



6 Weeks Machine Learning Project Batch

starting shortly



Instructions:

- Have patience.
- Give yourself 6 weeks of time to create this project.

What exactly we are going to cover?

- 1 Machine learning project statement will be provided
- If you don't know basics of Python, learning videos will be provided to understand basics.
- Weekly tasks will be provided.
- Weekly, we will have a live session to discuss your queries.

Use of LinkedIn

- Accountable, to remain consistent
- Introductory post of today's session
- Tag Talent Battle, Ajinkya Kulkarni, Amit Prabhu on LinkedIn
- Use these hashtags: #talentbattleprojectchallenge #talentbattlemachinelearning
- After every 7 days, summary of your study

Common Questions

- How to access the dashboard?
- If I get any doubts, what to do?

contact@talentbattle.in

Regarding Certificate

- Value of the certificate
- Need to complete entire project demo at the end

6 Weeks Project Challenge

6 Weeks Project Challenge



Complete Machine Learning Project in 6 weeks



Features:

Learn & Develop **Project from Scratch**



Weekly Live session for doubt clearing & Mentorship



Related **Learning Videos & Documents** will be given to develop project



Certificate after completion of Project



Weekly tasks will be given to complete project



Develop Github profile. Add value to Resume & LinkedIn profile



No Prior Knowledge of Machine Learning required.



**Basic Python Knowledge Training required for project will be provided by Talent Battle



Handwritten Digit Recognition using ML (Deep Learning Approach)



Week 1	Prerequisite Learning
Week 2	Programming Fundamentals (Python) + Required Installation
Week 3	ML (Deep Learning) Specific
Week 4	Coding
Week 5	Git Hub Deployment
Week 6	Extension + Summarization

SDLC

Software Development Life Cycle



Process :

A process is the sequence of steps executed to achieve a goal. A process is defined by cycles. Similar to a project, a process also has a beginning, middle, and end; however, this cycle repeats itself over an average period of time.

Project :

A project is defined by a fixed time, scope, and resources. When implementing a project, the goal is to execute change, usually drastic, and to incorporate that change into the day-to-day processes of the company.



SDLC: Software Development Life Cycle

Software Development Life Cycle (SDLC) is a framework that defines the steps involved in the development of software at each phase. It covers the detailed plan for building, deploying and maintaining the software.

SDLC defines the complete cycle of development i.e. all the tasks involved in planning, creating, testing, and deploying a Software Product





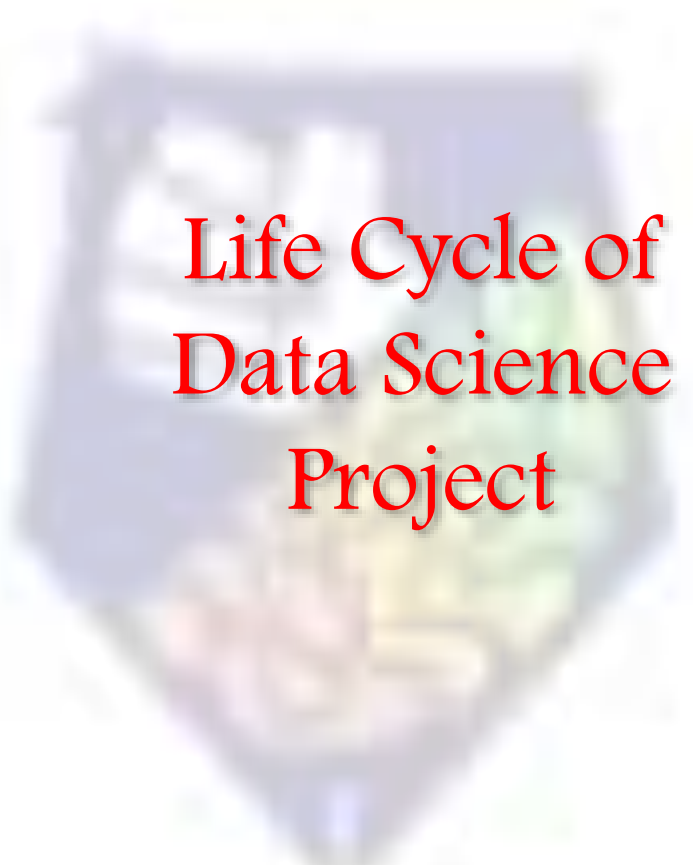
Week 1

Prerequisite Learning



Prerequisites to Learn Machine Learning

- Statistics
- Probability
- Linear Algebra
- Calculus
- Programming Language



Life Cycle of Data Science Project

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Prerequisites for Data Science:

