fnp FERNS N PETALS

Python + Data Science Schedule

Task Id	*Day*	*Title*	*Links*
TS-1	Day 1 - 2	**Environment Setup** **Understand Virtual Environments**	https://docs.python.org/3/library/venv.html#creating-virtual-environments
		Installation of Python 3.x	https://www.python.org/downloads/
		Python Getting Started	https://docs.python.org/3.9/tutorial/index.html
		Data Types	https://docs.python.org/3.9/tutorial/introduction.html#an-informal-introduction-to-python
TS - 2	Day 3 - 4	Variables, Control Flows, Loops	https://docs.python.org/3.9/tutorial/controlflow.html#more-control-flow-tools
		Functions	https://docs.python.org/3.9/tutorial/controlflow.html#defining-functions
		⇒ Program demonstrating data type, control flow, loops and functions	
TS - 3	Day 5 - 7	**Object Oriented and Storing**	
		Object Oriented Concepts – Classes, Objects – Inheritance, scopes of the variables	https://docs.python.org/3.9/tutorial/classes.html#classes
		Data Structures – Dictionary – Lists – Tuples – Searching in these Data Structures	https://docs.python.org/3.9/tutorial/datastructures.html
		⇒ Program demonstrating Object oriented and data structure for employee and address	
TS - 4	Day 8	**Exception & Errors Handling**	https://docs.python.org/3.9/tutorial/errors.html
		Exceptions, Errors and their purpose	
		Custom Exceptions	
		⇒ Program to demonstrate raise, handle a exception	
TS - 5	Day 9 - 10	**Web Programming - Django**	**Introduce to Vscode**
		Django Setup & Architecture	https://docs.djangoproject.com/en/4.1/
		Understand – Page Routing	
		Implement GET, POST requests	
TS - 6	Day 11	Create a Layout	https://docs.google.com/document/d/1kiKNwRC72PCUDQ3owd4eVpMgre84oWWfCuX4BflJGaM/edit
TS - 7	Day 12-13	***⇒ Create a CRUD Memory***	https://docs.google.com/document/d/1q6YQsyKf1lWmk14H1ivjVRRVbozU3ljoU47SSL_7AEg/edit#heading=h.2kllgiioi26y
TS - 8	Day 14 - 15	**Database**	
		MongoDB – MongoDB vs MySQL	https://www.mongodb.com/docs/manual/administration/install-community/
		CRUD operations	
		Connect Django with MongoDB	
		⇒ Create a CRUD using Mongo	https://docs.google.com/document/d/1q6YQsyKf1lWmk14H1ivjVRRVbozU3ljoU47SSL_7AEg/edit#heading=h.2kllgiioi26y
TS - 9	Day 16	**Machine Learning Basics**	Collect Sources, understand concept
		– What is Machine Learning? – What AI? – AI vs ML differences – Are they different or are they same?	
TS - 10	Day 17	Approaches in ML	Explore different approaches
		⇒ Present your understanding in a PPT	
TS - 11	Day 18 - 19	**Libraries**	**Introduce to IDE - Anaconda, Jupyter**
		Numpy	https://numpy.org/devdocs/user/quickstart.html
		Pandas	https://pandas.pydata.org/docs/user_guide/10min.html
TS - 12	Day 20 - 22	**Supervised Learning - Purpose**	Collect Sources, understand concept
		– What is Supervised Learning? – What are it's applications? – What type of algorithms fall under this category?	
		⇒ Try on Movie Recommendation	
TS - 13	Day 23 - 24	**UnSupervised Learning - Purpose**	Collect Sources, understand concept
		– What is UnSupervised Learning? – What are it's applications? – What type of algorithms fall under this category?	
		⇒ Try on Movie Recommendation	
TS - 14	Day 25 - 27	**Explore more**	
		NLP	https://www.analyticsvidhya.com/blog/2021/02/basics-of-natural-language-processing-nlp-basics/, https://www.kaggle.com/code/faressayah/natural-language-processing-nlp-for-beginners/notebook
		How do you train a Model?	Understand various steps involved in training a ML Model