

# Team Mental Elf

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# Our Vision

- Promote accurate information on mental health conditions
- Engage users in naturalistic conversation
- Break stigma surrounding the discussion of mental health

# Sample Dialogue

**Mental Elf:** Hello! I am Mental Elf. I like discussing mental health conditions and advocating for mental health awareness. What would you like to discuss today?

**User:** Can we talk about autism?

**Mental Elf:** Did I hear you correctly that you would like to discuss an overview of autism spectrum disorder?

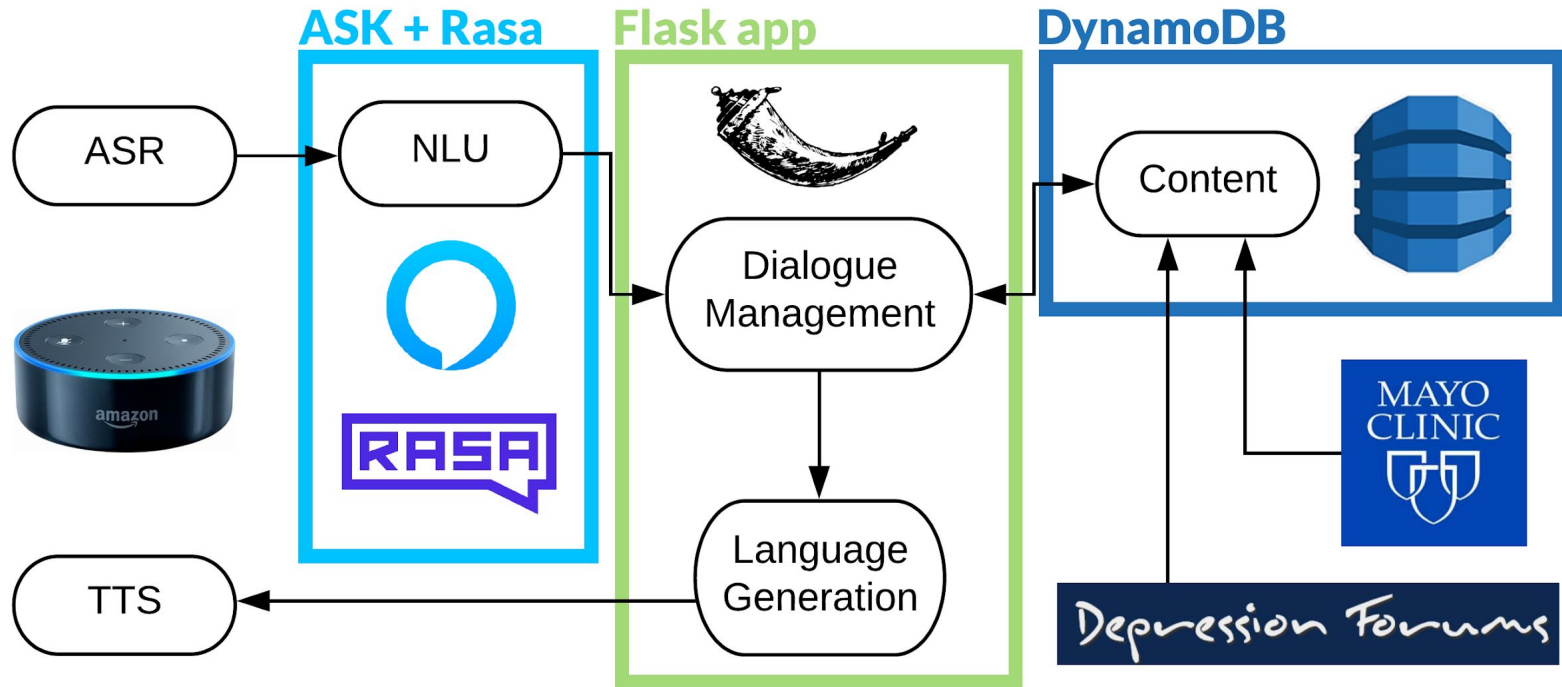
**User:** Yes, I would.

