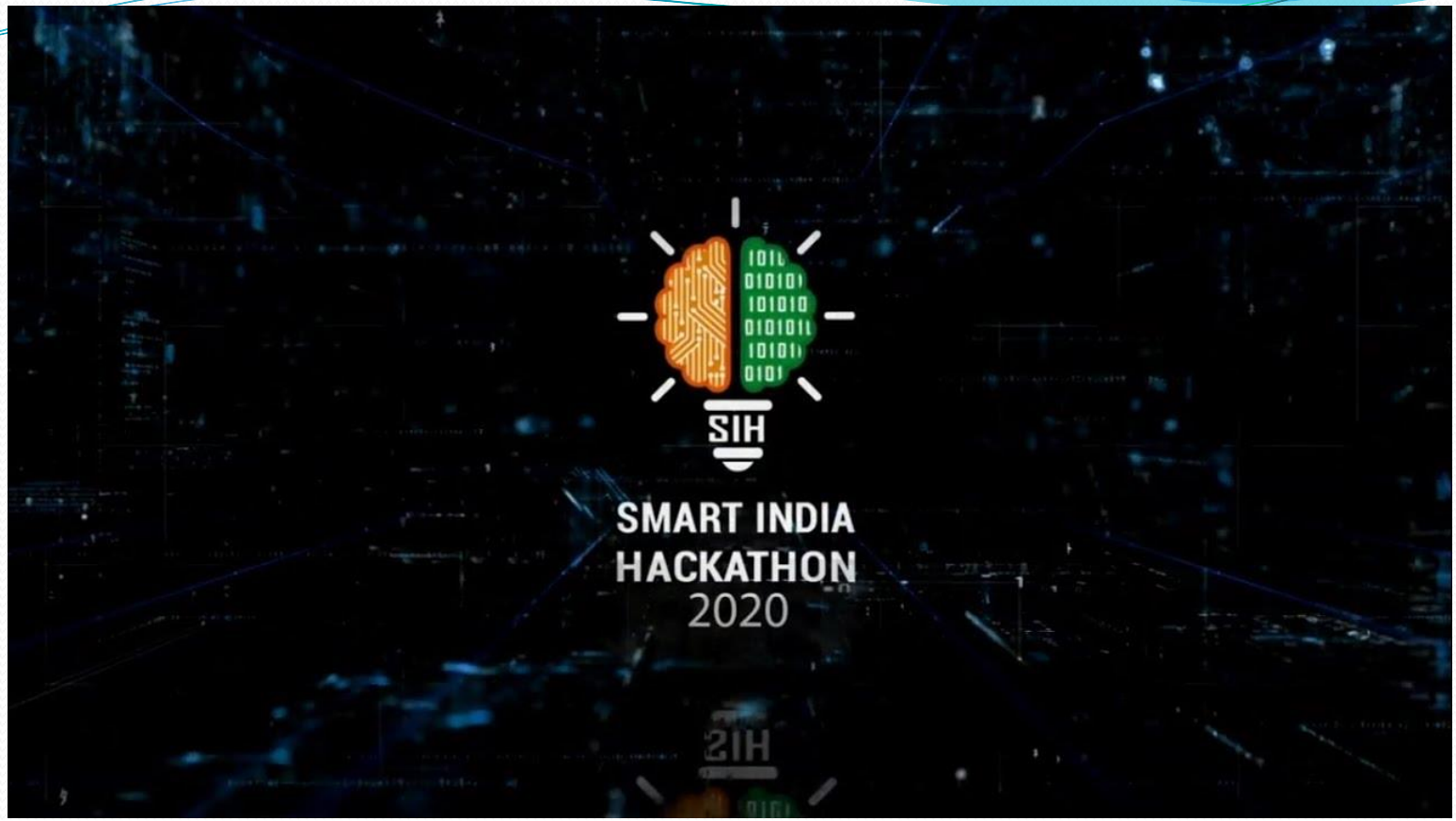



**PRESENTED BY :-**

# TEAM TAKSHASHELA

**BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, LAVALE**

# PROBLEM STATEMENT

The objective of our team is to develop a software solution to predict the future jobs based on location, sector, package and eligibility. Big data analysis can be useful to collect and analyze the data from different job sites and predict the future requirement applying machine learning

**PROJECT OF GOVERNMENT OF UTTARAKHAND**

# BACKEND DEVELOPMENT

1.Since the data was not provided, the biggest challenge for us, was to find the data that replicates the real world scenario of jobs.

