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	Name :- Rahul Ravindra Shinde
	ROIL NO. 8- 64
	Class 8- BE.IT
	Subject &- Is Lab
	Sem 5- VII
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Tutorial I

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AI	-	EGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCE
ROCERGOLINGO		Design of Intelligent Agent
ķ		de sign of exportingent
	*	Aim & To understand the concept of Agent
. f		Abstraction by Studying definition
<u>}</u>	2	of Rational Agent, Agent environment
		Task Environment Descriptors,
	7	environment types.
4,000	1	COND THE PROPERTY OF THE OWN
	*	Theory o-
à	4.	- An Artificial Intelligent (AI) system is compos
Line	,	of an agent and its environment.
		- The agents act in their environment.
	20	- An agent is anything that can perceive
: 7	100	its environment through sensors and
	1	acts upon that environment through
1209	is	effectors. This can be clearly seen
249		in FPq. 1. An agent in particular can bes.
		Sensons
		Percepts
		- Effectors
	F	·/·
	71	Environment
1 1:1/	() 3	Actions de la
11	1.5	allet and to with a
F	7 18	Fig. 1 & AI Agent with Environment
i . ist	des *	as at a feet and a feet and a feet a
1	*	Human agent has sensory organs such
-		parallel to the sensors and other
- 5 C p :	2	parallel to the sensors and other
		THE MEN

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Karjat -	Raigad Date:
- HOLEKOCEKOCEKOCEKO	THE THEORY OF THE OFFICE FROM THE CONTROL OF THE OFFICE FROM T
KGCERGCERGCERG	Organs such as hands, legs, mouth for
	offectors.
×	DALATIC AGONT 3- replaces cameras ava
	The serious to the serious
	and various motors and actuators
A CALAN	and various vicios
	for effectors
*	software agent has encoded bit
	Strings as its programs and actions.
	T S N
¥-	-Agent struture can be viewed as a
	combination of Agent architecture and
	COM PINCELON)
41/2	Agent programment
in it is at	- Agent Architecture refers to the
1.7 112	madely were that an agent escelates
4.14 210	MARKET PROGRAMMENT
Para	an agent thon of an agent function.
Ans. I was	- Figure 2 Show four important types
	of agent architecture.
1	of agent account
S.	
1. 2. 4 = / 1	Agent
	LI Sensors Hagen E Sensors
	State
	How is the Cordition- How is the How work
	4 now 2 Action 1 world envolves
	what actions & Rule & L what my
4. 9	1 0
1, 1	Effectore C
_ WOTE .	Effector Rule
N 10	/ Acc 1 Cold to Cold
	(a) simple Reflex Agent (b) Model Based Reflex
	Agent
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		evolves How world
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11197	- 1	action
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-	71 2 7	QCTION HY
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11 117 12 1-1		E What Obility actions
		S actions
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1		Will be a second of the second
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		The sold THE SOLD THEN THE CORNER -
7		
	4	(c) Goal Based Agent (d) Utility Based Agent
		Figure 2: Agent Architecture Types
y y	2	Figure 20 ligent michitecture Tipes
1		ANTONIA THEORY OF THE PART OF
	,,	Death of information is
1 4	*	Another important piece of information is
d.	18-1	tack phylronment properties.
		O Discrete or continuous - if there are
		1) DISCYPTE OF CONTINUOUS - IT THEIR WILL
Los Las	31	· a l'imited number of distinct, clearly
	,	Language of the amount that
1 1	i i	defined, states of the environment the
1211	1 1	environment Ps discrete (For Example Chess
-	. A 1	Cautomated driving)

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		@ observable or Partially observables-if
		It is possible to determine the complete
		State of the environment at each time
547	- ·	State of the environment at each time point from the procepts it is observable
y ii		3 Static or Dynamic 3 - If the environment
	. 7 (does not change while an agent is
w' -	+3	does not change while an agent is acting then it is static otherwise it
AF S		is dynamic.
		@ Deterministic or Non- deterministic ?-
		If the next state of the environment
		is completely determined by the current
	r O	state and the actions of the agent
7.		then the environment is deterministic
		otherwise it is non- deterministic
17/K.	,	5 Episodic ox sequential = In an episodic
		environment ceach episode of events
		consists of the agent perceiving and
		then actions
		CHET SCOTTO
- 4	<u></u>	Morking ?-
(7	- Search internet for AI based applications
10917		in following ocenarios and identify
24 24 1 1 2		who is agent for that application.
1		- + task envisonment properties
		D Autonomous Lunar Rover
	11 -	Deep Blue chess playing computer
v \		
D P	, =,	3 Eliza the natural language processing
× 13		computer program created from 1966 to
	N /	1966 at the MIT Artificial Intelligence
-		Laboratory be Joseph Wizenbaum.
	II	2.05 1 d (0.14 0) (0.05 () 10 () 1

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		(5 Sophia is a social humanoid robot
	i	developed by Hong kong based compan,
	.6	Hason Robotics
意がついてき		6 Apples virual assistance siri
		A Endurance: A companion for Dementia
		Patients
m 1 11.12	1 7	welling out the standard and doctor
24.10 8	*	Resources
L FRA	1/3:	- The above diagrams are taken from
		online tutorial available at Tutorials
Kar Miles Jan Y	117	points on topic AI - Agents and
try ern		ENVIYON MENTS.
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		1 NOTE) NEW 1/7 & 1-2 1/2
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