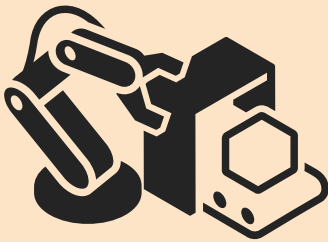
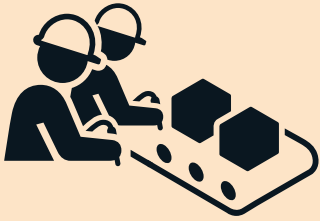


CODING

BASIC ARCHITECTURE



CONCEPT The basic architecture of coding provides a framework for designing and programming robots to perform specific tasks in a structured and organized manner. The architecture helps ensure that the robot can perceive its environment accurately, make decisions based on that information, and act accordingly, all while communicating with other systems or humans as needed.

REAL WORLD CONNECTIONS

Kawasaki Motors Manufacturing Corp USA (KMM) in Nebraska uses robots equipped with sensors, such as vision systems and proximity sensors, to assemble engines for motorcycles and power products. The cognition component processes the sensor information and makes decisions on assembly tasks. The control component uses algorithms to control the robot's movements and actions, and the communication component allows the robot to exchange information with other systems. The use of robotics improves productivity, reduces costs, and increases quality while creating a safer and more consistent manufacturing process.

EXAMPLES

PERCEPTION: Sensors and other technologies that allow the robot to gather information about its environment, such as position, orientation, and the presence of obstacles.

COGNITION: Processing the information gathered by the robot's sensors and making decisions based on that information. This may involve machine learning, decision-making algorithms, and other forms of artificial intelligence.

CONTROL: Translating decisions made by the robot's cognition system into actions that the robot can perform. This may involve motor control, manipulation of tools, or other physical actions.

COMMUNICATION: Exchanging information between the robot and other systems, such as a human operator or other robots. This may involve wireless communication, internet connectivity, or other forms of data transfer.