# Low Level Design

## Random Jokes App

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## Document Version Control

| Date Issued | Version | Description | Author |
|---|---|---|---|
| 18 Mar 2023 | 1.0 | Introduction | Vaishnavi Jaju |
| 20 Mar 2023 | 1.1 | Problem Statement | Vaishnavi Jaju |
| 21 Mar 2023 | 1.2 | Dataset Information | Vaishnavi Jaju |
| 23 Mar 2023 | 1.3 | Architecture | Vaishnavi Jaju |
| 25 Mar 2023 | 1.4 | Architecture Description | Vaishnavi Jaju |
| 26 Mar 2023 | 1.5 | Deployment | Vaishnavi Jaju |

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# 1 Introduction

## 1.1 Why this Low-Level Design Document?

The goal of the LDD or Low-level design document (LLDD) is to give the internal logic design of the actual program code for the Heart Disease Diagnostic-Analysis dashboard. LLDD 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.

## 1.2 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.

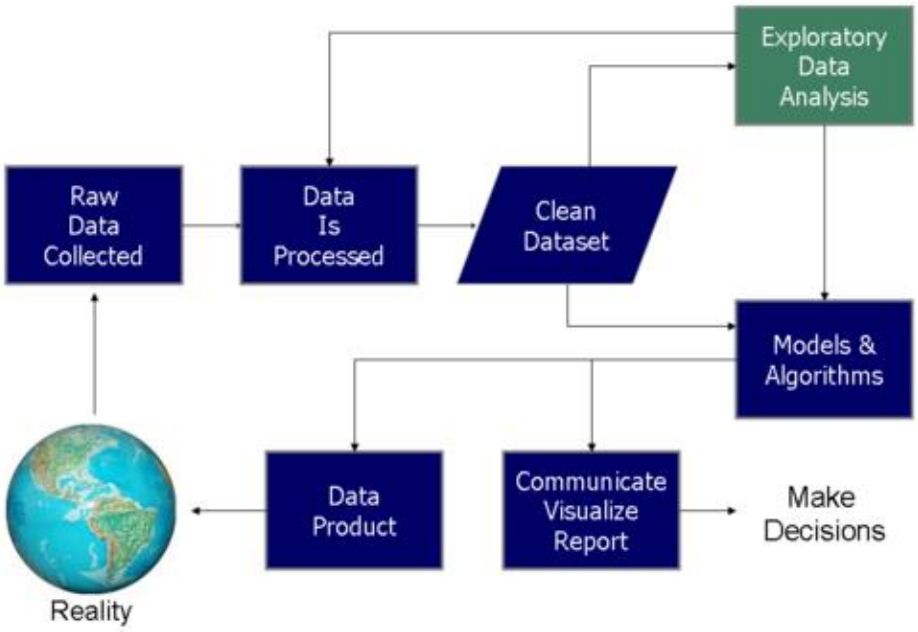
## 1.3 Project Introduction

We need to laugh in our day-to-day life for healthy life. For entertainment there are too many options so here we can read jokes as many as we want by clicking on just 1 button.Wr can get n number of jokes at 1 platform.

## 1.4 Problem Statement

The main objective of this project is to create a simple random jokes app that displays a random joke everytime user clicks on fetch a new joke button. You can use any Jokes API

# 2 Architecture




# 3 Architecture Description

## 3.1. Data Design

For this project, we have implemented the machine learning life cycle to create a basic
web application which will give you new joke everytime you clicked on button
using ~~library react~~.

### 3.2 Data Pre-Processing

Before finding insights from the given data, it is crucial to perform data pre-processing to feed the correct data to the model to learn and predict. Performance of the model depends on the quality of data used to train the model.

This Process includes:

- Handling Null/Missing Values
- Handling Skewed Data
- Outliers Detection and Removal

### 3.3 Data Cleaning

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

- Remove duplicate or irrelevant observations
- Filter unwanted outliers
- Renaming required attributes

### 3.4 Exploratory Data Analysis (EDA)

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

## 3.5. Reporting

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

- High-Level Design Document (HLD)
- Low-Level Design Document (LLD)
- Architecture
- Wireframe
- Detailed Project Report
- PowerPoint Presentation

## 3.6. 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 for the data to be stored 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.

## 3.7. Deployment

Created a Tableau dashboard.