

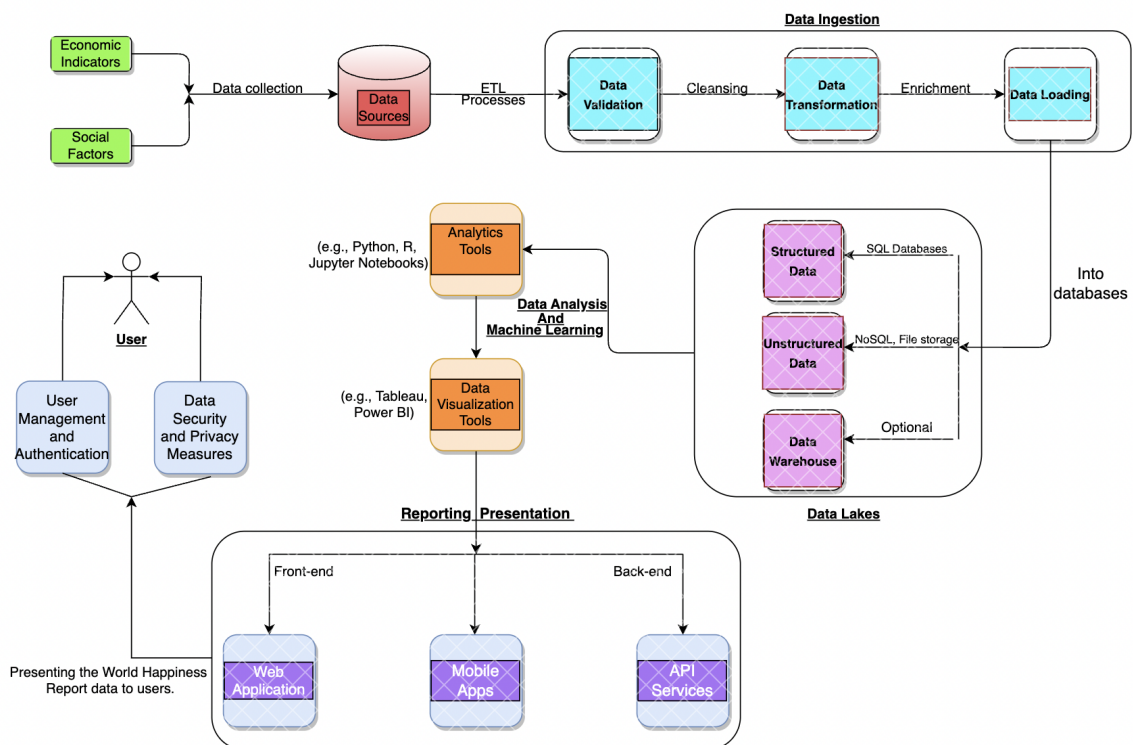
## Project Design Phase Solution Architecture

Date	18 Oct 2023
Team ID	Team-592621
Project Name	World Happiness Report
Maximum Marks	5 Marks

### Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.



*Architecture and data flow of the World Happiness Report*

This diagram provides an overview of the key components in the World Happiness Report system:

- ❖ **Data Sources:** This is where data from various surveys, economic indicators, and social factors are collected.
- ❖ **Data Ingestion:** The ETL (Extract, Transform, Load) processes for data validation, cleansing, transformation, and loading into databases.
- ❖ **Data Storage:** Structured and unstructured data is stored in databases and data lakes for analysis.
- ❖ **Data Analysis & Machine Learning:** This layer includes tools and frameworks for performing data analysis and machine learning on the stored data.
- ❖ **Reporting and Presentation:** Web applications, APIs, and mobile apps for presenting the World Happiness Report data to users.
- ❖ **User Access and Authentication:** User management and authentication to control access to the data.
- ❖ **Security and Compliance:** Ensures data security and compliance with privacy regulations.