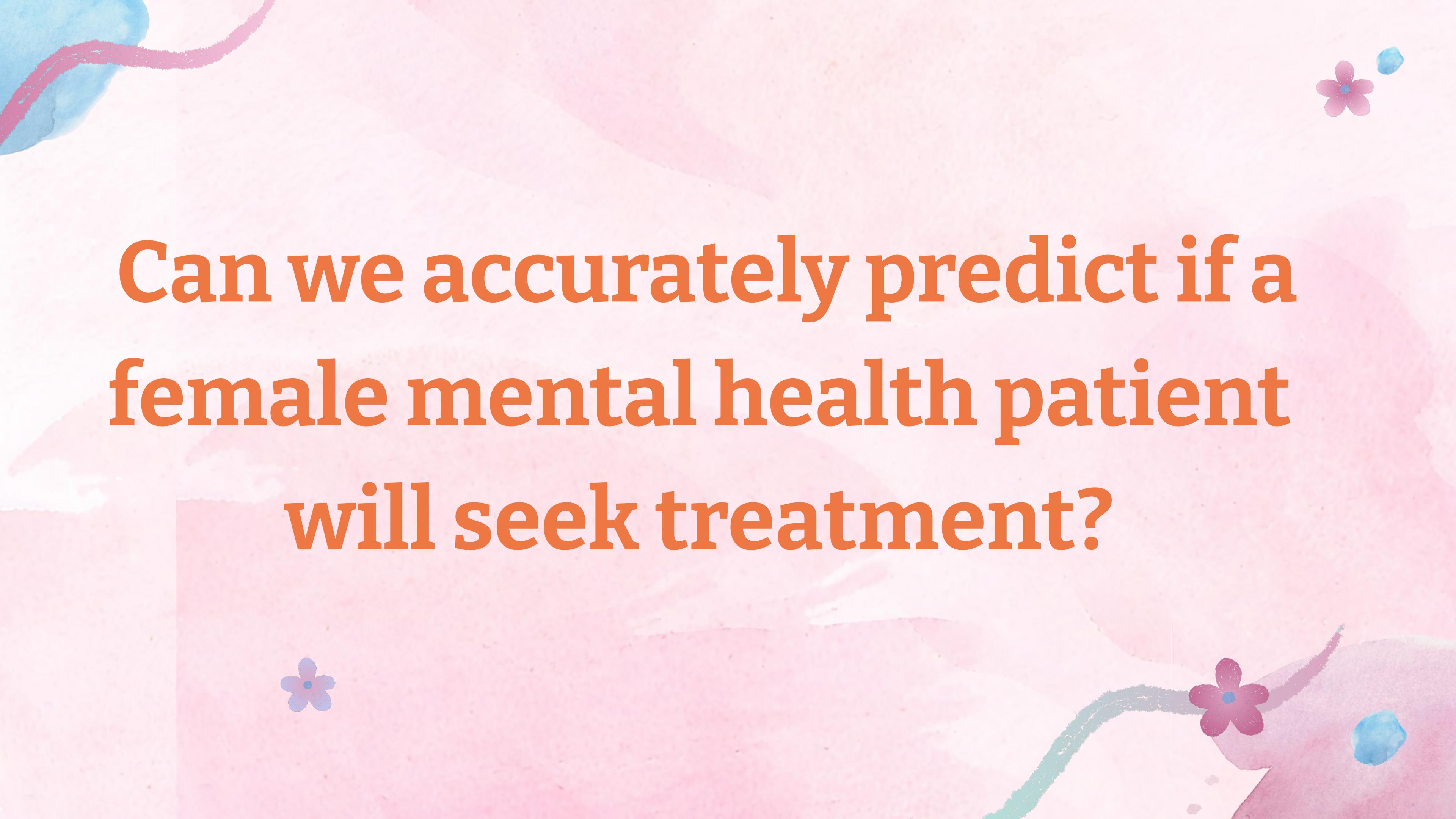


Data Analysis of Women's Mental Health





Can we accurately predict if a
female mental health patient
will seek treatment?

