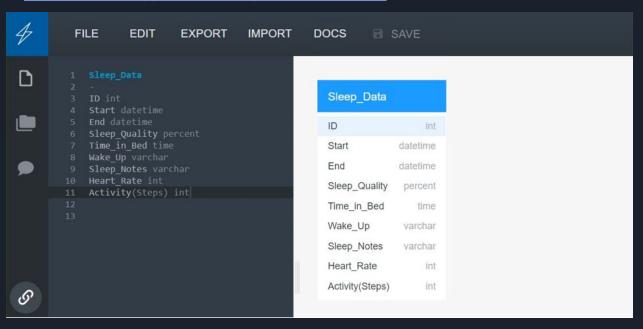
Sleep Data Analysis

Team: Megan, Misty, Jordan, Laura, Danny

Our Data Set

https://www.kaggle.com/danagerous/sleep-data



How will I feel when I wake up?

Plan: Build a website for people to predict how they feel when they wake up given the other parameters in the data set being imputed by the user. The output would be an emoji.

Issues: During preprocessing we saw our data set would be very small and would not do well with multiple models.

Start	Oser input, 24-nr time
End	User input, 24-hr time
Heart Rate	User input, if applicable (smart watch required)
Activity	User input, if applicable (step counter required)
Stressful Day	User input, checkbox
Drank coffee	User input, checkbox
drank tea	User input, checkbox
ate late	User input, checkbox
Worked out	User input, checkbox
SUBMIT	User input, BUTTON
Sleep Quality	Computed based on Start/end time
Time in Bed	Computed based on Start/end time
Predicted mood!	EMOJII

Change of course....New Plan! New Question! What was the quality of my sleep?

New plan: We will still build a website, but instead of predicting how we will wake up feeling, we predict the quality of the sleep that we had.

Pros: We can use more of our data.

More machine learning models are at our disposal.

Start	User input, 24-hr time
Time in Bed	Computed based on Start/end time
Heart Rate	User input, if applicable (smart watch required)
Activity	User input, if applicable (step counter required)
Stressful Day	User input, checkbox
Drank coffee	User input, checkbox
drank tea	User input, checkbox
ate late	User input, checkbox
Worked out	User input, checkbox
How'd you feel when you woke up? User input, dropdown menu	
SUBMIT	User input, BUTTON
Predicted Sleep quality! Sleep quality % output	

Tableau Story

Tableau Story



Our Database of Choice: MongoDb Atlas

Pros: I Megan's Org - 2021-... ▼ 👶 Access Manager ▼ Billina All Clusters Free, simple, Realm **Charts** Project 0 **Atlas** High speed, **DEPLOYMENT** MEGAN'S ORG - 2021-12-09 > PROJECT 0 flexible **Database Deployments** Databases Data Lake Q Find a database deployment... ■ DATA SERVICES Triggers GetSleepy View Monitoring Browse Collections Connect Data API PREVIEW **⋒** SECURITY • R 0 Connections 0 o In 0.0 B/s Data Size 287.6 KB Database Access W 0 Out 0.0 B/s Network Access Last 19 days Last 6 hours Last 6 hours Last 6 hours 100.0/s 100.0 100.0 B/s 512.0 MB Advanced

Currently.....

Our group is trying out different machine models to see what models work well and which don't.

We are also taking time to dig into why certain models do not work so well for our data set.