The following are the 3 essential traits of a Data Scientist:

- CURIOSITY
- COMMON SENSE
- COMMUNICATION SKILLS

Prerequisites for Data Science:

1. Machine Learning:

- It is the backbone of Data Science. It is one of the many ways that Data Science uses to find the solution to a problem.



Prerequisites for Data Science:

2. Mathematical Modelling:

- It can be extremely helpful to make fast calculations and predictions from what you know of your data.

Prerequisites for Data Science:

3. Statistics:

- It is foundational to Data Science, to extract knowledge and obtain better results from the data.

Prerequisites for Data Science:

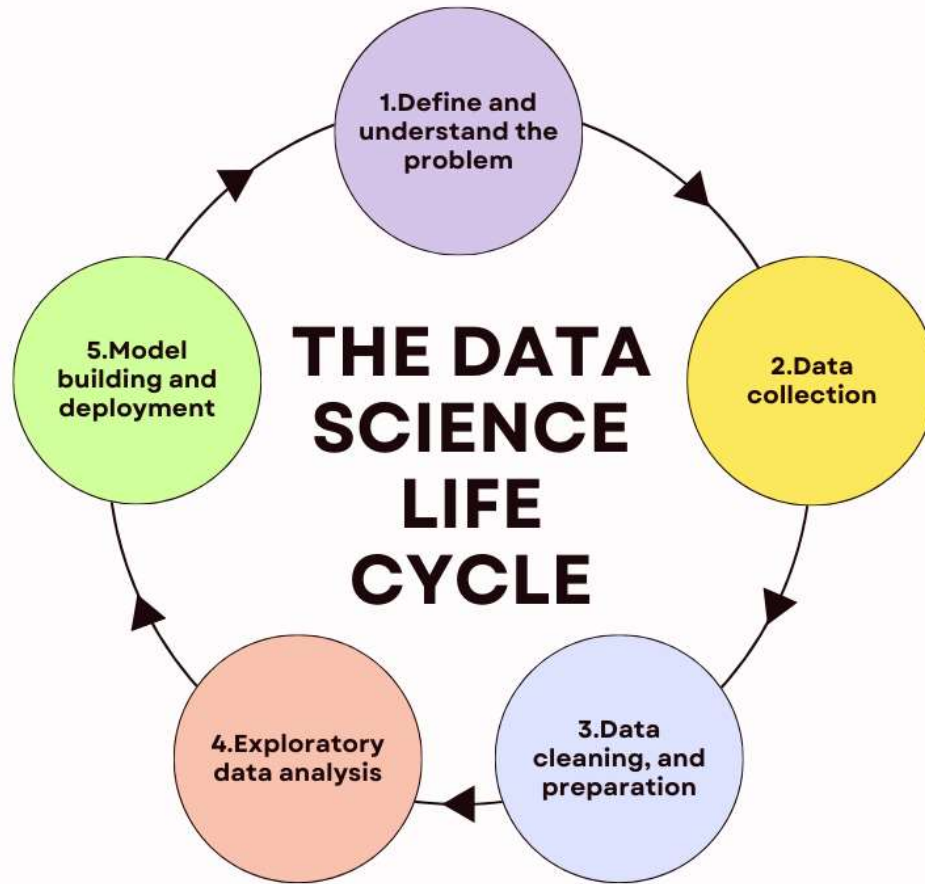
4. Computer Programming:

- You should know at least one programming language, preferably Python or R for data modelling.