2. So, we explored the WEB, for example Kaggle, but we were unable to find the data that fulfils the needs of thus problem statement.

3.We accepted many websites with the help of tools such as Dataminer and create a dataset that achieves what the problem statement desires.

4.We have also cleaned the dataset using numpy and pandas libraries.

5.We have implemented various machine learning algorithms after which we have framed XGboost and Random forest with good score so, we further narrow it down to RMSE values.

# BACKEND DEVELOPMENT

6. Since, the RMSE value gives better accuracy so we choose XGboost as our final algorithm due to its low RMSE values.

7.Till now we have executed XGboost algorithm on our dataset which gives various predictions and a good accuracy score.

8.We also executes the graphs between the predicted values with other attributes to find the variance.

9.We are further working on the learning curves which gives us better insight how our machine working algorithm is working.

10.We are also working on the plotting other graphs which will give the description about the various trending attributes according to the current data.

11.When we are working on the prediction we are getting problem while accessing on the attributes known as Eligibility.

12.So, we use Count Vectorizer technique which helps to tackle that problem while working on prediction.

13.We have also convert the other string to labels because ML is efficient with numeric values

# The technologies we are using till now are :-

1.Sklearn for feature attraction and algorithms.

2.Matplotlib notebook for plotting.

3.Numpy and Pandas for data framing.

4.For prototyping we have used Jupyter Notebook.

5.We are further working on flask for connectivity and security.

6.MySQL for the database.

# FRONTEND DEVELOPMENT

The execution of the project starts with the index page which the user will visit it first. Keeping users interaction with website we have kept the design simple and handy. So, firstly the user needs to login or signup to our website in order to get the desired job prediction. For that we have provides they login and signup buttons in header section. So after successful login the user will be redirected to the home page of the website, in which we will take input from him through simple dropdowns. This dropdowns are like education, job title, sector, city and salary expectations. After filling this form the data will be sent to the perfection algorithm and the corresponding output will be shown.

There were many things which had a impact on the design of the website. Like the alignments of the few things has disturbed the design. We also tried to add few things like login with google option for the user to our project, but there we faced many issues while integrating it with our project. So for now we had to drop that idea. But we are planning to add this in future.

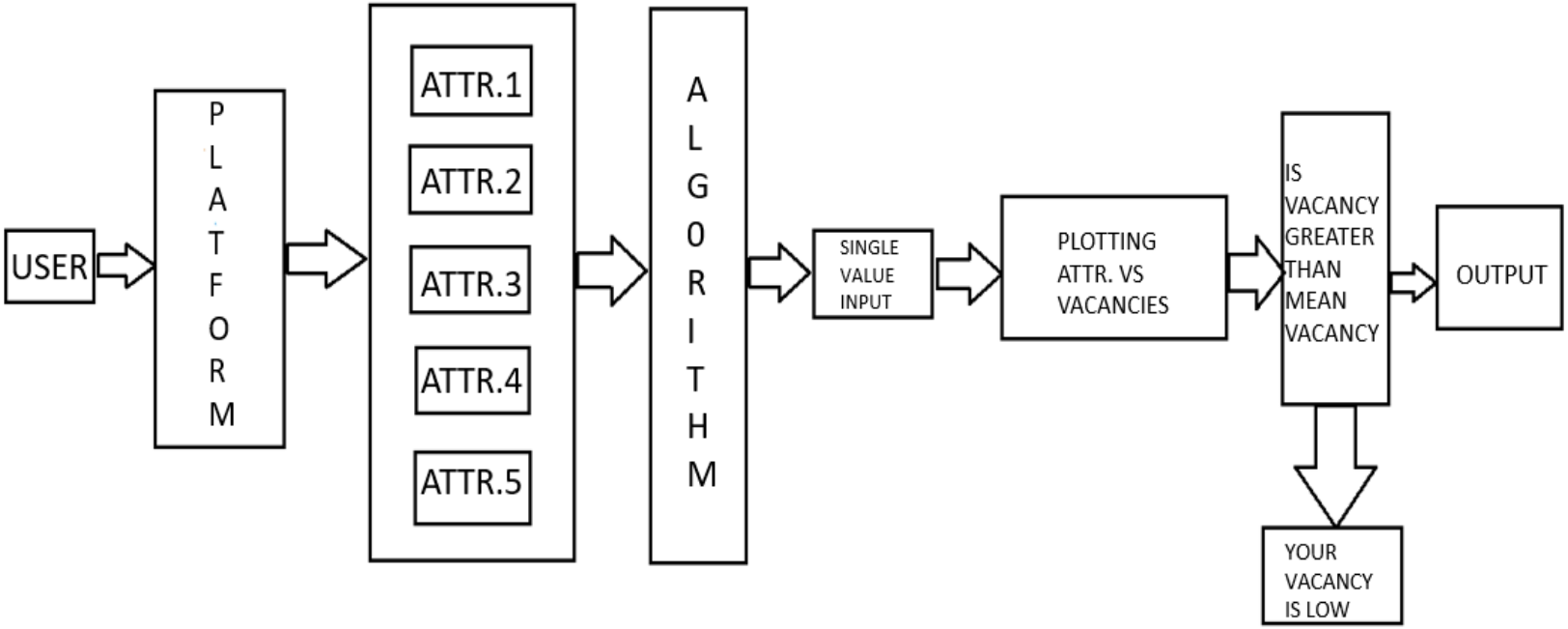
So as there were problems we need to find the solution for the same. For the same we tried to keep the design simple and user friendly.

