Low-Level Design (LLD)

**EdTech Startup Analysis**

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**Contents**

Document Version Control 2

1. [Introduction 4](#_bookmark0)
   1. [What is Low-Level Design Document? 4](#_bookmark1)
   2. Scope 4
   3. [Project Introduction 4](#_bookmark2)
2. [Problem Statement 5](#_bookmark3)
3. [Dataset Information 5](#_bookmark4)
4. [Architecture 6](#_bookmark5)
   1. [Architecture Description 6](#_bookmark6)

# Introduction

## What is Low-Level Design Document?

#### The goal of the Low-level design document (LLDD) is to give the internal logic design of the actual program code for the Sales Analysis dashboard. LLD describes the class diagrams with the methods and relations between classes and programs specs. It describes the modules so that the programmer can directly code the program from the document.

* 1. **What is Scope?**

#### Low-level design (LLD) is a component-level design process that follows a step- by-step refinement process. The process can be used for designing data structures, required software architecture, source code and ultimately, performance algorithms. Overall, the data organization may be defined during requirement analysis and then refined during data design work.

## Project Introduction

Educational technology (Ed-Tech)  refers to a wide range of teaching and learning-related software and hardware that is increasingly being used in college and university classrooms. The ultimate purpose of educational technology, commonly known as Ed Tech, is to provide a better learning environment, which in turn is intended to improve student results. It's also been shown to boost student involvement and participation in class.

# Problem Statement

Educational technology (Ed-Tech)  refers to a wide range of teaching and learning-related software and hardware that is increasingly being used in college and university classrooms. The ultimate purpose of educational technology, commonly known as Ed Tech, is to provide a better learning environment, which in turn is intended to improve student results. It's also been shown to boost student involvement and participation in class.

Educational technology (Ed-Tech) is a technology that typically aids in the facilitation of cooperation in an active learning setting. Educators can use educational technology to develop digital, interactive textbooks, gamify courses, take attendance, assign homework, hold quizzes and assessments, and receive real-time results linked to teaching subject, style, and format. Traditional education and teaching methods are being disrupted by educational technology, which allows both teachers and students to learn in an environment that makes use of now-common gadgets such as smartphones, computers, and tablets.

1. **Dataset Information**

**Company:- Name of companies**

**Net worth:- Total net worth of companies**

**ROI:-Return of Investment**

**Placement rate:- Amount of placement of student**

**No. of Students:-Total number of Students**

# Architecture

Exploratory Data Analysis (EDA)

Modelling

Deployment



Raw Data Collection

Data Pre- Processing

Data Cleaning

REAL WORLD

Reporting

* 1. **Architecture Description**

### Raw Data Collection

The Dataset was taken from iNeuron’s Provided Project Description Document.

[Stockdata.zip - Google Drive](https://drive.google.com/file/d/1MFuGLfg0pzpZhH-3ZoIZv607GD2pGZtS/view)

### Data Pre-Processing

Before building any model, it is crucial to perform data pre-processing to feed the correct data to the model to learn and predict. Model performance depends on the quality of data fed to the model to train.

This Process includes-

* + - 1. Handling Null/Missing Values
      2. Handling Skewed Data
      3. Outliers Detection and Removal

### Data Cleaning

Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset.

* + - 1. Remove duplicate or irrelevant observations
      2. Filter unwanted outliers
      3. Renaming required attributes

### Exploratory Data Analysis (EDA)

Exploratory Data Analysis refers to the critical process of performing initial investigations on data to discover patterns, spot anomalies, test hypotheses and check assumptions with the help of summary statistics and graphical representations.

### Reporting

Reporting is a most important and underrated skill of a data analytics field. Because being a Data Analyst you should be good in the easy and self- explanatory report because your model will be used by many stakeholders who are not from a technical background.

* + - 1. High-Level Design Document (HLD)
      2. Low-Level Design Document (LLD)
      3. Architecture
      4. Wireframe
      5. Detailed Project Report
      6. PowerPoint Presentation

### Modelling

Data Modelling is the process of analyzing the data objects and their relationship to the other objects. It is used to analyze the data requirements that are required for the business processes. The data models are created to store the data in a database. The Data Model's main focus is on what data is needed and how we have to organize data rather than what operations we have to perform.

### Deployment

We created a Power BI Dashboard

