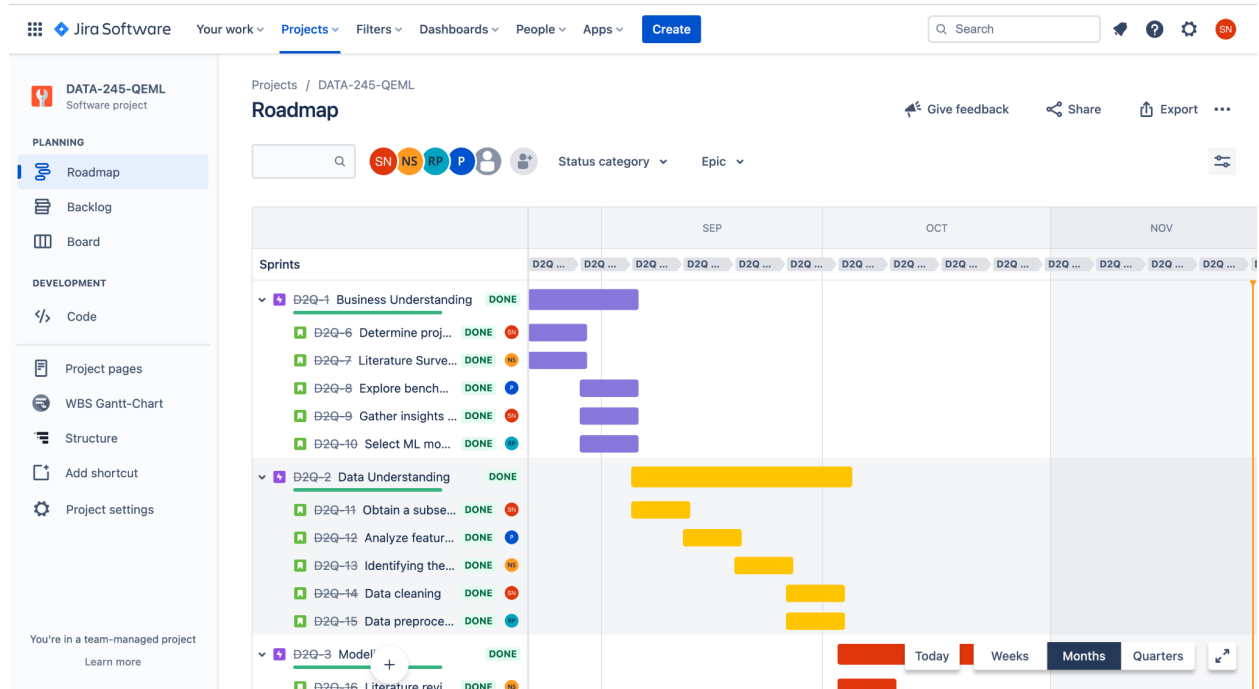


1. Github link to our project code:

https://github.com/praveen-thanniru/DATA_245_ML_Project

2. Jira link to our Project management:

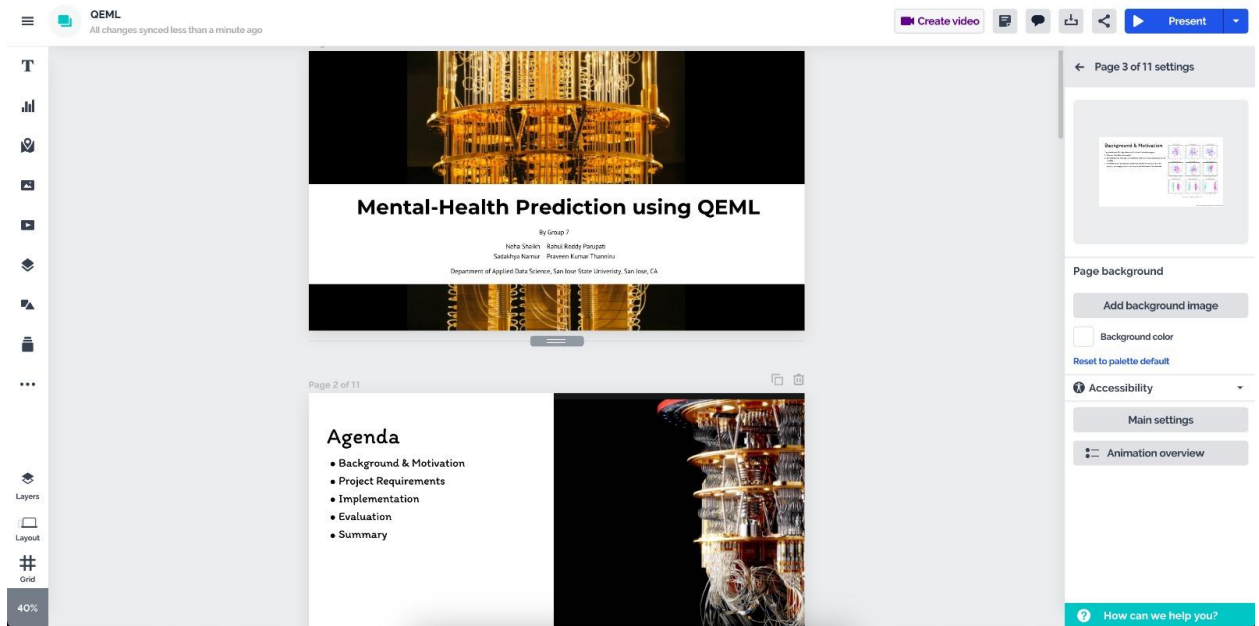
<https://sadhya.atlassian.net/jira/software/projects/D2Q/boards/2/roadmap>



