HIGH LEVEL DESIGN

INSURANCE PREMIUM PREDICTION

Abstract:

Here we try to build the project for the prediction of in through which a candidate put some basic detail and get some prediction ,the value which he put on the form.

1.Introduction

1.1 why high level design document require?

A high-level design document (HLDD) is a critical document that outlines the architecture and design of a software or system. Here are some of the reasons why a high-level design document is required:

a.Helps to establish project scope: HLDD provides a blueprint for the software or system that is being developed. It outlines the scope of the project, what it will entail and what the project will deliver.

1. Enables effective communication: HLDD facilitates communication among project stakeholders, including developers, testers, project managers, and other stakeholders. It helps ensure that everyone is on the same page regarding the project's architecture and design.
2. Helps with decision-making: HLDD serves as a reference document for project decisions. The document can help project managers and developers identify potential issues and make informed decisions about the project's architecture and design.
3. Facilitates collaboration: HLDD encourages collaboration among team members, who can provide feedback on the architecture and design of the project.
4. Ensures quality: HLDD helps ensure the quality of the project. It outlines the architecture and design of the project and can be used as a reference document to ensure that the project meets its requirements.

In summary, a high-level design document is critical to the success of any software or system development project. It provides a blueprint for the project, facilitates communication and collaboration, helps with decision-making, and ensures quality.

1.2 scope:-

1. Project or system overview: This section typically provides a brief introduction to the project or system, including its purpose, goals, and objectives.
2. Stakeholders: The HLD may outline the stakeholders involved in the project or system, such as users, customers, vendors, and internal team members.
3. Business requirements: The HLD may outline the high-level business requirements for the project or system, such as performance, scalability, security, and usability.
4. Functional requirements: The HLD may also include high-level functional requirements, such as features, functions, and capabilities that the project or system must support.
5. Non-functional requirements: The HLD may outline non-functional requirements, such as reliability, maintainability, and availability.
6. Risks and assumptions: The HLD may also identify risks and assumptions that may impact the project or system.

The scope of an HLD may vary depending on the specific project or system being documented, as well as the intended audience for the document. Generally speaking, the HLD should provide a high-level overview of the project or system that enables stakeholders to understand its purpose and objectives, as well as the high-level requirements and risks associated with It.

1.3 DEFINITION

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| TERM | DESCRIPTION |
| IPP | INSURANCE PREMIUM PREDICTION |
| DATABASE | collection of all the information |
| IDE | Integrated development environment |
| AWS | Amazon web service |

2.GENERAL DESCRIPTION:

2.1 PRODUCT PROSPECTIVE:

IFF IS basically a machine learn model hich allows us to predict the value of price of insurance having some parameter such as age,sex ,bmi etc.

PROBLEM STATEMENT:

HERE WE TRY TO BUILD A MODEL THROUGH WHICH ANY PERSON CAN PREDICT THE OUTPUT PRICE THROUGH WHICH WE EASILY GET A PRICE OF ITS VALUE.

This Dataset is something I found online when I wanted to practice regression models. It is an openly available online dataset at multiple places. Though I do not know the exact origin and collection methodology of the data, I would recommend this dataset to everybody who is just beginning their journey in Data science.

PROBLEM SOLUTION:

FOR solving the solution we need a dataset of insurance ,and have to build a end to end api ,after that we perform some algorithm and build a model.

Through this we can easily get exact value of insurance price.

TOOL USED:

1.PYTHON : it is a programming language

2.NUMPY: convert data into array

3.PANDAS: eda we used

4.SKIT-LEARN:to build a model

5.AWS: to deployment of the api.

6.GIT> to put the data into some platform.

FLASK. To build api

8.DOCKER: create cicd pipeline.

DESIGN DETAILS:

TO DUMP A DATA TO DATABASE:

output

mongodb

.CSV FILE

FILE

ML PROECT PIPELINE

MODEL PUSHER

MODEL EVALUATION

MODEL TRAINER

DATA TRANSFORMATION

DATA VALIDATION

DATA INNGESTION

DATA INGESTION

Training

source data

Local source

validation

testing

DEPLOY MODEL

Cv bridge

Predicted result

Mae prediction

preprocessing

Get model

Load model