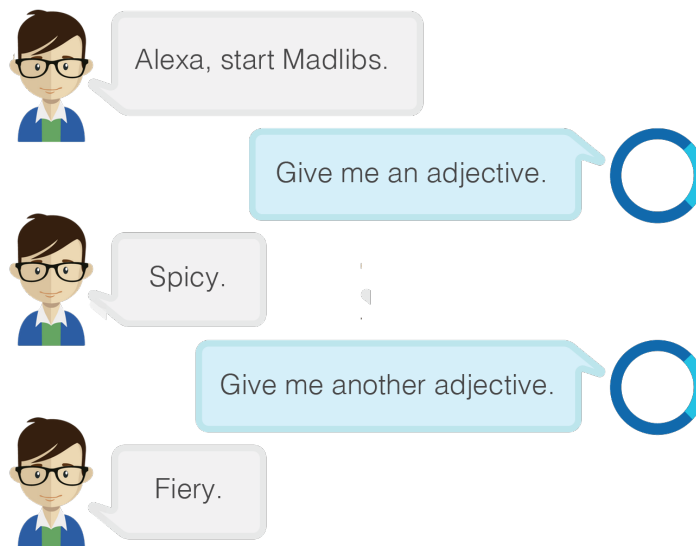


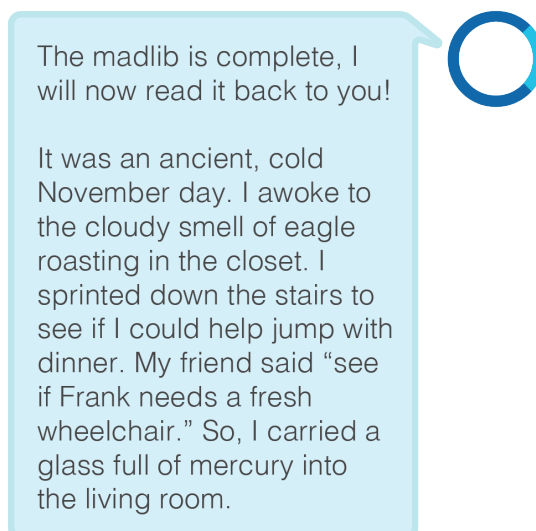
# Sessions & Voice User Interface Design

## Sessions & Voice User Interface Design


## Madlib Builder 1/4



## Madlib Builder 2/4



# Madlib Builder 3/4



Help.

Give me another adjective.

Speak an adjective to add it to the madlib. An adjective is a word that modifies a noun to make it more specific: rotten, cloudy, or cool are all adjectives. What adjective would you like?

# Madlib Builder 4/4

Home

Less ^

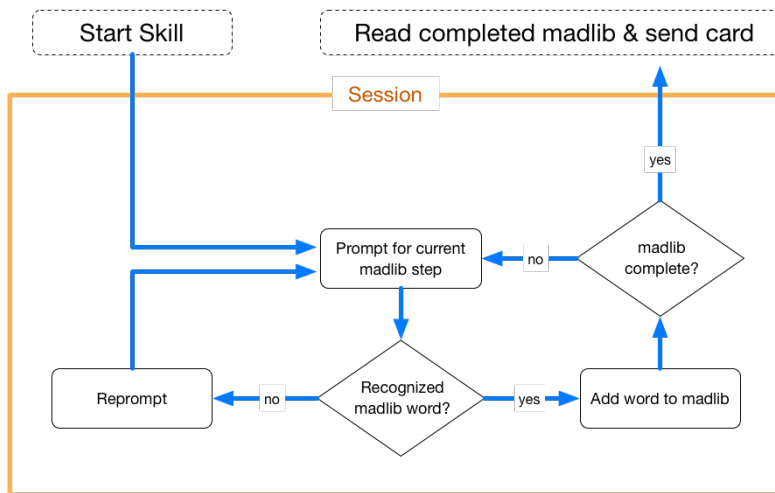
## A Cold November Day

Madlib Builder

It was a um, cold November day. I awoke to the cold smell of Parrish roasting in the bathroom downstairs. I rabbit down the stairs to see if I could help hustle with dinner. My friend said, "See if bobby" needs a fresh car." So I carried a tray of glasses full of bourbon into the camping room. When I got there, I couldn't believe my arms! There were pizzas possibly on the cancel!