Appearance's site appears to be simple and user friendly as well. As we have kept all the buttons and links handy to user.

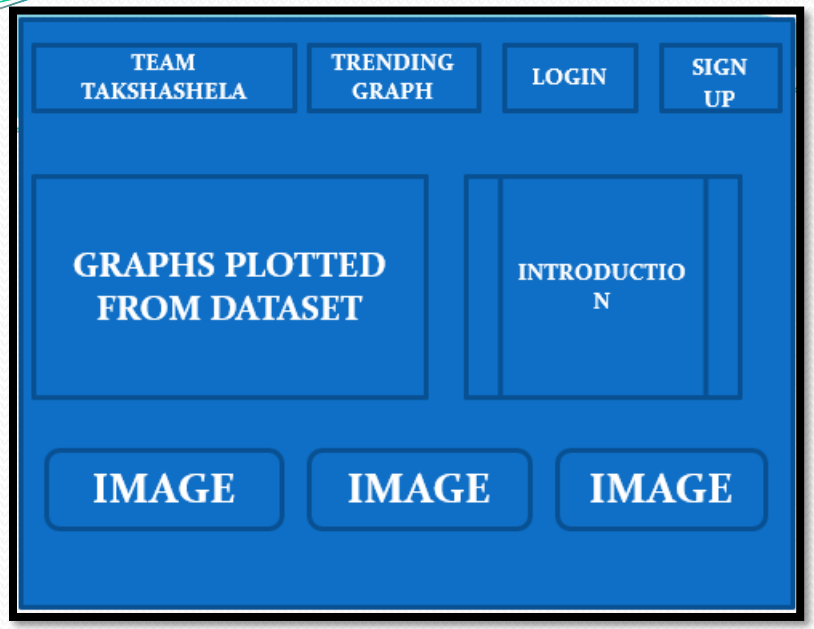
We have used frontend technologies such as HTML5, CSS3 and Bootstrap for designing the web pages. We also used Flask which is a python framework for the connectivity of the backend and frontend.

We tried to keep the design of the website simple and easy to handle for the end user. We have provided the proper buttons and links so that the user can go back and forth easily