Prerequisites for Data Science:

5. Databases:

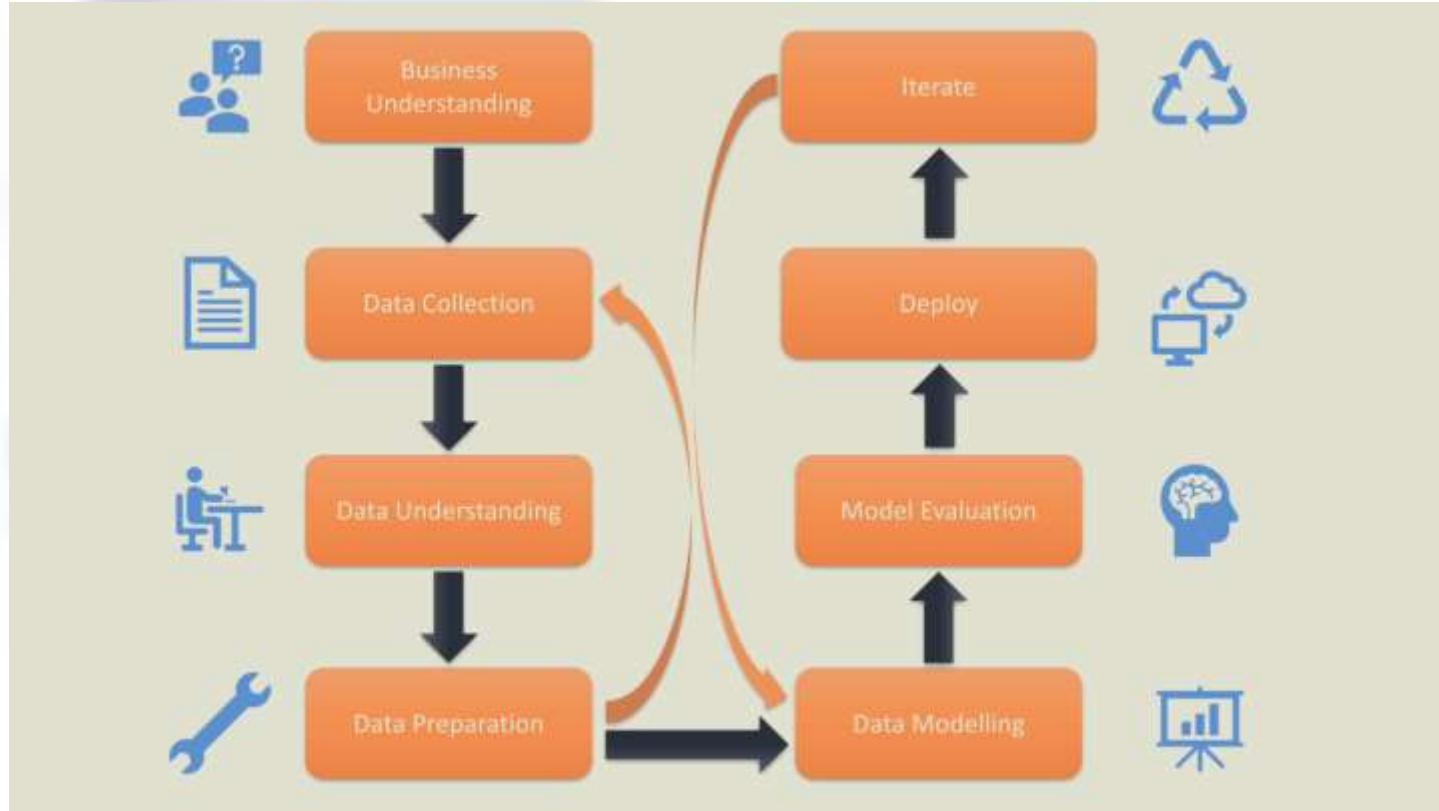
- The discipline of querying databases teaches you to ask better questions as a Data Scientist.



