**IBM Nalaiya Thiran: Data and Applied Science Project**



**Helpful Links**

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Applicant Credibility Prediction for Loan Approval

A group project to implement data science project to detect whether a applicant is eligible to apply loan. by using machine learning algorithm.

Motive of this Project is to implement loan approval based on applicant monthly or yearly income and other applicant details to make sure whether he/she is eligible to take loan.

[1. Numpy Basics](https://www.youtube.com/watch?v=GB9ByFAIAH4&t=1s)

[Open link](https://www.youtube.com/watch?v=GB9ByFAIAH4&t=1s)

**Project Leader**

M.Ananthi

IV th CSE

**Project Member**

K.Kaviya

IV th CSE

1. [Plotly basics](https://plotly.com/python/)
2. [Xgboost](https://xgboost.readthedocs.io/en/stable/)

[Open link](https://xgboost.readthedocs.io/en/stable/)

[Open link](https://plotly.com/python/)

**Project Member**

V.Kalaiselvi

IV th CSE

**Project Member**

S.Roja

IV th CSE

**1**

**Key Players**

**Background Information**

**Project Name**

**Project Kickoff**



**Timeline**

Project Planning and analyzing

First 15 days after allocation of data

End of September to mid October.

End of October

End

**Deploy solutuion and Correct based on feedbacks given by mentors**

**Perform MLOPs To train and deploy by IBM Watson Studio.**

**Store data , Clean and analyze by libraires**

**People**



1. Proper Planning and executing.
2. Strong support from IBM Team - Providing Big data and proper Guidance to complete this project.
3. Using Required Libraries and avoid explicitly of coding while developing this project.
4. Using testing techniques like a/b testing, etc.

**Success Measures**



1. Collect Big Data from IBM mentors or websites like kaggle, google, etc.
2. Perform Big Data storing, Cleaning, Big data analysis using lib like numpy, pandas, plotly.
3. Perform MLOPs cycle and use advanced Algorithms like gradient boosting by xgboost, etc.
4. Use aws, azure or IBM cloud tech to deploy and do further frontend development.

**Project Goals**

**Time**

**Difficulty**

**4**

**Defining Success**

**Future Headlines**

Imagine the project is done and it's a HUGE success! Write a short 2-3 sentence press brief of why this was such a big success.

1. Usage of gradient Boosting

technique to get High accuracy

2. Usage of Interactive data

visualization Library - Plotly

3. Usage of IBM Watson Studio to deploy Machine Learning Model -

Easy , fast , scalable to implement.

**Success Metrics**

1. **This model can achieve 95 % + accuracy by training model.**
2. **Clean given data perfectly.**

4 2 months Intermediate

**1**



**10 min**

1.Strong knowledge on 2.Teamwork and 3. Time management - we 4. Field Interest - As we fields like Machine talented members- have done projects in believe Enthusiasm is a Learning , Big Data splitage of taks will be Deep Learning , underrated skill , we

Handling and Analysis Computer Vision , Power hardly believe that this

and other important easy as there are Bi - Data Visualization enthusiasm and

fields like deep learning talented members in Project and we have confidence will lead us to

etc. team. finished projects on time. complete this project.

5. Experienced Mentors and Training - As IBM has allotted

Mentors and Dedicated Training In fields like Python , machine learning And flask. We believe that we could learn new stuffs regarding project and solve complex problems while doing project.

**Fears**

**Hopes**

**2**

1. New to Frontend field - Though we are strong at backend and analyzing project we don't have prior

experience in front end development. We Consider This As an minor Fear as IBM has mentors and dedicated session.

**Hopes & Fears**

**3**

**Project Goals**

problem we trying to solve?

**Who**

**Finance Companies, staff members who work in Bank as the workload of human is low and to find out applicants eligibility is easy**

**What**

**Applicant credibility prediction for loan approval based on their income, and other details of applicant.**

**How?**

**does it occur? By applying advanced tools like spark - for big data handling , plotly , sea born to visualize and using scikit and xgboost to train model**

**Why**

**Its Makes work easy for officials to make insight from data visualization and make further decisions with stakeholders and other officials.**



This project planning explains the libraries we use and key roles, gameplay and approach towards this project , this project mainly focuses on getting high accuracy , give useful insights for stakeholders to take data driven decision of loan credibility.



**Agenda**

1. **Project Name**
2. **Hopes & Fears**
3. **Project Goals**
4. **Defining Success**
5. **Team Core & Desired Capabilities**
6. **Collaboration Agreements**
7. **Risks**
8. **Wrap Up**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **5 Team Core & Desired Capabilities**  **Summary: We have talented teams with different skill set and using new and professional tools in project is our main motive.** | | | | |
| Person | P.Prathy | M.Vadivel Karthick | M.Durai Prabhakar | S.Mohammed Afridi |
| Core Capability | Python,machine and deep learner. | Python | Javascript , css ,html and other web tech framework | python |
| Desired Capability | Intermediate Data sciene , object detection  , and deep learner | Data analyst | Frontend And back end developer | Data Analyst |



**6**

**Collaboration Agreements**

**Collaboration tools we use: IBM Watson Studio**

**Open source tools like sci-kit learn, numpy, pandas, plotly, sea born.**



**7**

**Risks**

1.Using Flask would be a factor and it can be reduced in future by learning further.



1.Usage of Interactive Visualization.

2.Usage of gradient boosting technique to improve algorithm and accuracy

3. Low risks and high trust

on completing this project .

**WRAP UP**

**Key Takeaways & Observations**

1. Further steps will be updated

based on Feedback of Mentors and team members.

**Next Steps**