

Explicable Planning and Replanning for Human-in-the-loop Decision Support

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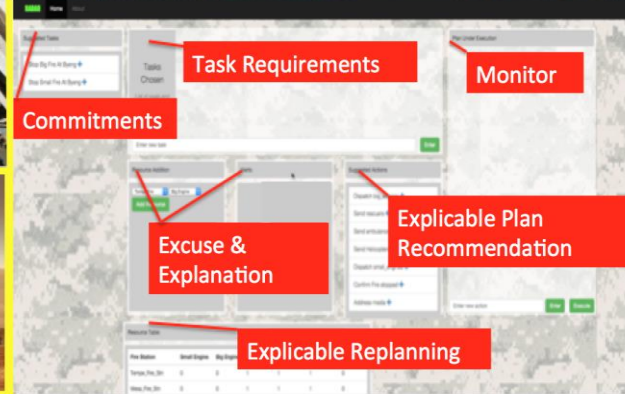
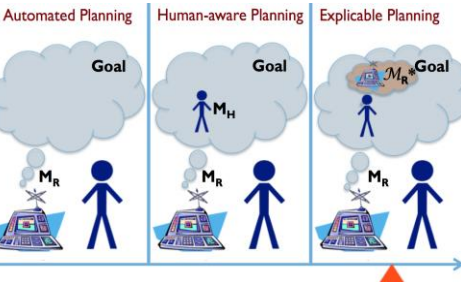
Title and Research Team

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Research Objectives

- Develop, implement and evaluate a decision support system, READS, that supports both explicable planning and replanning

- Explicable automation for decision support
- Remove restrictive assumptions compared to SOA
- Basic research (TRL 1)



Approach

- *Recommending* Explicable Plans that are easily understandable
- *Explain* plan recommendations via excuse and explanation generation
- *Replanning* to accommodate previous commitments of the humans
- Integration and evaluation via human factors

Use-case scenarios and key components in a mockup READS system that are relevant to NASA for decision support

Potential Impact

- Significantly extend the current planning technologies
- Facilitate more effective decision support
- Represent an important step to realize automated systems with humans in the loop.