**Mental Elf:** Autism spectrum disorder is a condition related to brain development that impacts how a person perceives and socializes with others, causing problems in social interaction and communication.

# Specific Capabilities

- Give an overview of a condition
- Give treatment options for a condition
- Give symptoms of a condition
- Provide an anecdote from a person living with a condition
- Elicit user opinions about provided information

# System Architecture



# Data Sourcing

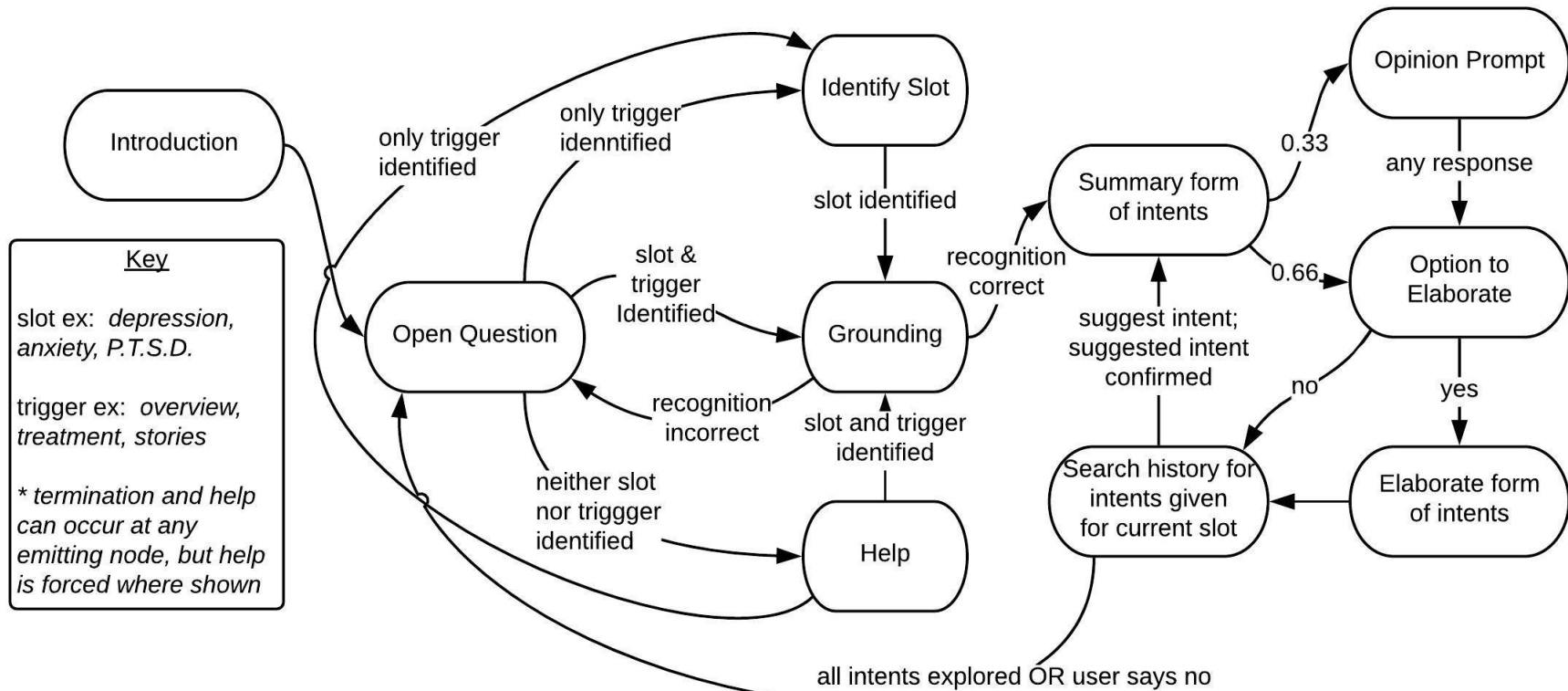
## Sources:

