HI!
NEED HELP?

LOAN STATUS PREDICTION

Ha Thanh Nga
Khieu Thi Hong Nhung
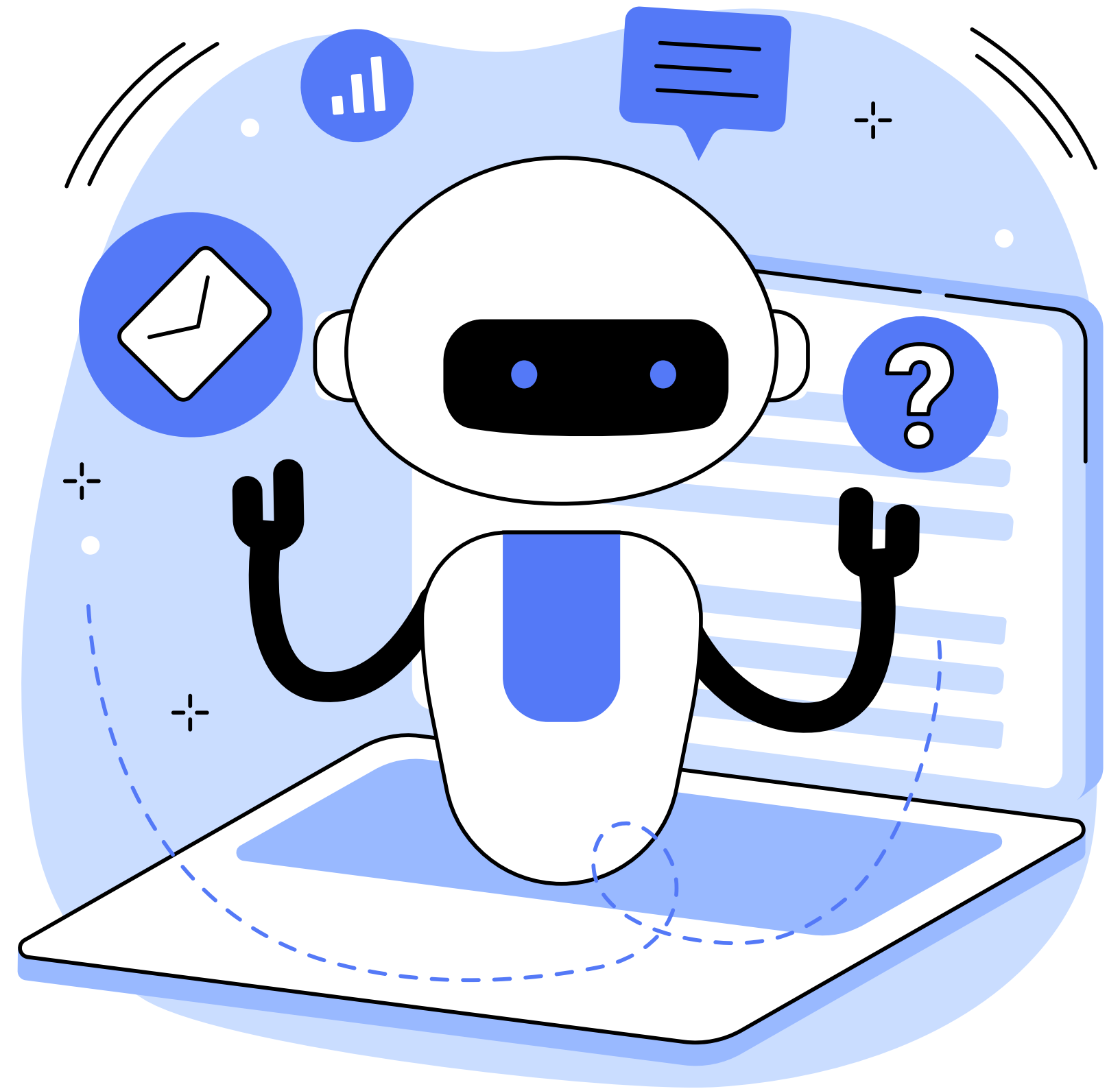
CONTENTS

WHAT IS PROJECT PROCESS?

Definition: involve utilizing machine learning algorithms to forecast whether a loan application will be approved or denied, as well as predicting the likelihood of repayment.

Its significance: optimize loan approval processes, minimize risks associated with default, and ensure a balanced loan portfolio.

PROBLEM STATEMENT

Dream Housing Finance Company, a leading home loan provider with a wide geographical presence, **aims to automate the loan eligibility process for potential customers filling online application forms**. The company seeks to identify eligible **customer segments** based on various details such as **gender, marital status, education, income, and credit history**.

