

Subspace descriptor

If Age < 50 and Male = Yes:

If Past-Depression = Yes and Insomnia = No and Melancholy = No, then Healthy

If Past-Depression = Yes and Insomnia = Yes and Melancholy = Yes and Tiredness = Yes, then Depression

If Age \geq 50 and Male = No:

If Family-Depression = Yes and Insomnia = No and Melancholy = Yes and Tiredness = Yes, then Depression

If Family-Depression = No and Insomnia = No and Melancholy = No and Tiredness = No, then Healthy

Default:

If Past-Depression = Yes and Tiredness = No and Exercise = No and Insomnia = Yes, then Depression

If Past-Depression = No and Weight-Gain = Yes and Tiredness = Yes and Melancholy = Yes, then Depression

If Family-Depression = Yes and Insomnia = Yes and Melancholy = Yes and Tiredness = Yes, then Depression

Decision
logic rules

If Exercise = Yes and Smoking = No:

If Rapid-Weight-Gain = Yes and Tiredness = Yes and Melancholy = Yes and Insomnia = Yes and Age < 50, then Depression

If Tiredness = Yes and Melancholy = Yes and Age \geq 50, then Depression

If Tiredness = No and Melancholy = No, then Healthy

If Smoking = Yes:

If Rapid-Weight-Gain = Yes and Melancholy = Yes, then Depression

If Tiredness = No and Insomnia = No and Melancholy = No and Rapid-Weight-Gain = No, then Healthy

If Insomnia = Yes and Past-Depression = Yes and Tiredness = Yes, then Depression

Default:

If Past-Depression = Yes and Tiredness = Yes and Melancholy = Yes, then Depression

If Past-Depression = No and Rapid-Weight-Gain = Yes and Tiredness = No and Melancholy = Yes, then Depression

If Family-Depression = Yes and Age \geq 50 and Male = No and Tiredness = Yes, then Depression

If Past-Depression = No and Melancholy = No and Rapid-Weight-Gain = No and Tiredness = No, then Healthy

If Melancholy = No and Overweight = No and Insomnia = No and Tiredness = No, then Healthy

Explanation of the Black Box Model
(No user input)

Explanation of the Black Box Model
w.r.t. **Exercise & Smoking**