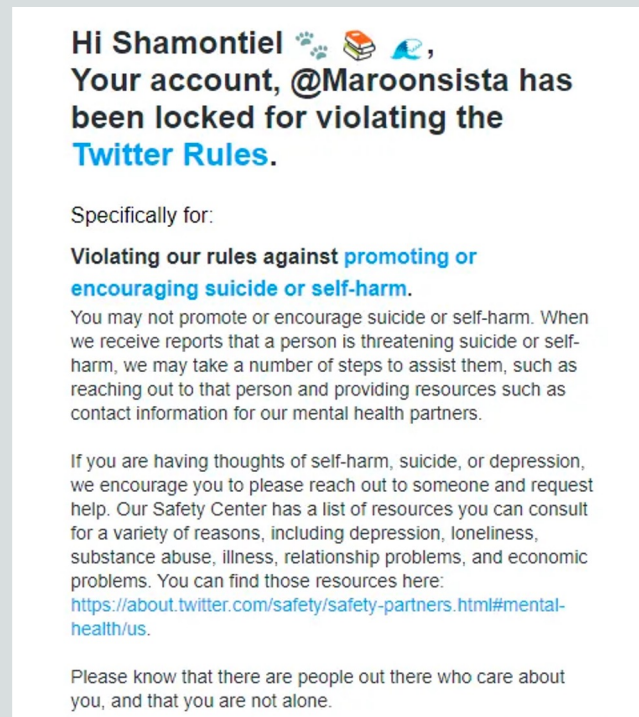
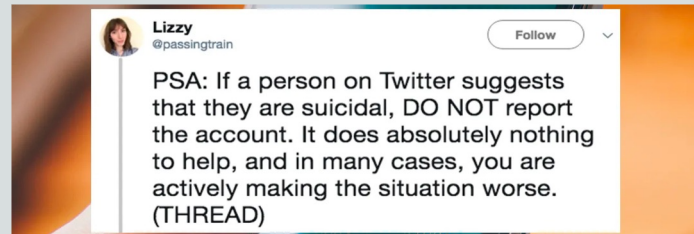


Problem Statement

Every year, around 800,000 people die of suicide (SAVE, n.d). Unfortunately, many signs of suicide are easy to miss (Ellis, 2019). **This is especially seen on social media, where mentions of suicide and suicidal situations are often identified and handled incorrectly (Peterson, 2022).**

Research

- Suicidality is a spectrum, and there are five main levels of risk: supportive, indicator, ideation, behavior, and attempt. Each category requires a different type of care.
- Social media does not handle suicidal situations in the correct way (does not identify correctly and disregards the spectrum).



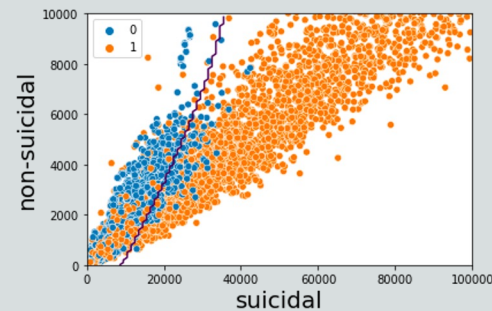
Procedure

- The first part of this project was creating the ML models.
- The iOS application was then created The finalized model was then imported and implemented into the app project. After the application was finalized, data was collected and analyzed.



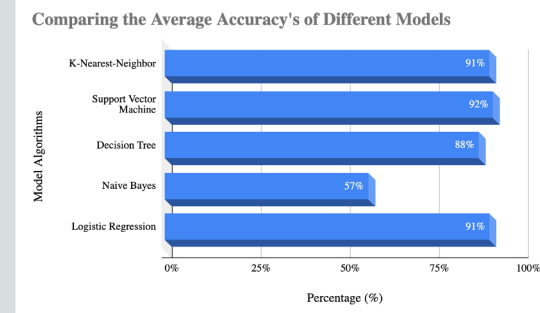
Data Analysis

- Three main metrics are collected for each model: accuracy, recall, and precision.
- Five main models were created for this problem.
- The SVM model was chosen for this project because it has higher accuracy than the other models.



	precision	recall	f1-score	support
0	0.88	0.99	0.93	3824
1	0.99	0.82	0.90	3015
accuracy			0.92	6839
macro avg	0.93	0.91	0.92	6839
weighted avg	0.93	0.92	0.92	6839

	precision	recall	f1-score	support
0	0.88	0.99	0.93	1297
1	0.98	0.82	0.90	983
accuracy			0.92	2280
macro avg	0.93	0.91	0.91	2280
weighted avg	0.92	0.92	0.92	2280



TalkToMe: An Application that Detects and Handles Suicidal Intentions on Social Media Through ML

