ST. CLAIR COLLEGE
ZEKELMAN SCHOOL OF INFORMATION TECHNOLOGY

Agenda & Meeting Minutes

Group No: 3 | Meeting Number: 5| Date: 2-April-2024 | Time: 12 PM

DAB 304 – Healthcare Analytics: Weekly Project Meeting Minutes

	Name	ID
Chair:	Tehsin Shaikh	
Present:	Srilakshmi Gummadidala, Yen Nga Le, Tehsin Shaikh	0803509, 0824817, 0831234
Next meeting date:	Date/Time 08 – Apr – 2024 9:00 AM	

1. **Agenda**

1.1 : **Project activities/work after W11.**
1.2 : **Individual group member action items**

2. **Specific Activities from prior week:**

2.1 List brief description of activities carried out by group members.

- As a team, we have successfully completed model tuning and optimization, performance evaluation, and model validation, marking significant progress towards project completion. In the Model Tuning and Optimization phase, each team member dedicated efforts to fine-tune the models, leveraging various techniques and methodologies to enhance performance. Strategies such as hyperparameter tuning and feature engineering were employed to optimize model efficiency and accuracy.
- Following model refinement, the team conducted an in-depth review of Performance Evaluation metrics. Key performance indicators were analyzed to gauge the effectiveness and reliability of the models developed. Simultaneously, we finalized the model, ensuring that all adjustments and optimizations were integrated seamlessly.
- Lastly, we advanced to the drafting of the report. Initial sections detailing methodology and results were outlined, with the drafting process well underway. Collaborative efforts were underway to compile comprehensive insights and findings for inclusion in the report.

3. **Specific Output from prior week:**

3.1 Include summary of any written work or any code developed.

- We conducted dataset cleaning procedures, addressing missing values, performing statistical analysis, handling data types, and examining categorical distributions for the 'Class' variable. Additionally, we investigated the correlation among variables as part of our EDA analysis.

- Subsequently, we proceeded with predicting the model using a logistic regression approach and analyzed the resulting classification report to evaluate model performance.
- Explored feature importance to understand which features have the most significant impact on the target variable. This could help in feature selection or further interpretation of the model.
- Built additional models such as Random Forest classifier, Decision Tree, XGBoost, and Neural Networks. This step likely involved using different algorithms to compare their performance and select the best-performing model for your dataset.
- During week 11, we engaged in refining our modeling methods, building upon the models developed in the previous week. We explored various modeling techniques to identify the most suitable approach for our project dataset. By carefully testing and validating our models, we strived to develop robust and dependable predictions that can be trusted for decision-making purposes. We began exploring advanced modeling methods following feature selection based on feature importances using Lazy Predict modeling and neural network techniques.
- Last week, we transitioned to advanced modeling techniques after selecting only the most important features using feature importance methods. Our approach involved employing Lazy Predict modeling and neural network techniques.
- Dataset link: https://data.world/uci/breast-cancer-wisconsin-original/workspace/project-summary?agentid=uci&datasetid=breast-cancer-wisconsin-original

4. **On Target:**

4.1 Indicate the status of your project.

- ○ **green**: everything on track for completion by due date

5. **Challenges/Disagreements:**

5.1 List any challenges identified/discussed and possible solutions.

- Currently, no specific challenges or issues have been identified or discussed. Our attention is directed towards employing advanced modeling techniques to achieve higher accuracy scores while mitigating overfitting and bias.

5.2 List any notable disagreements and subsequent discussion and resolution.

- There have been no notable disagreements among team members thus far, but it has not been decided on the final version yet. Discussions have been collaborative and focused on understanding the dataset and refining our analysis techniques. Any differences in opinions or approaches have been resolved through open communication and consensus-building within the team.

6. **Planned Activities for coming week:**

6.1 List brief description of activities by group member.

- In the upcoming week, our focus will be on finalizing both our project report and presentation. For the report, we'll consolidate individual contributions, incorporate feedback, and ensure adherence to formatting and citation guidelines. Simultaneously, we'll compile presentation slides covering key project aspects, rehearse the delivery for clarity, coherence, and address any potential questions or concerns raised during rehearsals. Our goal is to effectively communicate our project's depth and significance to our audience.

6.2 Make sure tasks are assigned to address yellow and red flag items.

- As of now, there are no yellow or red flag items identified. The team will promptly address any such issues that may arise during the project's progression.

7. **Action Items/Deadlines**

7.1 April 2 to April 15 (Week 13 – 15): The following deadlines are proposed for upcoming project action items along with team members who is going to perform that activity.

- **Week 13 (Apr 2 – Apr 8**)**:** Final project Report preparation - **Srilakshmi Gummadidala & Tehsin Shaikh**
- **Week 14 (Apr 8 – Apr 15):** Final Project Presentation preparation - **Yen Nga Le**
- **Week 15(Apr 15 – Apr 22):** Final Project Presentation