Our objective: Uncover hidden trends and patterns in the data, build a robust predictive model, and evaluate its performance

OUR DATASET

- 614rows x 13collums
- Attributes:
  - Loan_ID
  - Gender
  - Married
  - Dependents
  - Education
  - Self_Employed
  - ApplicantIncome
  - CoapplicantIncome
  - LoanAmount
  - Loan_Amount_Term
  - Credit_History
  - Property_Area
  - Loan_Status
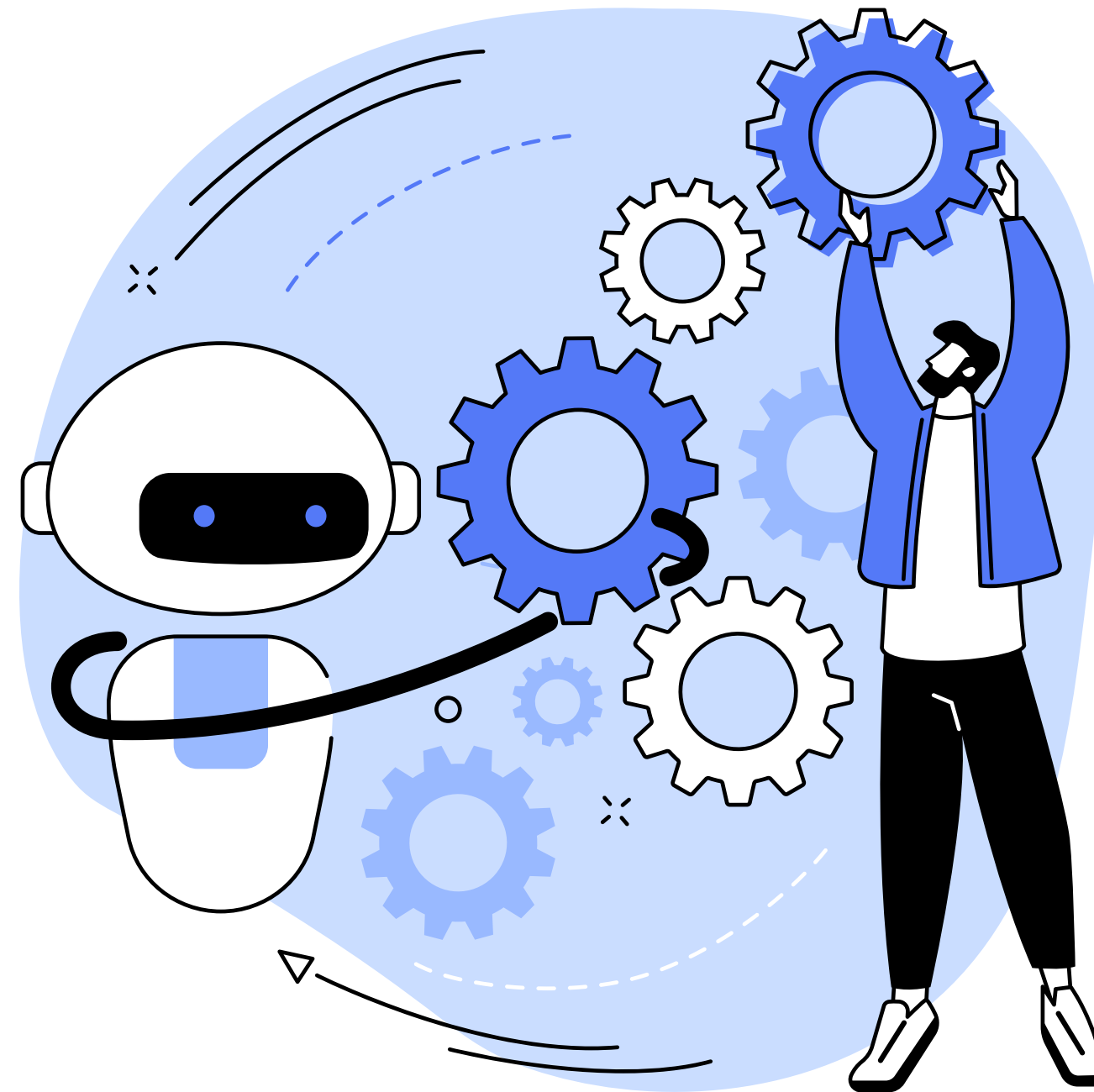
PROJECT PROCESS

Importing Libraries

Reading the Dataset

Descriptive Statistics

Bivariate Data Analysis

Comparing Categorical Data with Target Columns

Data Preparation

Resampling for Balancing the Data

Logistic Regression Model

Gradient Boosting Model

Applying Gradient Boosting

RESULTS

Let's open Colab