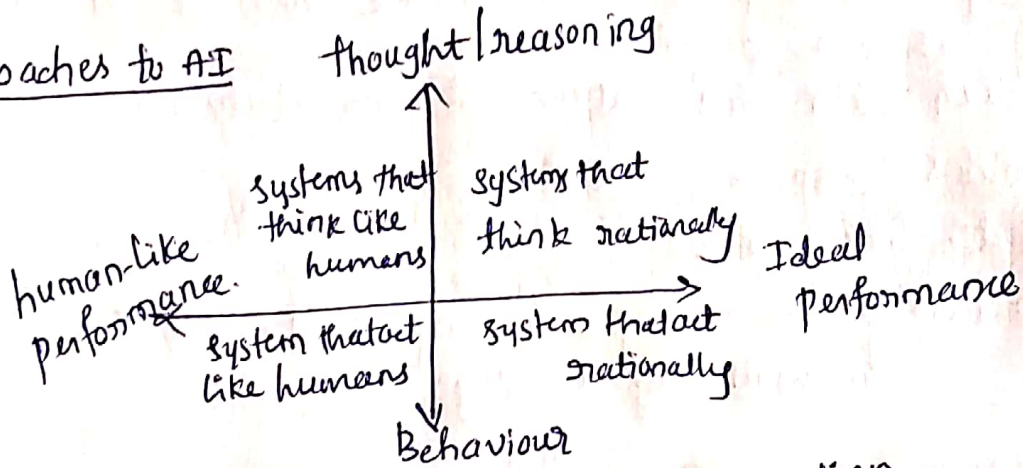22-may-2020

TCS

Artificial Intelligence

module-I   Introduction

what is AI

→ is concerned with the design of intelligence in artificial devices

Approaches to AI

Alan Turing - Father of AI

Intelligent Behaviour

- perception
- reasoning
- learning
- understanding
- solving natural problems

Application

→ computer vision
→ image Recognization
→ Robotics
→ natural language processing
→ speech processing

Foundations

Psychology   Biology

philosophy

Artificial intelligence   computer engineering

mathamatics

Economics   linguistic

Understand Artificial Intelligence

→ understood the basic fundamentals about key paradigms. core techniques and algorithms

→ The role of basic knowledge representation, problem solving and learning methods in AI.

→ AI systems to computer vision, robotics, natural languge processing and expert system like medical diagnosis in a narrow domain.

→ familiar with different agent architectures

→ stimulus response agents.

→ state based agent

→ Representing knowledge is important for essential successfull agent designs.

Afternoon session   Python

App2: Create web maps with python & folium

web map is a map that is displayed by the browsers can be visited by the web.

* The basemap
   we need to use libary called folium.
   To install folium type - pip install folium

```
>>> map = folium.map(location > [88, +100])
>>> map
>>> map.save ("map1.html")
```

      tiler = "mapbox bright"
      tiles = "stamen terrain"

Both types of basemaps, but mapbox bright doesn't work anymore - stamen terrain work great.

Adding point

```
import folium
map = folium.map (location = [38.58,-99.09], zoom_start=6,
                    files= "map box Bright")
fg = folium.featureGroup (name = "my map")
fg.add_child (folium.marker(location = [38.2,-99.1], popup=
            "Hi I am a marker", icon=folium.Icon
                                        (color = green )))

map.add_child (fg)
map.save ("map1.html")
```

+ Adding multiple point

for co-ordinates in ([38.2,-99.1], [39.2, -97.1]]

• we can use HTML in the popup window

•• colour points

```
def color_producer (elevation):
    if  elementian <1000:
        return 'green'

    elif 1000 <= elevation <3000:
        return 'orange'

    else:
        return 'red'
```

+ Add & style points :—

we can use dir (folium) to lock for possible methods
of creating circle markers.

+ learn about population map

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■ Accounting Fundamentals ■ IT Foundational Skills ■ Overview of Artificial Intelligence* (Source NPTEL)

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