Personal Scheduling Assistant (PSA)

Automated & Ubiquitous Event Scheduling for Digital Voice Assistants

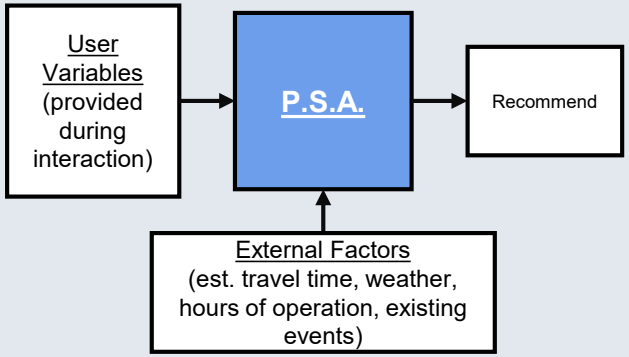
Developed by Daniel Ruiz and John English, CS248A, Winter 2019, UC Irvine

Literature Review Key Points

- General public preference for digital > analogue calendars (Brush et al, 2005).
- Most scheduling research concerns optimizing for organizations (Abbaspour, 2011) or large events (Cohen et al, 2017).
- Limited research for “ubiquitous” personal scheduling (Cranshaw et al, 2017).
- Digital voice assistants are largely underutilized in most homes (Bentley et al, 2018; Prasad, 2019).
- Our Target:

Concept & Design

“The very act of planning robs us of time that could be spent doing.”



- Individual Events Focused - optimizing the planning of daily chores/obligations
- Time saving mechanisms:
  - Automate planning process
  - Schedule events for “better than random” optimal white space gain
  - Eliminate interaction with multiple apps via API

Implementation

- Python Prototype
  - Queries user for input (similar to existing VAs)
  - Computes optimal event placement based on user variables, external factors, & user-defined priorities.
  - Simulates interaction with VA to assist with future translation to different platforms