second advantage is that cloud computing technologies are now become easily accessible and also it promises to deliver the services with minimum time.

- As a result the doctor's has no need to invest in large computing infrastructures.