Conversational UI with Drupal

Piyuesh Kumar
@piyuesh23

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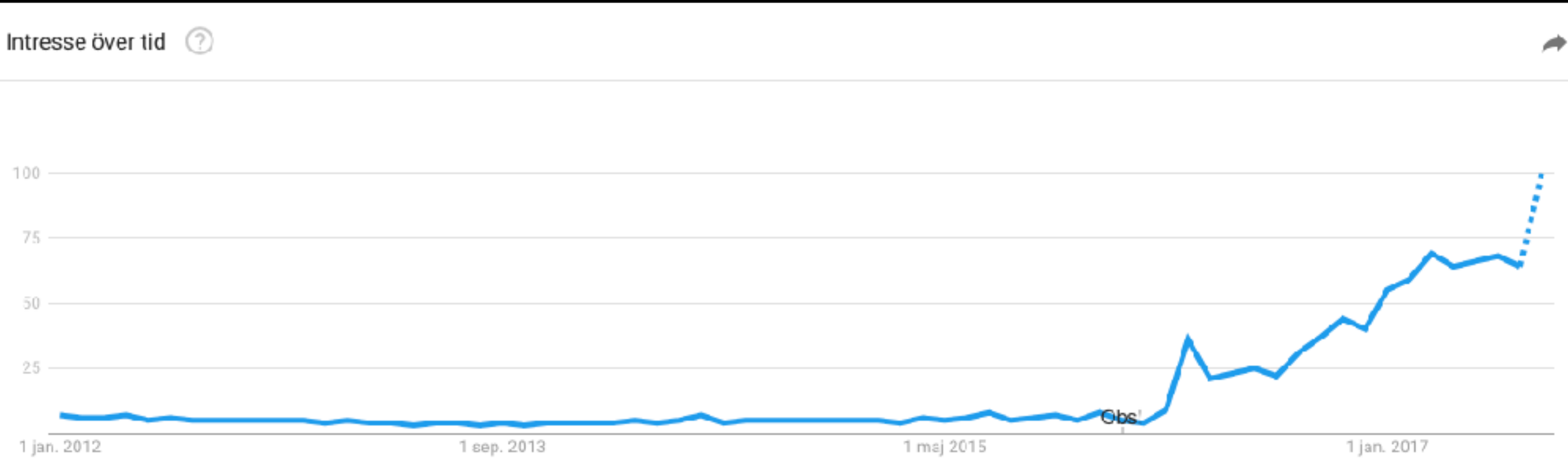
Key Pointers

- Introduction & state
- Major Frameworks
- Tips
- Tooling & Pre-requisites
- Key Concepts
- Integration with Drupal
- POC demo of integration with Commerce
- Future Extension

Introduction

Google Trends data for search term “chatbot”, for august 2012–2017



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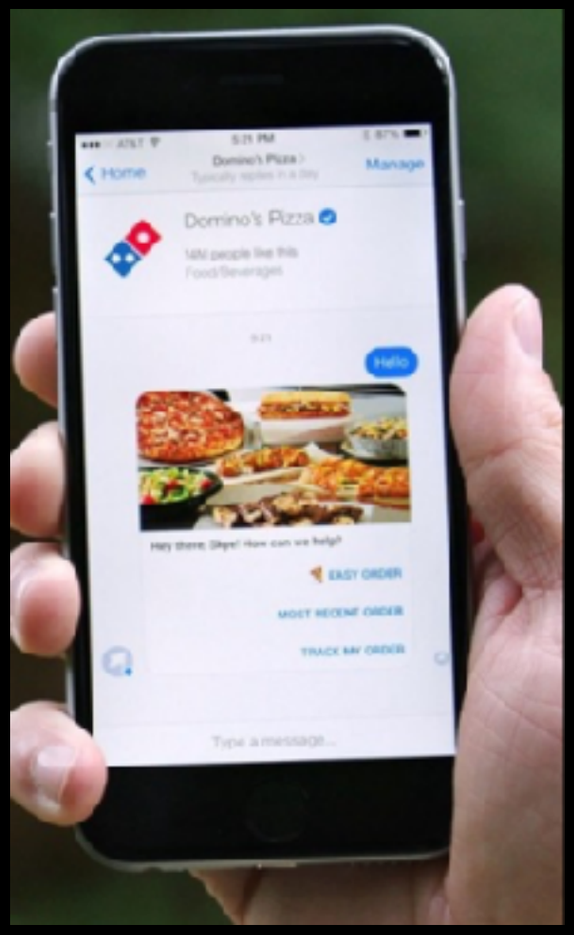
Evolution



Alexa, Please order a [chicken Mexicana] [cheese burst] pizza for me

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“According to Gartner, by 2020, 30% of web browsing sessions will be done without a screen.”

Major Frameworks in Market

api.ai

IBM Watson

Wit.AI

. . .

