

Culbit Shringi (596) - II

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P.E.A.S \Rightarrow Performance, Environment, Actuator, Sensor.

①. Medical Diagnostic System:-

- Performance: System's ability to accurately diagnose medical conditions or predict outcomes based on input data, such as symptoms, patient history and diagnostic tests.
Performance metric may include sensitivity, specificity, accuracy and predictive value.
- Environment: Medical settings in which system includes hospitals, clinics or remote healthcare facilities.
Factor such as available resources, patient demographics, and healthcare regulations may come under:
- Actuator: This includes recommending treatments, ordering further diagnostic tests, referring patients to specialists, etc.
- Sensors: The inputs to the system, including patient symptoms, medical history, laboratory test results and other data used for diagnostic purposes.

②. Face-Biometric Systems

- ↳ Performance: This refers to the accuracy and speed of system in recognizing and verifying individuals.

based on their facial features.

- Environment: This includes physical surroundings where the system will be deployed, as well as any potential challenges like varying lighting conditions or the presence of facial obstructions, eg: (glasses, facial hair etc).

- Actuators: These are the components responsible for taking actions based on system's analysis, such as unlocking a door, or granting access to a secure area.

- Sensors: These are the cameras or the other devices that capture facial images & biometric data.

③ Self-driving:

- Performance: safe, efficient navigation while adhering traffic laws and adapting to changing conditions.
- Environmental: Perceived surrounding \rightarrow including roads, traffic, weather, and pedestrians.
- Actuators: controls for steering, braking and acceleration to interact with the environment.
- Sensors: cameras, lidar, radar, GPS and more for real time gathering on surroundings.