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Architecture Design

Metro Interstate Traffic Prediction

Contents

1 Introduction

What is Architecture Design Document?

Any software needs the architectural design to represent the design of the software. IEEE defines architectural design as “the process of defining a collection of hardware and software components and their interfaces to establish the framework for the development of a computer system.” The software that is built for computer-based systems can exhibit one of these many architectures. Each style will describe a system category that consists of

- A set of components (e.g. a database, computational modules) that willperform a function required by the system.
- The set of connectors will help in coordination, communication, and cooperation between the components.
- Conditions that how components can be integrated to form the system.
- Semantic models help the designer to understand the overall properties of the system.

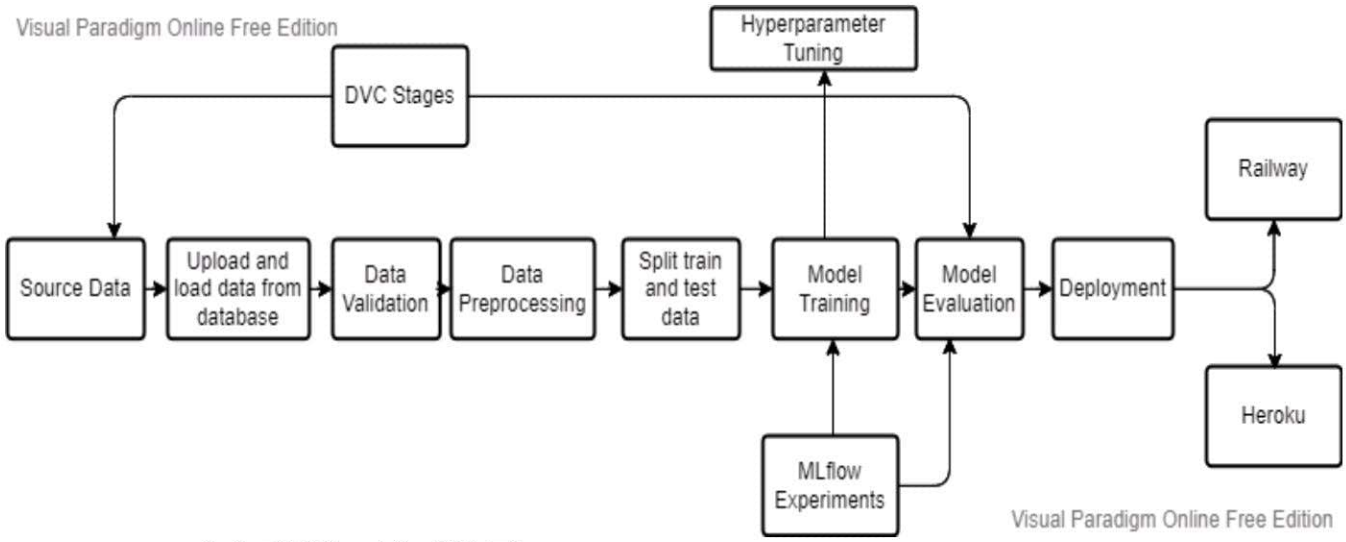
What is Scope?

Architecture Design Document (ADD) is an architectural 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 design principles may be defined during requirement analysis and then refined during architectural design work.

