ARCHITECTURE

ADULT CENSUS INCOME PREDICTION

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26/09/2023	1	C Sindhuja	

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1 Introduction

1.1 What is Low-Level design document?

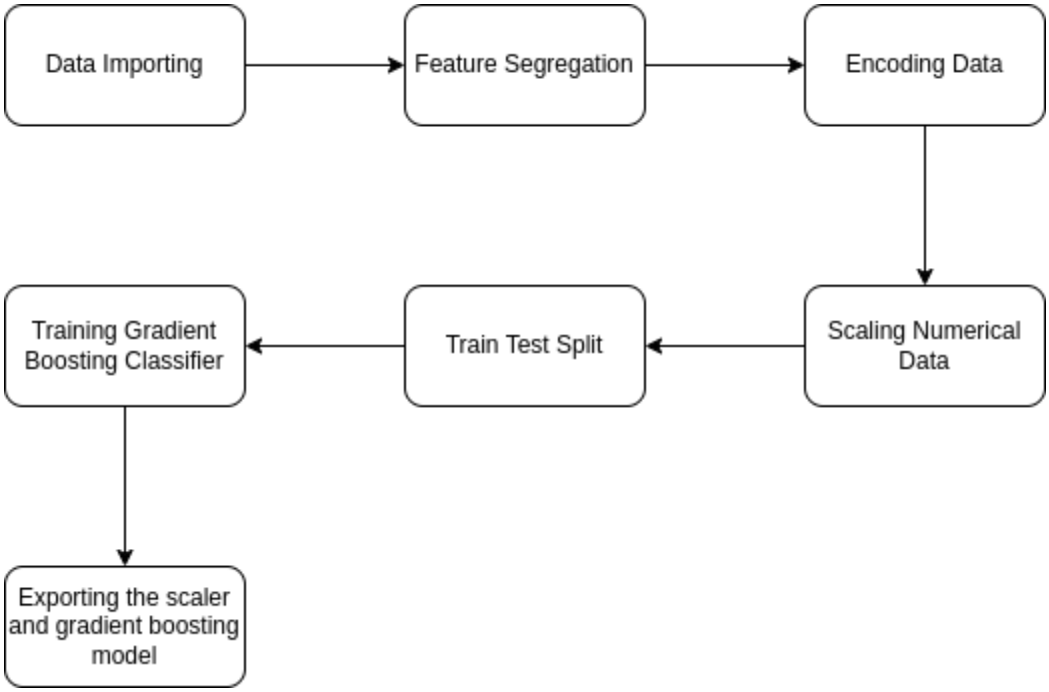
The goal of LLD or a low-level design document (LDD) is to give the internal logical design of the actual program code for flight fare estimation System. LLD describes the class diagrams with the methods and relations between classes and program specs. It describes the modules so that the programmer can directly code the program from the document.

1.2 Scope

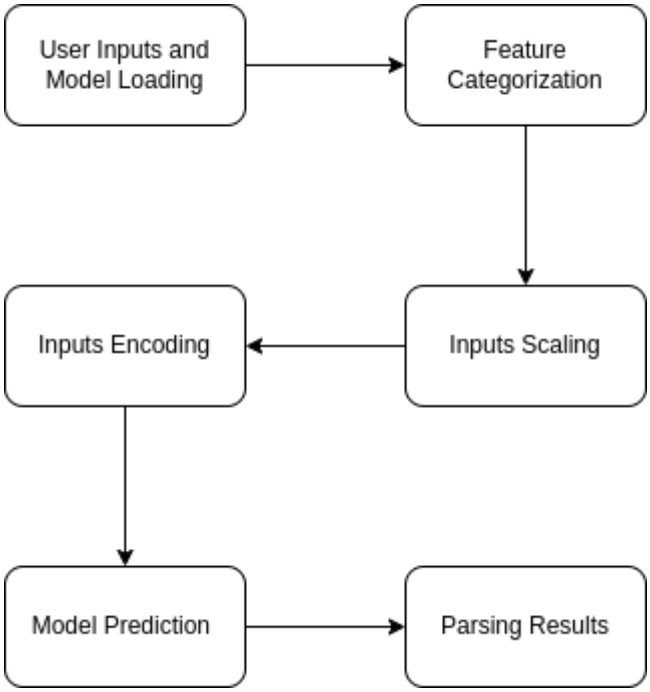
Low-level design (LLD) is a component-level design process that follows a step-by-step refinement process. This process can be used for designing data structures, required software architecture, source code and ultimately, performance algorithms. Overall, the data organization may be defined during requirement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

2 Architecture

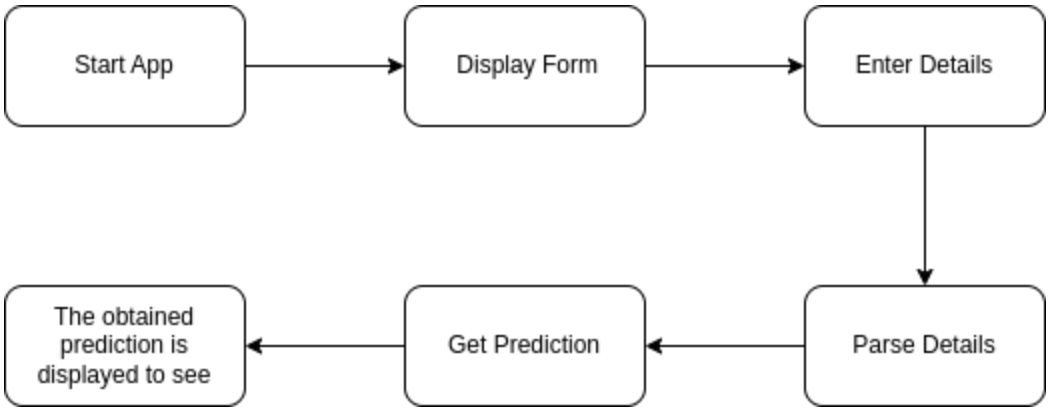
2.1 Training Flow



2.2 Prediction Flow



2.3 Application Flow



3 Dataset

The dataset consists of both numerical and categorical column with string and float data types columns

- The Dataset has the following features
  - Age
  - Work class
  - Final weight
  - Education
  - Education-Num
  - Marital-status
  - Occupation
  - Relationship
  - Race
  - Sex
  - Capital-gain
  - Capital-loss
  - Hours-per-week
  - Country
  - Salary
- Here the following are numerical columns
  - age
  - Final weight
  - Capital-gain
  - Capital-loss
  - Hours-per-week
- The rest of the columns are categorical columns

4 Deployment

The flask app is hosted in render as a web service using gunicorn **WSGI** (web server gateway interface)

5 Proposed Solution

The solution is a ML model built on the dataset obtained. The model gets the values from the UI of the flask app and sends it to the model. The model generates the prediction and sends it back to the flask app to display it.