Working Memory Element (WME) Decay in Soar

Michael James

University of Michigan

Introduction

- Extension of work done by Ronald Chong
- Trying to improve efficiency of implementation

Overview

- Forget WMEs that have not been recently used
- This type of effect is normal in human cognition
- Step towards making memory in Soar more psychologically plausible

Implementation

- Controlled using a run-time flag
- Only affects o-supported WMEs
- Each WME has an activation level which decays with time
- When a WME created or tested, activation is reset
- When activation decays past some threshold, the WME is removed