Target Variable

Did the patient receive
Treatment?

Our Team



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Brooke Long

Heather Aubry

Isabella Malek

McKenna O'Bryant

Data Cleaning

Dropped columns:

Timestamp, Country, Occupation, Self-Employed, Mental_Health_History, Coping_Struggles, Work_Interest, Social_Weakness, and Care_Options

Dropped rows: All rows that had male patients

	Gender	family_history	treatment	Days_Indoors	Growing_Stress	Changes_Habits	Mood_Swings	
0	0		1	0	1	0	1	1
1	0		0	0	1	0	1	1
2	0		0	0	1	0	1	1
3	0		0	0	1	0	1	1
4	0		0	0	1	0	1	1
...
52509	0		1	0	2	1	1	0

Data Cleaning

- ❖ We converted categorical data to binary for rows:
 - Gender
 - Treatment
 - Changes in Habit
 - Family History
 - Growing Stress
 - Mood Swings

We represented Yes with 0's and No with 1's

- ❖ For Days Indoors we converted the following:
 - 0- Going out Everyday
 - 1- for 1- 14 days
 - 2- 15-30 days
 - 3- 31-60 days
 - 4- 2 or more months

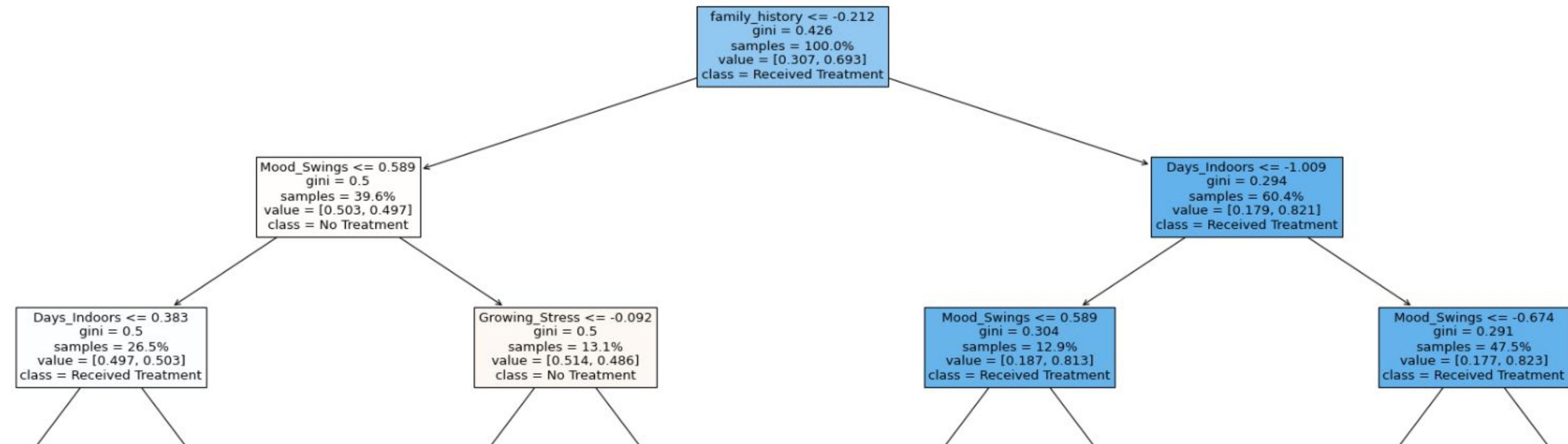
Training

Total Data Points:

- ★ 24,000+
- ★ Used 70% of data points

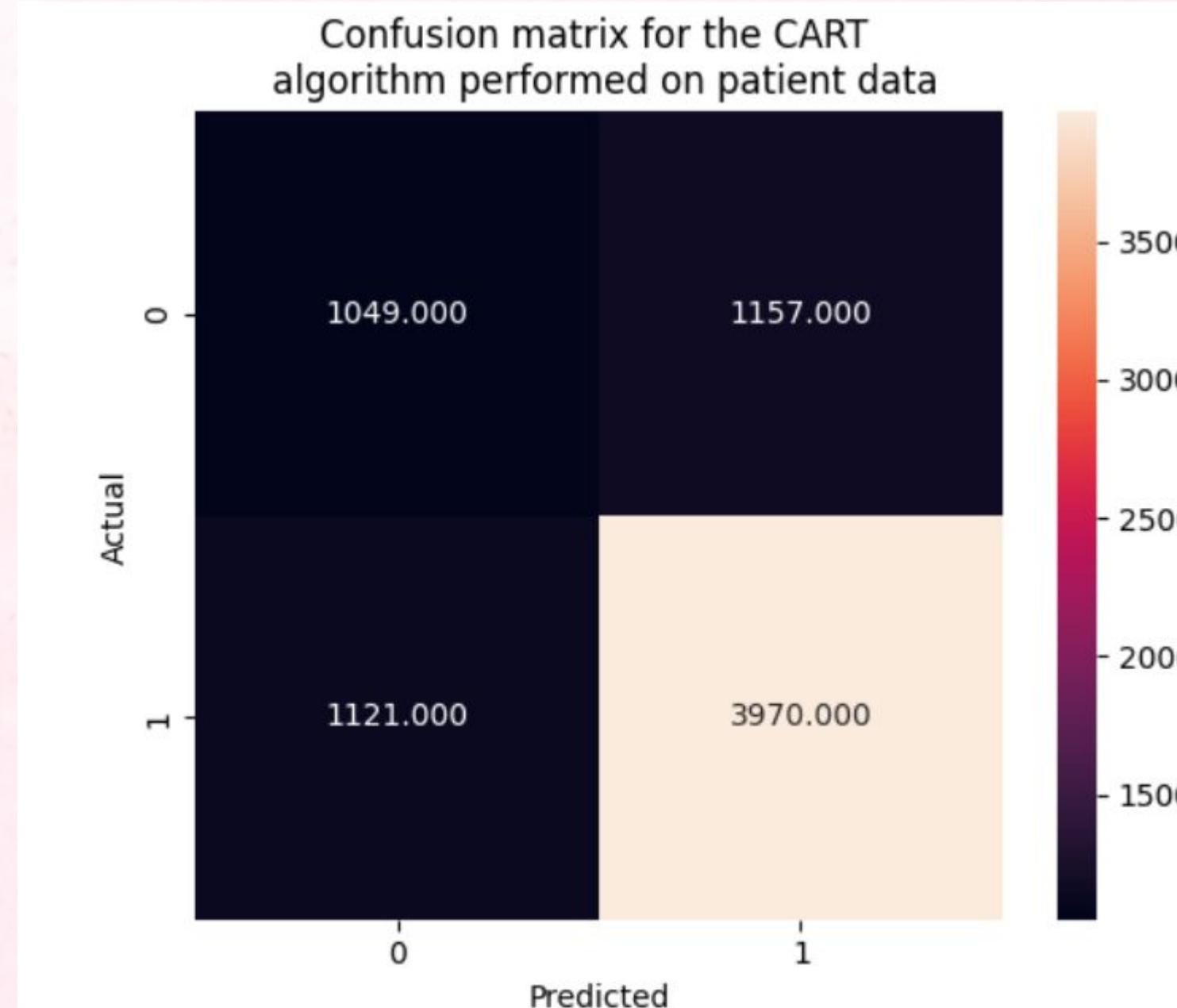
Model Selected: Decision tree

The classes defined as received as 'Received treatment' and 'No treatment'



Validation

Confusion Matrix



We can predict the accuracy
whether someone can receive
treatment with a
0.6878169110593395 Accuracy



Thank you!