# Work Explanation

* Data Cleaning and Preprocessing: The first step in the implementation process would be to clean and preprocess the dataset. This involves removing any missing or duplicate values, converting categorical variables into numerical values, and scaling the data.
* Feature Selection: The next step would be to select the most relevant features that can help in predicting the type of tumor. This can be achieved using statistical methods such as correlation analysis or machine learning-based feature selection algorithms.
* Model Selection: Once the features have been selected, the next step would be to choose an appropriate machine learning model that can predict cancer likelihood accurately. This can be done by comparing the performance of various models such as decision trees, logistic regression, support vector machines, and neural networks. For this model, we found Logistic Regression gave us the best accuracy.Logistic regression is a classification algorithm that predicts a binary outcome based on a series of independent variables.
* Model Training: After selecting the model, the next step would be to train the model on the dataset. This involves dividing the data into training and testing sets, tuning the model's hyperparaeters, and optimizing the model's performance.
* Model Evaluation: Once the model has been trained, the next step would be to evaluate its performance using various metrics such as accuracy, precision, recall, and F1-score. This can help determine if the model is performing well or needs further improvement.
* Deployment: After evaluating the model's performance, the final step would be to deploy the model in a real-world setting. This can involve integrating the model with an existing healthcare system or developing a new software application for cancer diagnosis.
* Continuous Improvement: Finally, the implementation process should include a continuous improvement phase, where the model's performance is monitored, and the model is updated periodically to incorporate new data and improve its accuracy.