3. Latex was used for documentation .tex uploaded.

The screenshot shows the IEEE LaTeX editor interface. On the left, the source code is visible, showing LaTeX commands for document structure, captions, and subfigures. On the right, the rendered document is displayed, featuring the title 'Mental Health Prediction using Quantum-enhanced Machine Learning' and the authors 'Neha Shaikh, Praveen Kumar Thanniru, Sadakhya Narnur, and Rahul Reddy Parupati'. The abstract discusses the use of quantum-enhanced machine learning for mental health prediction.

4. Prezi tool used for preparing the slides.



5. CREDIT Statement included in the report following <https://credit.niso.org/>



6. Grammarly is used for assessing our reporting language.

Menu

IEEE

Upgrade

DATA_245_QEML

Review

Share

Submit to IEEE

History

Layout

Chat

Source

Source (legacy)

Rich Text

1.png

2.png

3.png

4.png

5.png

Group_07_project.tex

Group_07.tex

heatmap.png

File outline

Evaluation metrics

Accuracy

Precision

Recall

F1 score

Model comparison

Languages Used

Tools used

Conclusion

Criteria met in Rubrics

Author Contributions

Acknowledgments

Acknowledgment

and especially for our classification problem. With some improvements in our approach this can be in future capable of a competition.

11. Innovation - QEML is a very new concept that needs to come into light. Our project is an implementation of this rarely explored concept to a social cause. We attempted to implement few algorithms that weren't previously available which could be seen as an area of future research.

12. Evaluation of Performance - The models are checked on an evaluation metric. Initially the correlations were checked which was a partial evaluation and later a comparison is made between models performance.

13. Teamwork - The whole team was involved in each phase of the project and had a weekly sync up to discuss progress towards the goal. A clear credit statement is mentioned in Appendix 8.

14. Technical difficulty - As the topic is pretty new, less number of research papers were available to refer to and not many have addressed the problem or use case, also this requires the implementation of complex python libraries which simulate Quantum Computing power. A very few traditional machine-learning algorithms are implemented using this QEML method hence the modeling phase took a reasonably longer time. We have tried to implement few other models which weren't available in the library which was pretty difficult and had to drop them.

15. Practiced pair programming - GitHub copilot is used as a plugin in VScode.

16. Practiced agile / scrum (1-week sprints) - We followed a 1 week sprints agile framework using JIRA. Weekly meetings were held to track our progress on the deliverables.

17. Used Grammarly for language - We have used Grammarly to check our document language and rules.

18. Slides - Prepared our presentation slides to cover important aspects of the project.

19. Demo - We have prepared a demo structure to follow for better presentation and show the working model.

20. Using LaTeX - We have used latex for formatting our report using the IEEE template. All the documentation is done using overleaf.

21. Used creative presentation technique - The presentation slides are prepared with Prezi tool with interesting animations.

22. Literature Survey - We have referred to papers and researches that cover the mental health predictions and classifications. All the literature is distributed into meaningful subsections and concepts are introduced appropriately. All the cited works are referred.

APPENDIX B

AUTHOR CONTRIBUTIONS

Sadakhya Narmur: Conceptualization, Methodology, Investigation, Writing - Original Draft, Neta Shaikh: Software, Validation, Data Curation, Writing - Review and Editing, Rahul Reddy Paripati: Visualization, Formal analysis, Validation, Writing - Review and Editing, Praveen Kumar Thammuru: Project administration, Investigation, Writing - Review and Editing.

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