More v

# Designing the Voice User Interface



## VUI Invocation Types

- **Full Intent** - all info required to complete request for Intent
- **Partial Intent** - only some info passed in to complete the Intent, needs more info

# VUI Invocation Types : Full Intent

- **Full Intent** - all info required to complete request for Intent

"Alexa, ask Hello Alexa to Say Hello."

"Alexa, ask Airport Info for Flight Delays at ATL."

"Alexa, ask Fantasy Names for an Elf Name."

"Alexa, tell Lucky 8-Ball to get my fortune."

# VUI Invocation Types : Partial Intent

- **Partial Intent** - only some info passed in to complete the Intent, needs more info needs to continue the interaction to complete the request.

"Alexa, ask Madlibs to start a Madlib." - **which madlib?**

"Alexa, ask Horoscopes for my horoscope." - **what's your sign?**

# Verifying the Intent's Values

Verifying a Full Invocation is a good VUI practice to ensure necessary values are present.

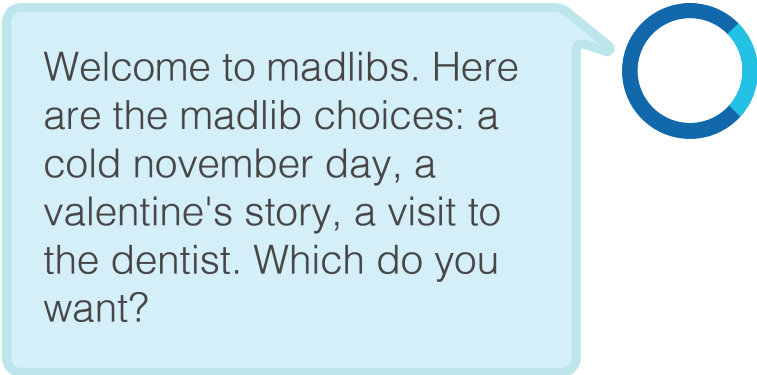
Example:

```
var airportCode = req.slot('AIRPORTCODE');
var reprompt = 'Tell me an airport code to get delay information.';
if (_.isEmpty(airportCode)) {
  var prompt = 'I didn\'t hear an airport code. Tell me an airport code.';
  res.say(prompt).reprompt(reprompt).shouldEndSession(false);
} else {
  var faaHelper = new FAADDataHelper();
  faaHelper.requestAirportStatus(airportCode).then(function(airportStatus) {
    console.log(airportStatus);
    res.say(faaHelper.formatAirportStatus(airportStatus)).send();
  });
};
```

## VUI Guidelines 1/5

**Make it clear user needs to respond**

Do:



Welcome to madlibs. Here are the madlib choices: a cold november day, a valentine's story, a visit to the dentist. Which do you want?

# VUI Guidelines 1/5

**Make it clear user needs to respond**

Don't:

Welcome to madlibs. You can choose a cold november day, a valentine's story, a visit to the dentist.



# VUI Guidelines 2/5

**Avoid overwhelming users with too many choices**

Do:

Here are the madlib choices: a cold november day, a valentine's story, a visit to the dentist. Which do you want?



## VUI Guidelines 2/5

**Avoid overwhelming users with too many choices**

Don't:

Welcome to madlibs. To select a cold november day say "a cold November day", for a valentine's story say "a valentines story", for a dentist madlib, say "a trip to the dentist". You can also say cancel to exit the skill, or help to get more information. What would you like to do?

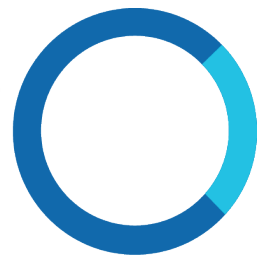


## VUI Guidelines 3/5

**Obtain one piece of information at a time**

Do:

Give me an adjective.