Understanding the Business Problem:

- Client Communication
- Expert Consultation
- Maximum Precision is required

Data Collection



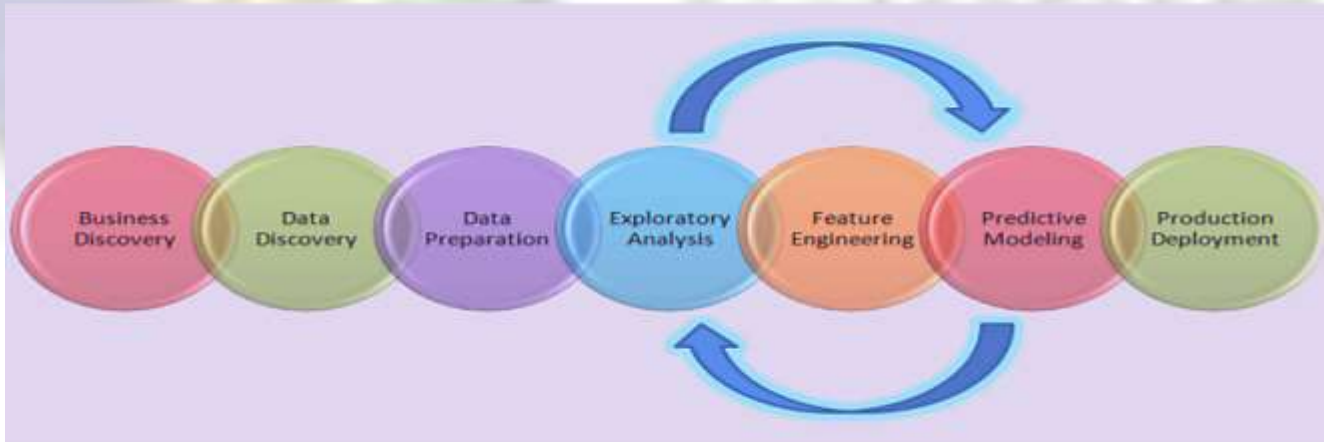
Data Preparation

- Data Cleaning / Wrangling
- Time consuming phase
- EDA

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Data Modelling

- Core Process
- Model selection
- Choose Appropriate Algorithm



Model Deployment

- Rigorous Evaluation
- Achieve desired accuracy
- Rigorous testing of every step

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Must Know Machine Learning Algorithms:

1. Regression
2. Clustering
3. Decision Tree
4. Support Vector Machine
5. Naïve Baiyes

Understanding Data Science Life Cycle with Example:

Step 1. Concept Study:

- Understanding the problem statement, thorough study of the business model is required.

Ex:

- What is use case?
- What are specifications?
- What is the budget?
- What are end goals?

Understanding Data Science Life Cycle with Example:

Step 2. Data Preparation:

- Also known as Data Munging. Most important aspect of Life

Cycle.

Ex:

- Data Integration
- Data Transformation
- Data Reduction
- Data Cleaning

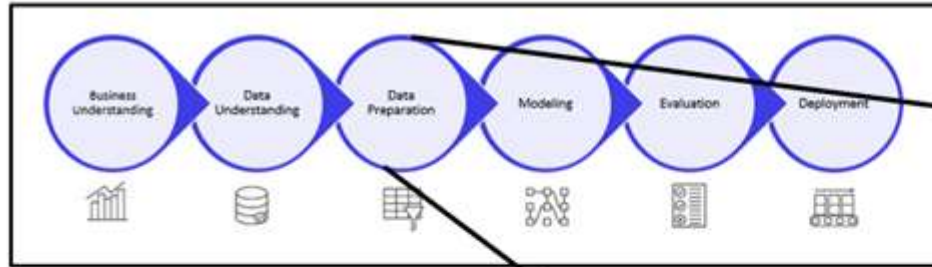
Understanding Data Science Life Cycle with Example:

Step 3. Model Planning:

- It involves EDA. (Exploratory Data Analysis)
- Key variables are selected.

Ex:

- ML Model
- Statistical Model
- Regression Model
- Classification Model, etc.



EDA

Understanding Data Science Life Cycle with Example:

Step 4. Model Building:

- Uses various analytical tools and techniques.
- Goal is to build right model.

Ex:

- Linear Regression

Understanding Data Science Life Cycle with Example:

Step 5. Communicate Results:

- Key findings are identified and conveyed to the stakeholders.

Understanding Data Science Life Cycle with Example:

Step 6. Operationalize:

- Final reports, code, and technical documents are delivered by the team.

Thank you!



The best
way to predict
the future
is to create it.

-Peter Drucker