

Order Forecast in Oasis Store

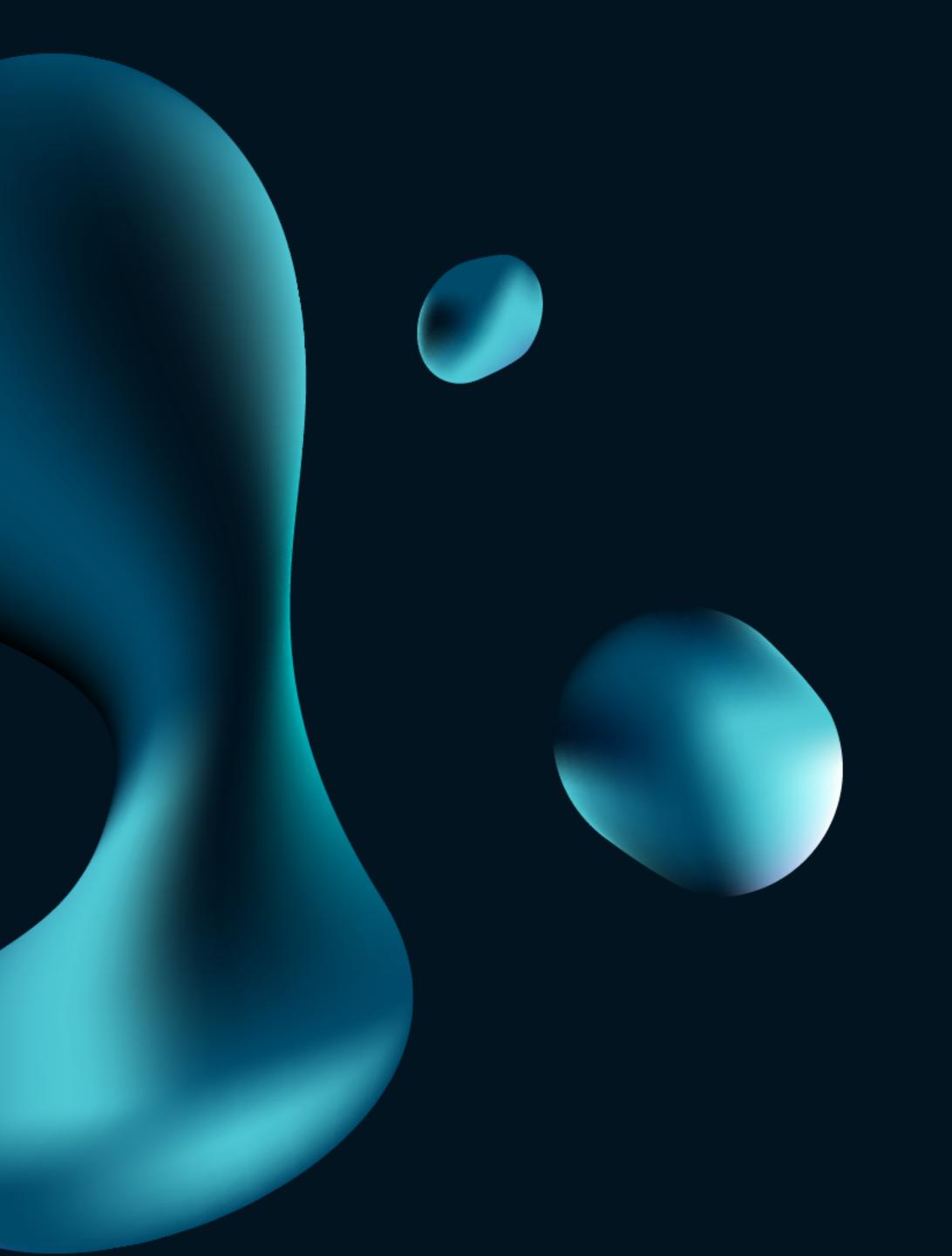
Team: Buggy Decoders

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PROJECT OVERVIEW

We'll build a complete application with User Friendly design where user can upload the CSV or Excel File, and our Machine Learning model will evaluate Ordering Patterns and Ordering Forecast on the basis of various KPIs.

IDEA ABSTRACT

We will build complete front-end with Next Js with state management using Redux. Furthermore, we will implement a Machine Learning Model that will take all historical data and Key Performance Indicators as input and output various evaluations such as ordering patterns, ordering forecast, and contribution rate of various KPIs for further analysis. Mongo DB will be our primary database for storing results so that users can compare analysis reports.

Solution Flow



Front end

We'll use Next Js to create a front-end and fetch results from a Flask server using the various data fetching methods available in Next Js. In addition, we will save all of the analysis reports for the user to review.



Algorithm

Now Our machine learning model will be implemented in our Flask server. To begin, we will input the data set using the pandas library. Furthermore, for better analysis, we'll use NumPy to convert the data into numerical matrices. Then, for graphical data understanding, we'll use matplotlib.pyplot.



Database

We'll use MongoDB as our primary database for various actions like storing analysis reports, historical data etc.

Tech Stack

Front End Technologies:

Next Js, Redux/Thunk, HTML5, Tailwind CSS

Back End Technologies

Machine Learning (Pandas, Numpy, Matplotlib) Flask, Mongo DB