- Mayo Clinic
- [depressionforums.org](http://depressionforums.org), a public mental health forum

## Conditions Covered:

Autism, Alcohol use disorder, Kleptomania, Postpartum depression, PTSD, Social anxiety disorder, ADHD, Atypical depression, Schizophrenia, Binge-eating disorder, Bulimia, Borderline personality disorder, Dissociative disorders, Panic attacks, Panic disorders, Rett syndrome, SAD, Bipolar disorder, Tourette syndrome

# Dialogue Management



# Performance Evaluation

## Testing:

- 3 conversations elicited from team
- 3 conversations elicited from novel users

## Error Types:

- Failure to successfully fill slots on rephrases
- Frustration at fixed dialogue flow

## Virtues:

- User encouraged to explore many veins of inquiry
- Run-of-the-mill/expected utterances handled well

## Improvements:

- FSM-style dialogue not naturalistic
- Out of domain utterances unhandled (renders 'help')
- Custom NLU



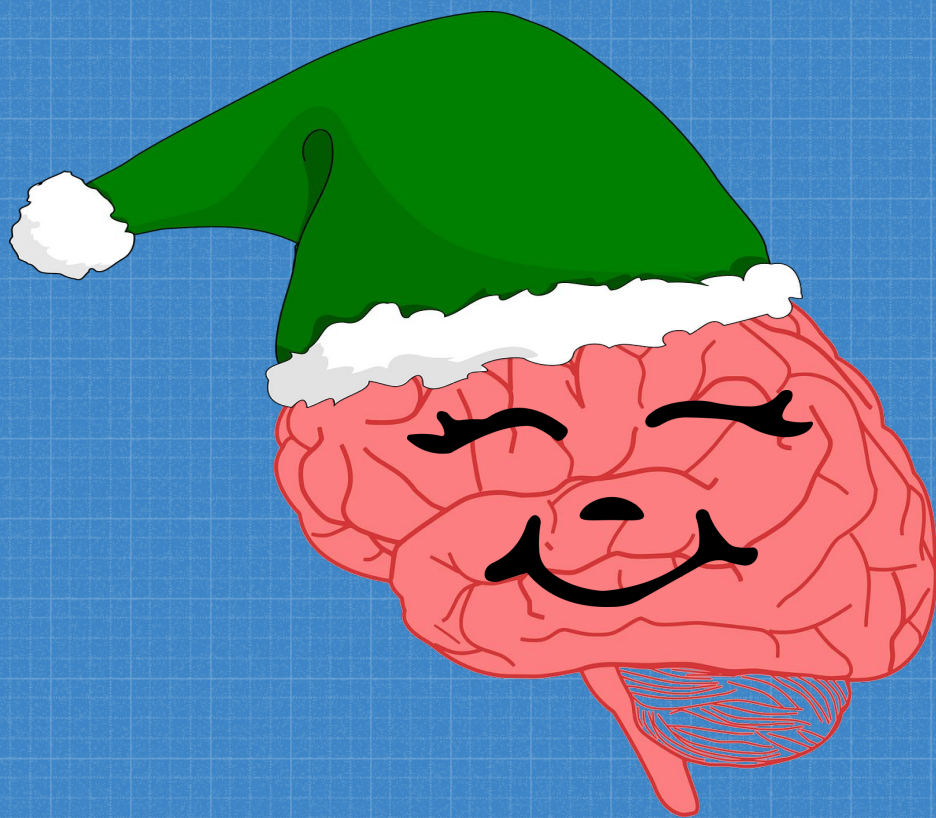
# Next Steps

- Expand data sources
- Allow for more user-oriented control of dialogue management
- Perform summarization on long anecdotes
- Include broader range of topics (e.g., stigma, prevalence, etc.)
- Full utilization of Amazon comprehend
- Point users to relevant online resources or local healthcare advocates
- Tailor experience to each individual user - update privacy policy :p



# Demonstration

Please be kind



Thank you!