Tips around designing a conversational UI

Tip#1: Clear Flow

- What user/customer problem will it solve efficiently?
- How will it benefit the target audience and you?

- Improve discoverability by providing hints
- Simplify data entry
- Avoid asking open-ended and rhetorical questions

  e.g.,

  Closed-ended question (e.g. “What color is your shirt?”)

  Open-ended question (e.g. “Why did you choose that color for your shirt?”)

Tip#2: User-Control

- Don’t leave the user hanging
- Graceful error handling
- Provide undo/cancel/reset
- Confirm by asking/Not stating

Tip#3: Personality

- Keep it as human as possible

```
<speak>
    I want to tell you a secret.
    <amazon:effect name="whispered">I am not a real human.</amazon:effect>.
    Can you believe it?
</speak>
```

```
<speak>
    I already told you I
    <emphasis level="strong">really like</emphasis>
    that person.
</speak>
```

Tip#4: Cognitive load

- Be concise when interacting with users
- Prioritized & Personalized information
- Avoid jargon

Tools & Pre-requisites

- Strong understanding of REST/Web-services & authorization methods
- Understanding around basic terminologies: Intent, Context, Utterances
- Basic sense/ research around designing interfaces for different apps.

Key Concepts

Activation

Alexa,
Ask Drucom
To

Invocation

Add [red wine] to my cart

Slot

Utterance & Intent

Activation

- Possible names: Alexa, Echo, Amazon
- Doesn’t allow custom names.
- Configurable per device

Invocation

- Open, Launch, Ask + {skill name}
- Again, fixed keywords. Cannot add a custom invocation keyword.

Utterances

- Human way of talking to your Alexa app.

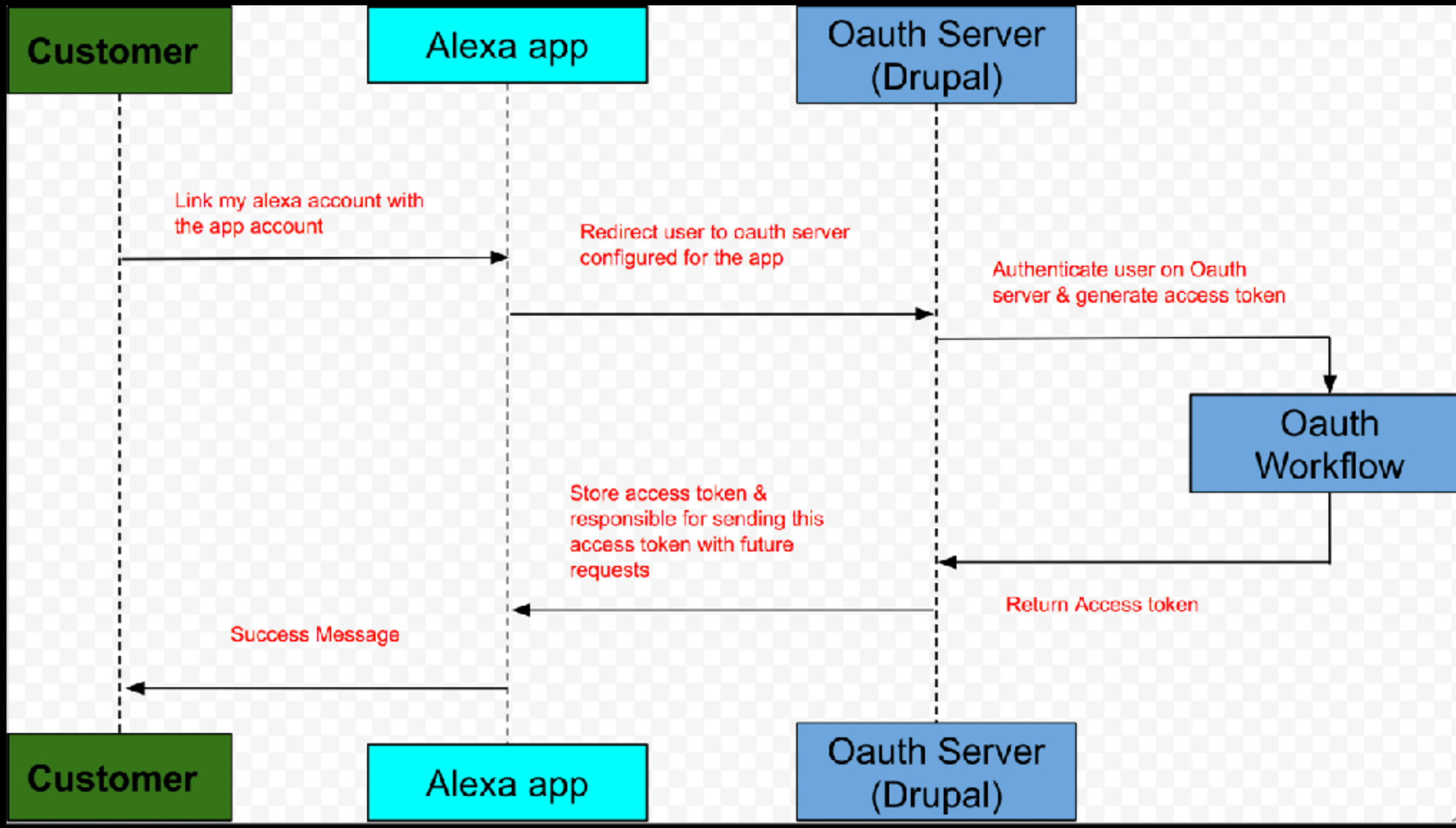
Alexa, ask drucom to add red wine to my cart.
Alexa, ask drucom I want to add red wine to my cart.
Alexa, ask drucom I want to purchase red wine.

