

Professional Readiness for Innovation, Employability and Entrepreneurship
Project Report for week 2

Project Title: Fertilizers Recommendation System For Disease Prediction

Mentor Name: Mrs. R Jeena

Team ID : PNT2022TMID26182

Team Size : 4

Team Leader : HARENEE A S

Team member-1 : RENNIE SHARON ROSE P

Team member-2 : BHAVANI S

Team member-3: JANANI PRIYA R

Phase 2 Description: Ideation Phase (Literature Survey, Empathize, Defining Problem Statement, Ideation)

2.1 Literature survey on the selected project & Information Gathering

Collected the relevant information on the project use-case, referred the existing solutions, technical papers, research publications, etc.

Paper 1 –Soil Fertilizer Recommendation System using Fuzzy Logic

Reference - **Doi:10.1109/TENCON50793.2020.9293780.**

Paper 2 – Farmer's Assistant: A Machine Learning Based Application for Agricultural Solutions

Reference - [arXiv:2204.11340https://doi.org/10.48550/arXiv.2204.11340](https://doi.org/10.48550/arXiv.2204.11340)

Paper 3 –CNN based Leaf Disease Identification and Remedy Recommendation System

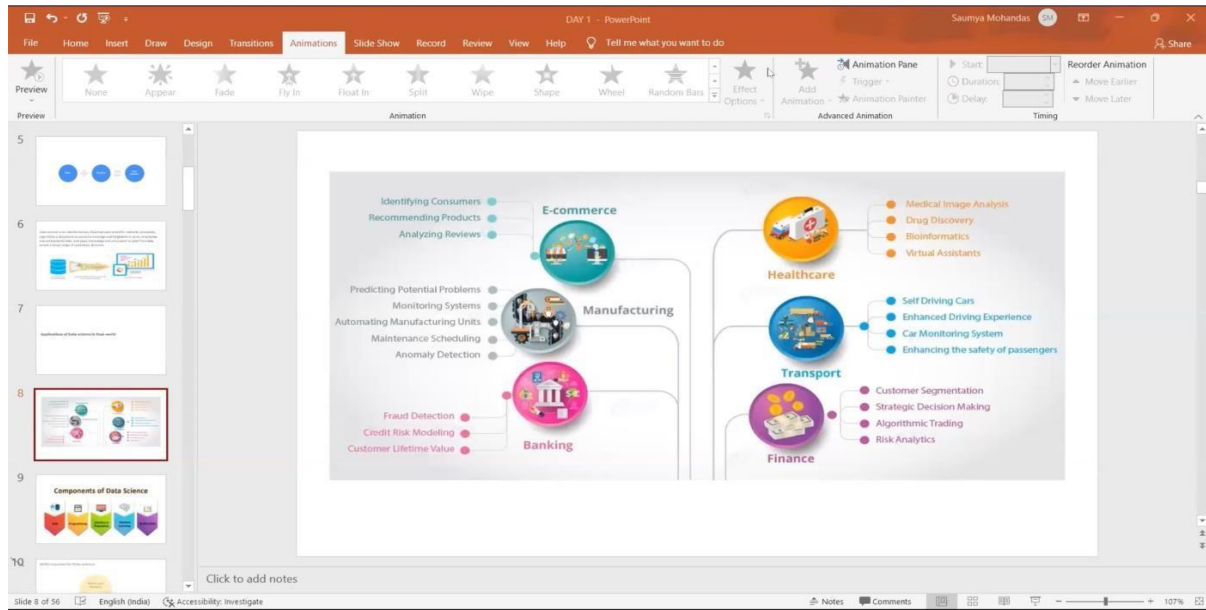
Reference -doi: 10.1109/ICECA.2019.8821872.

