

HACKFEST 2023

StartupSense – A ML Web App

Failures of Startup



- Startups face fierce competition and numerous challenges
- Limited access to funding and resources
- Lack of guidance and mentorship
- Data-driven insights are crucial for startups
- Startups need support to overcome these challenges and increase their chances of success.



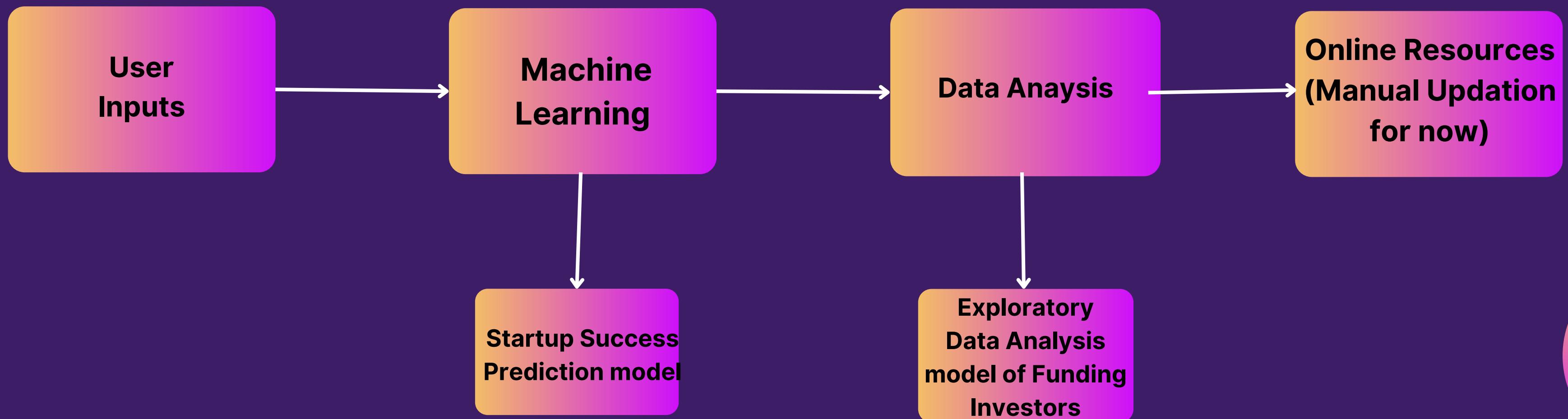
Introducing Startup Sense

"Our proposed solution is an integrated web app that provides comprehensive support and resources to startups, empowering them for success."

The features of this app are:

- Startup Success Prediction based on country, funding investors and more features.
- An exploratory data analysis of funding investors for entrepreneurs to give an overview about investors.
- Online Resources for guidance and support for entrepreneurs.

Visual Block Diagram



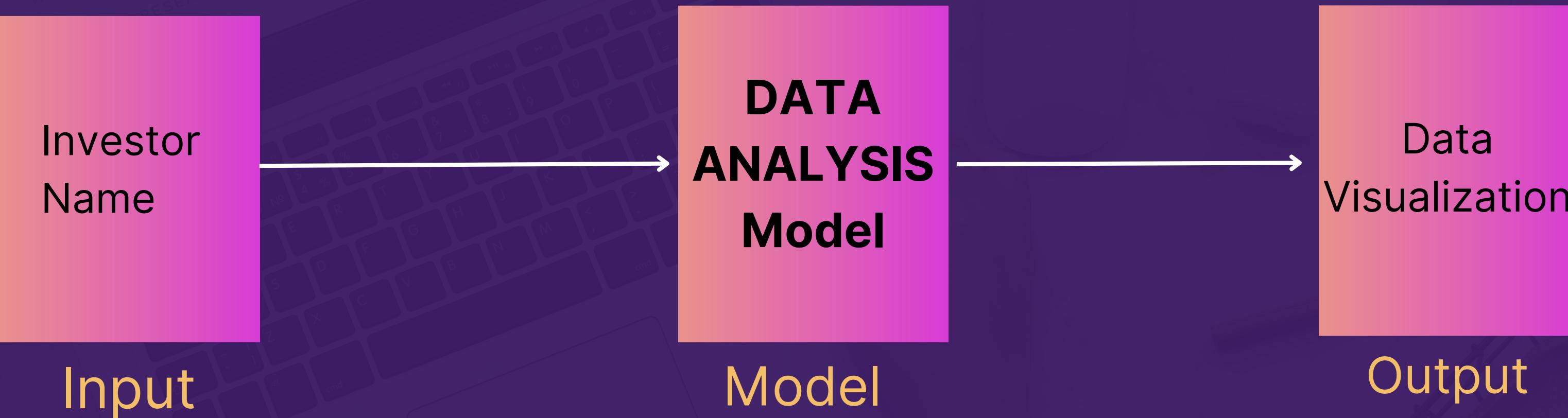
Feature 1: Startup Success Predictor



ML Model Design

- The ML Model receives the inputs like country code, total investment.
- We have categorized each features for more accurate prediction.
- The ML model uses the Decision Tree and Random Forest Algorithm for prediction.
- Used GridSearchCV for the choosing the best parameters.
- The model is now access to all users for fine-tuning the model.

Feature 2: EDA of Funding Investors



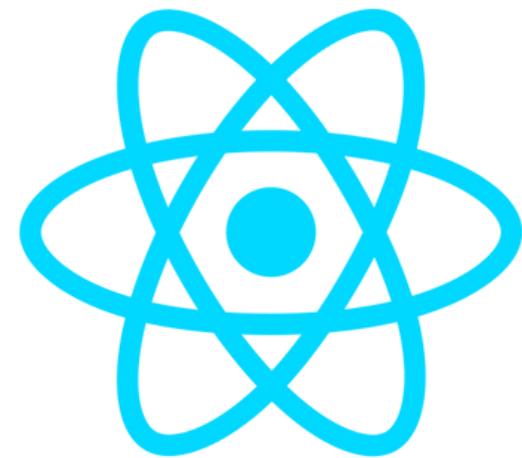
Data Analysis Model

- The Data Analysis model receives the name of investor.
- We have collected the real world data from an authorized source and preprocessed it and chose the top investors for toy model.
- The DA model uses Pandas for data analysis and Matplotlib for data visualization.
- The Data analysis model visualizes the data in the form of graphs. Eg: City in which the particular investor invested.
- The model is now access to all users for increasing data efficiency

Feature 3: Online Resources

- This feature is now manually updated by our members,
- We have hand-picked the important articles, case studies and E-Books.
- We have scraped the data from articles and journals to provide the important data.
- All websites have resources but are they user friendly? That's the best part of our resources
- We try to update the feature by creating an API in the upcoming stages of deployment.

Tech Stacks



Security of Data Provided

- The data provided by the users will be not misused as it only used for prediction.
- We are now making the API calls to the models using 'axios' which is safer in the development stage and in the deployment we'll make it more secure by making HTTP calls.
- The data of the registered users are saved in our MongoDB cloud which is safer for now and in the deployment stages we'll hash them for extreme security.
- The authenticated users are now provided with JWTs in order to prevent phishing.



THANK YOU