## VUI Guidelines 3/5

**Obtain one piece of information at a time**

Don't:

Give me an adjective, an adverb, a noun, another noun, a family members name, and a type of a liquid.



## VUI Guidelines 4/5

**Offer contextual help**

Good:



Help.

Give me another adjective.

Speak an adjective to add it to the madlib. An adjective is a word that modifies a noun to make it more specific: rotten, cloudy, or cool are all adjectives. What adjective would you like?



# VUI Guidelines 5/5

## Offer contextual help

Bad:



# AMAZON.StopIntent

# Keeping Track of Session State

```
var MADLIB_BUILDER_SESSION_KEY = 'madlib_builder';
app.intent('madlibIntent'
function(request, response) {
    var madlibHelperData = request.session(MADLIB_BUILDER_SESSION_KEY);
    if (madlibHelperData === undefined) {
        madlibHelperData = {};
    }
    new MadlibHelper(madlibHelperData);
    madlibHelper.currentStep++;
    response.say('Give me ' + madlibHelper.getPrompt());
    response.reprompt('I didn\'t hear anything. Give me ' + madlibHelper.getPrompt() + ' to continue.');
```

**response.shouldEndSession(false);**

**response.session(MADLIB\_BUILDER\_SESSION\_KEY, madlibHelper);**

```
    }
};
```

## Tidying up

```
var MADLIB_BUILDER_SESSION_KEY = 'madlib_builder';

var getMadlibHelper = function(request) {
    var madlibHelperData = request.session(MADLIB_BUILDER_SESSION_KEY);
    if (madlibHelperData === undefined) {
        madlibHelperData = {};
    }
    return new MadlibHelper(madlibHelperData);
};
```

# Implementing Contextual Help

## Implementing Contextual Help 1/2

```
app.intent('AMAZON.HelpIntent', {},
function(request, response) {
    var madlibHelper = getMadlibHelper(request);
    var help = 'Welcome to madlibbuilder. ' +
        'To start a new madlib, say create a madlib.' +
        'You can also say stop or cancel to exit.';
    if (madlibHelper.started) {
        help = madlibHelper.getStep().help;
    }
    response.say(help).shouldEndSession(false);
});
```

# Implementing Contextual Help 2/2

**MadlibHelper.js:**

```
steps: [  
  {  
    value: null,  
    template_key: 'adjective_1',  
    prompt: 'an Adjective',  
    help: 'Speak an adjective to add it to the madlib. What adjective would you like?'  
  },  
  {  
    value: null,  
    template_key: 'type_of_bird',  
    prompt: 'a Type of bird',  
    help: 'Speak a type of bird to add it to the madlib. What type of bird would you like?',  
  },  
  {  
    value: null,  
    template_key: 'room_in_house',  
    prompt: 'a name of Room in a house',  
    help: 'Speak a name of a room in a house. What room in a house would you like?',  
  },  
  ...  
]
```

# Creating a Card 1/2

Home

Less ^

A Cold November Day

Madlib Builder

It was a um, cold November day. I awoke to the cold smell of Parrish roasting in the bathroom downstairs. I rabbit down the stairs to see if I could help hustle with dinner. My friend said, "See if bobby" needs a fresh car." So I carried a tray of glasses full of bourbon into the camping room. When I got there, I couldn't believe my arms! There were pizzas possibly on the cancel!

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## Creating a Card 2/2

```
response.card(title, body, subtitle);
```

```
if (madlibHelper.completed()) {  
  var completedMadlib = madlibHelper.buildMadlib();  
  console.log('madlib completed! Result: ' + completedMadlib);  
  response.card(madlibHelper.currentMadlib().title, completedMadlib, 'Madlib Builder');  
  response.say('The madlib is complete! I will now read it to you. ' + madlibHelper.buildMadlib()),  
  response.shouldEndSession(true);  
}
```

## Sessions & Voice User Interface Design