2.2 Attended the technology training as per the training calendar

B6-6M2E

Artificial Intelligence Day 1 03-09-2022

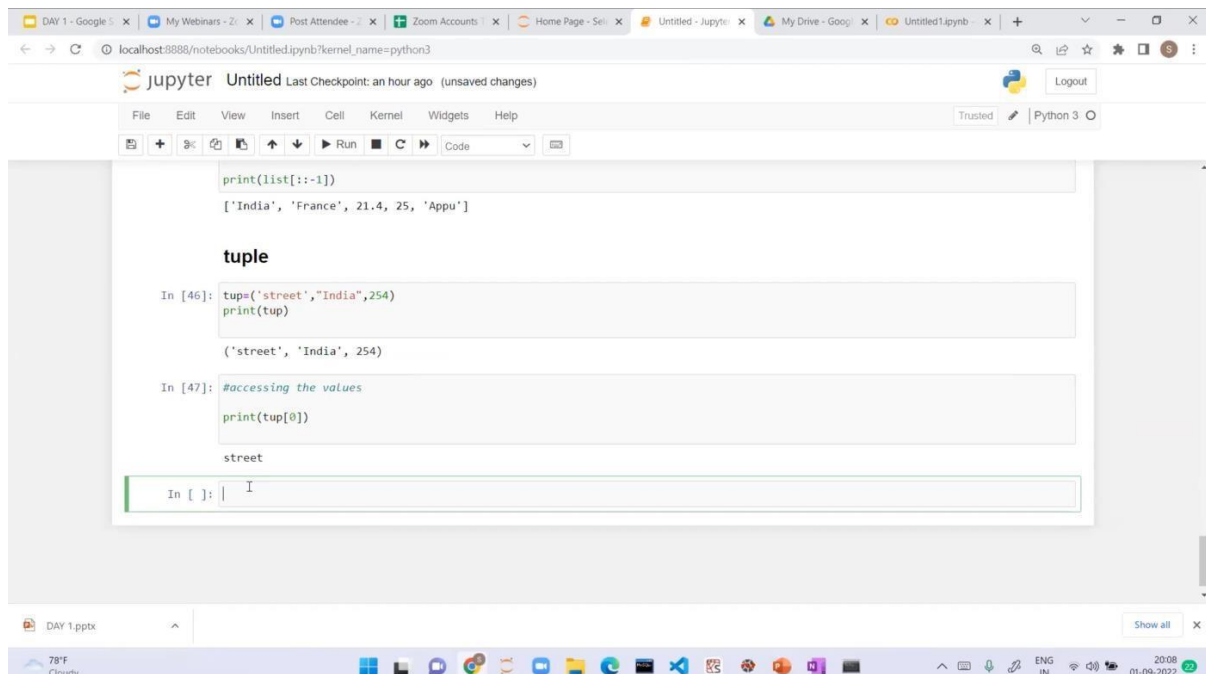
9:00am - 12:00pm



B6-6M2E

Artificial Intelligence Day 2 06-09-2022

6:00pm - 9:00pm



Important Methods Pandas Packages

Data Importing

```
pd.read_csv()
pd.read_table()
pd.read_excel()
pd.read_sql()
pd.read_json()
pd.read_html()
pd.DataFrame()
pd.concat()
pd.series()
pd.date_range()
```

Data Cleaning

```
pd.fillna()
pd.dropna()
pd.sort_values()
pd.apply()
pd.groupby()
pd.append()
pd.join()
pd.rename()
pd.to_csv()
pd.set_index()
```

Data Statistic

```
pd.head()
pd.tail()
pd.describe()
pd.info()
pd.mean()
pd.median()
pd.count()
pd.std()
pd.max()
pd.min()
```

The screenshot shows a Jupyter Notebook interface with the following components:

- Browser Tabs:** My Webinars - Zoom, Post Attendee - Zoom, B2 BATCH NALAIYA THIRAN/, Pandas - Jupyter Notebook.
- Address Bar:** localhost:8888/notebooks/B2%20BATCH%20NALAIYA%20THIRAN/Pandas.ipynb
- Page Header:** jupyter Pandas Last Checkpoint: 39 minutes ago (unsaved changes) Logout
- Menu Bar:** File, Edit, View, Insert, Cell, Kernel, Widgets, Help
- Toolbar:** Includes icons for file operations, running code, and a dropdown menu set to 'Code'.
- Data Table:** A table with 12 columns and 8 rows of car data.

24	Pontiac Firebird	19.2	8	400.0	175	3.08	3.845	17.05	0	0	3	2
25	Fiat X1-9	27.3	4	79.0	66	4.08	1.935	18.90	1	1	4	1
26	Porsche 914-2	26.0	4	120.3	91	4.43	2.140	16.70	0	1	5	2
27	Lotus Europa	30.4	4	95.1	113	3.77	1.513	16.90	1	1	5	2
28	Ford Pantera L	15.8	8	351.0	264	4.22	3.170	14.50	0	1	5	4
29	Ferrari Dino	19.7	6	145.0	175	3.62	2.770	15.50	0	1	5	6
30	Maserati Bora	15.0	8	301.0	335	3.54	3.570	14.60	0	1	5	8
31	Volvo 142E	21.4	4	121.0	109	4.11	2.780	18.60	1	1	4	2
- Code Cells:** Five input cells are shown. The first contains the comment `# Datsun 710-Fiat 128 hp-am`. The other four are empty.
- System Tray:** Shows 83°F Cloudy, taskbar icons, and system time 11:48 06-09-2022.