# ARCHITECTURAL DAIGRAM :



# WIREFRAME :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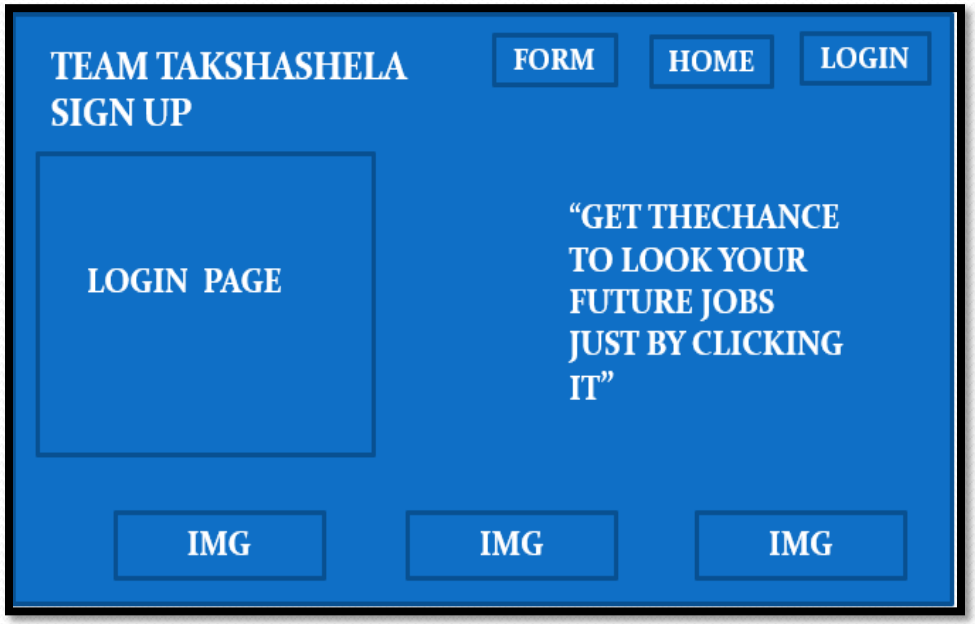
TEAM TAKSHASHELA SIGN UP
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LOGIN PAGE
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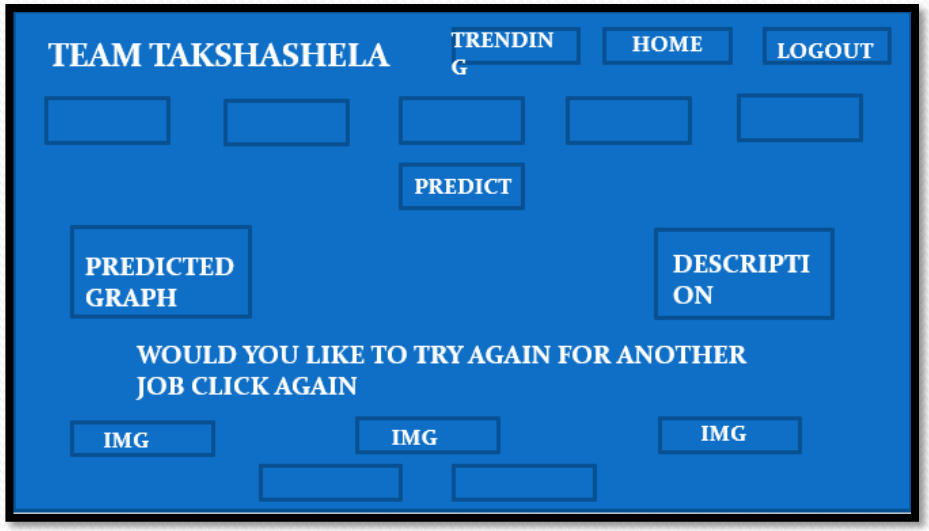
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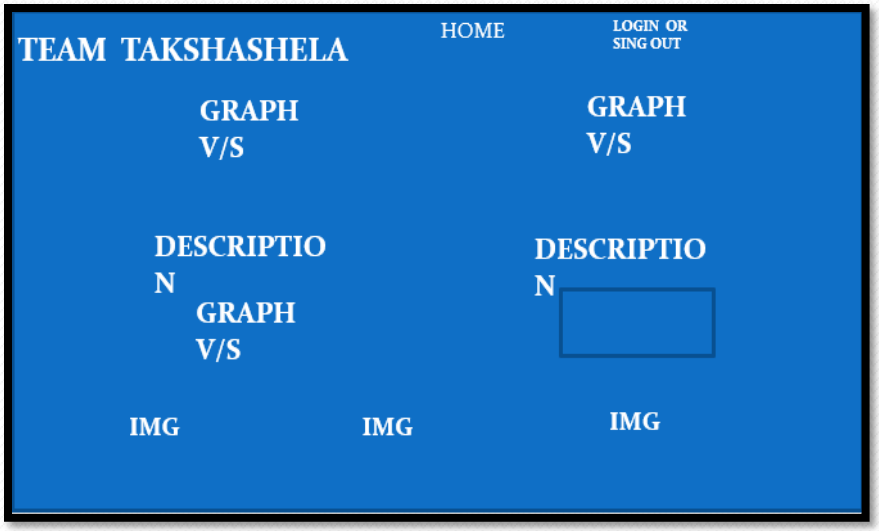
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