

Diagnosing Common Reasons for Car Failure

Eugene Lee, Tevin Vu, Victor Tran

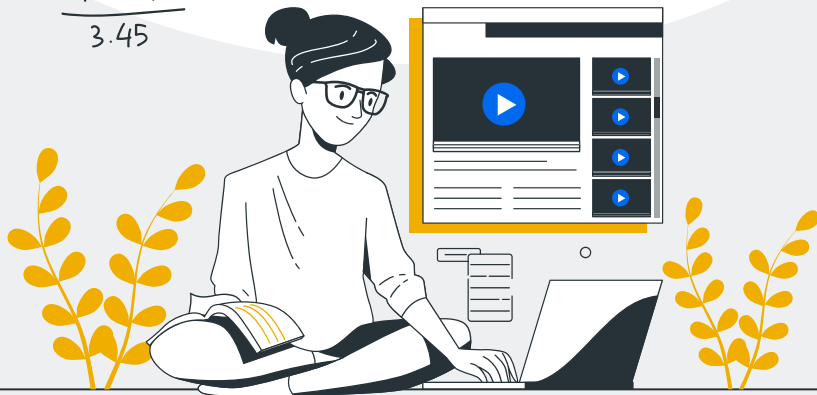
○

◇

$$\frac{10+17}{3.45}$$

$$C = \frac{B^3 + C^2 + A}{3BA}$$

○



◇

$$\left(\frac{C-B}{3-D} \right) = \left(\frac{A}{3B} \right) = \frac{3C(2)^4}{X+Y+C}$$

○

◇

$$\frac{\sqrt{2.8}}{3+2^+}$$



01

Overview

$$\frac{4+6+(2\sqrt{3})}{\sqrt{276}}$$

Data

<https://www.ifitjams.com/starting.htm>



$$\frac{\sqrt{2.8}}{3+2^+}$$

$$\frac{10+17}{3.45}$$

$$\frac{4+6+(2\sqrt{3})}{\sqrt{276}}$$



$$\frac{\sqrt{2.8}}{3+2^+}$$

Why Prolog

Backtracking, more support than
CLIPS, etc...



$$\frac{10+17}{3.45}$$

$$\frac{4+6+(2\sqrt{3})}{\sqrt{276}}$$

Structure

Separate facts & inferencing logic



$$\frac{\sqrt{2.8}}{3+2^+}$$



$$\frac{10+17}{3.45}$$

$$\frac{\sqrt{2.8}}{3+2^+}$$



02

Demo





$$\frac{4+6+(2\sqrt{3})}{\sqrt{276}}$$



$$\frac{\sqrt{2.8}}{3+2^+}$$

Lessons Learned

Original iteration was “C++ like,” trying to mimin nested if statements.

New iteration appropriately separates the fact from the logic.
Pattern matching, unification, backtracking, and lists

$$\frac{10+17}{3.45}$$

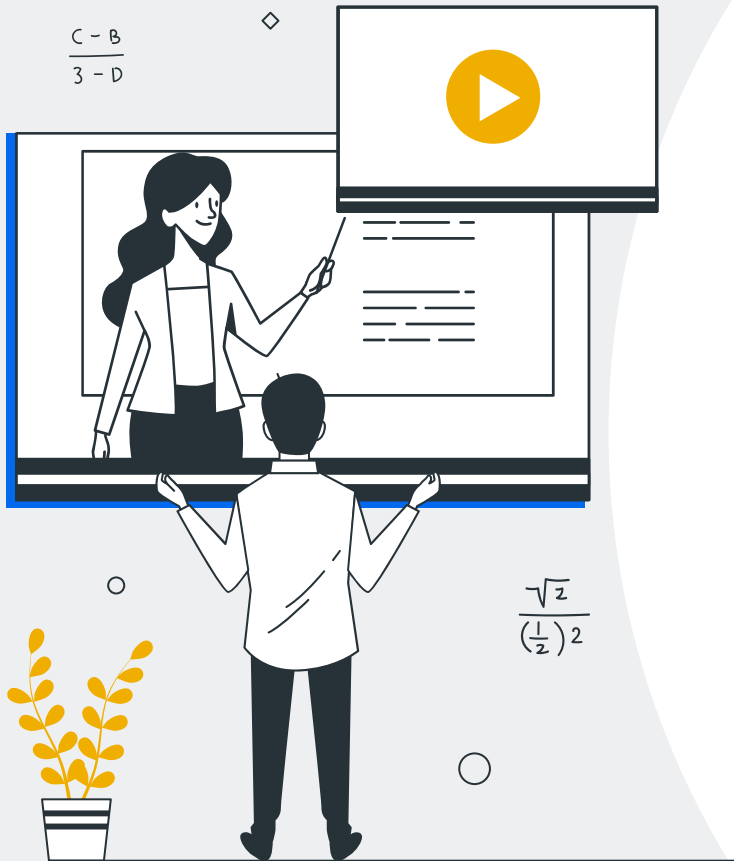


$$\frac{\sqrt{2.8}}{3+2^+}$$



03

Questions



Thanks

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon**, and infographics & images by **Freepik**

Please keep this slide for attribution