ARTIFICIAL INTELLIGENCE

ACTIVITY 1

PEAS Description of the task environment

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The **PEAS** is used for high-level characterization of agents. **PEAS** Stand for

**P** = Performance Measure

**E** = Environment

**A** = Actuators

**S** = Sensors

**What are PEAS Descriptors?**

**Performance Measure:**

If the objective function to judge the performance of the agent. things we can evaluate an agent against to know how well it performs.

**For example**, in case of pick and place robot, no of correct parts in a bin can be the performance measure.

**Environment:**

It the real environment where the agent needs to deliberate actions. what the agent can perceive.

**Actuators:**

These are the tools, equipment or organs using which agent performs actions in the environment. This works as output of the agent. what an agent can use to act in its environment.

**Sensors:**

These are tools, organs using which agent captures the state of the environment. This works as input to the agent. what an agent can use to perceive its environment?

Examples

### 1. PEAS ****descriptor for**** Shopping for used AI books on the Internet.

**Performance Measure:**price, quality, authors, book review

**Environment:**web, vendors, shippers

**Actuators:**fill-in the form, follow URL, display to the user

**Sensors:**HTML

### 2. ****PEAS descriptor for****Playing a tennis match.

**Performance Measure:**winning

**Environment:** playground, racquet, ball, opponent

**Actuators:**ball, racquet, joint arm

**Sensors:**ball locator, camera, racquet sensor, opponent locator