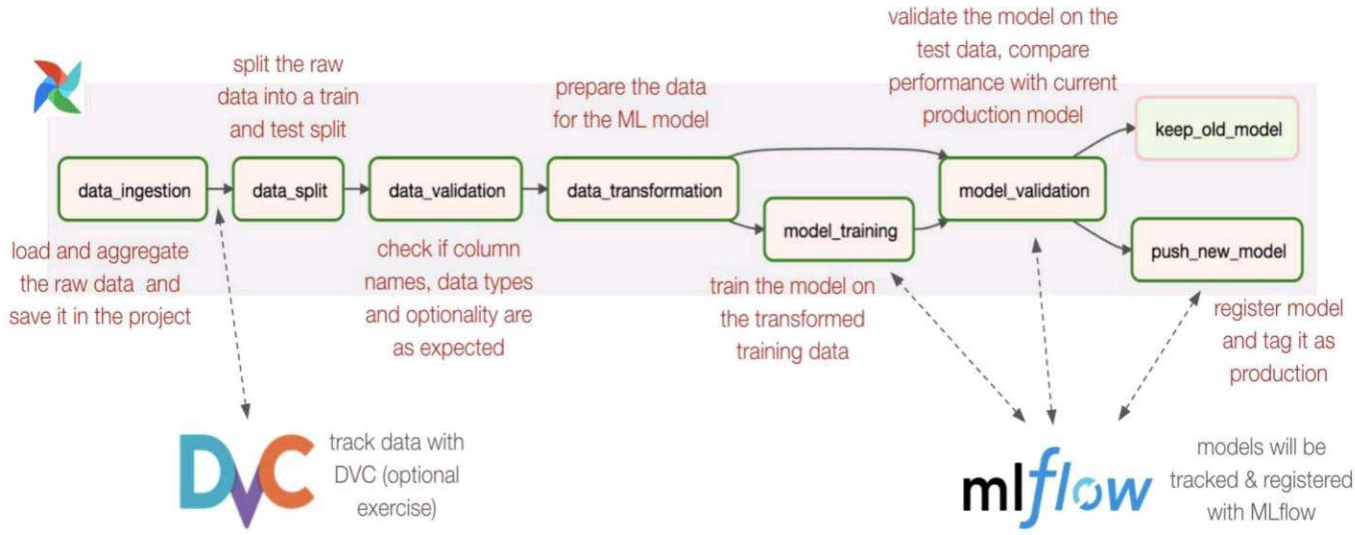
2 Architecture

2.1 Model Architecture

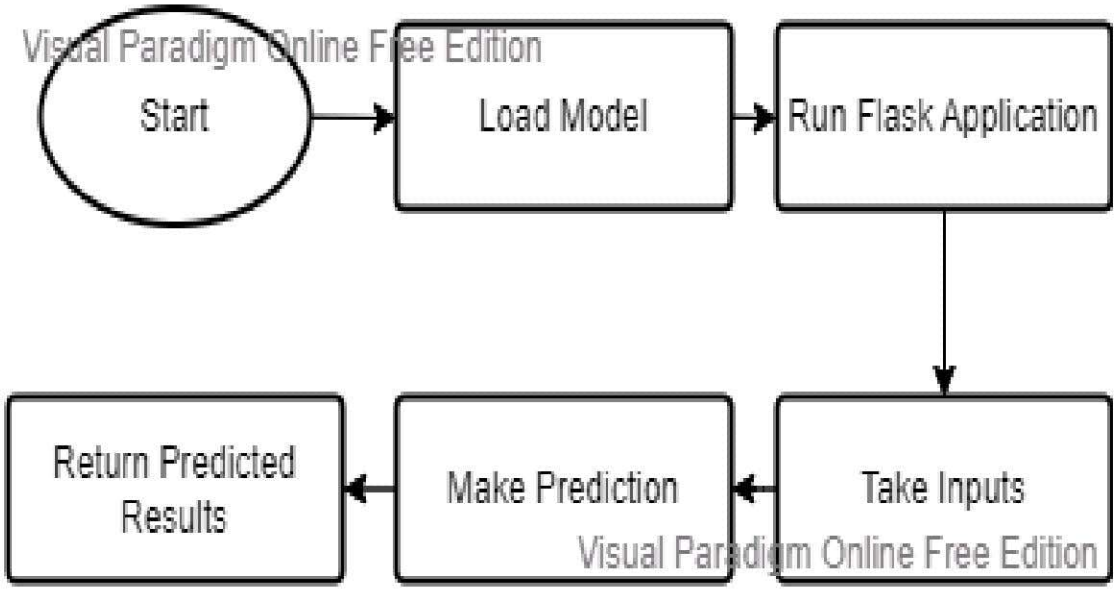
The Complete End to End solution of this project.



2.2 DVC with MLFlow



3 Deployment



3.1 Data Options

- Prediction Webpage
- API

3.2 Deployed Platforms

- Railway
- Heroku
- Render