Intents

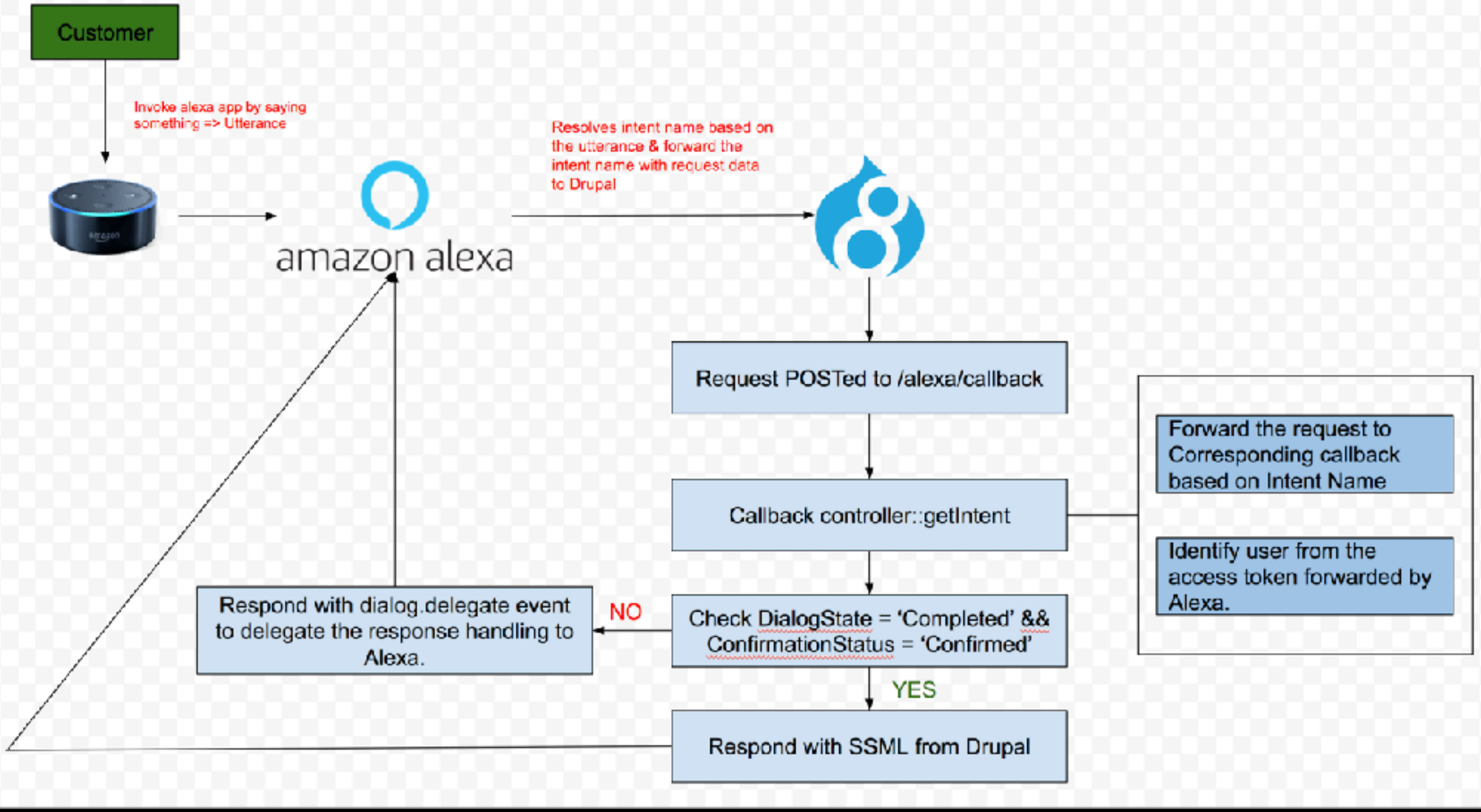
- Functional points provided by Alexa Skill.
- Utterances resolve to an intent.

Drupal Integration with Alexa

Linking user

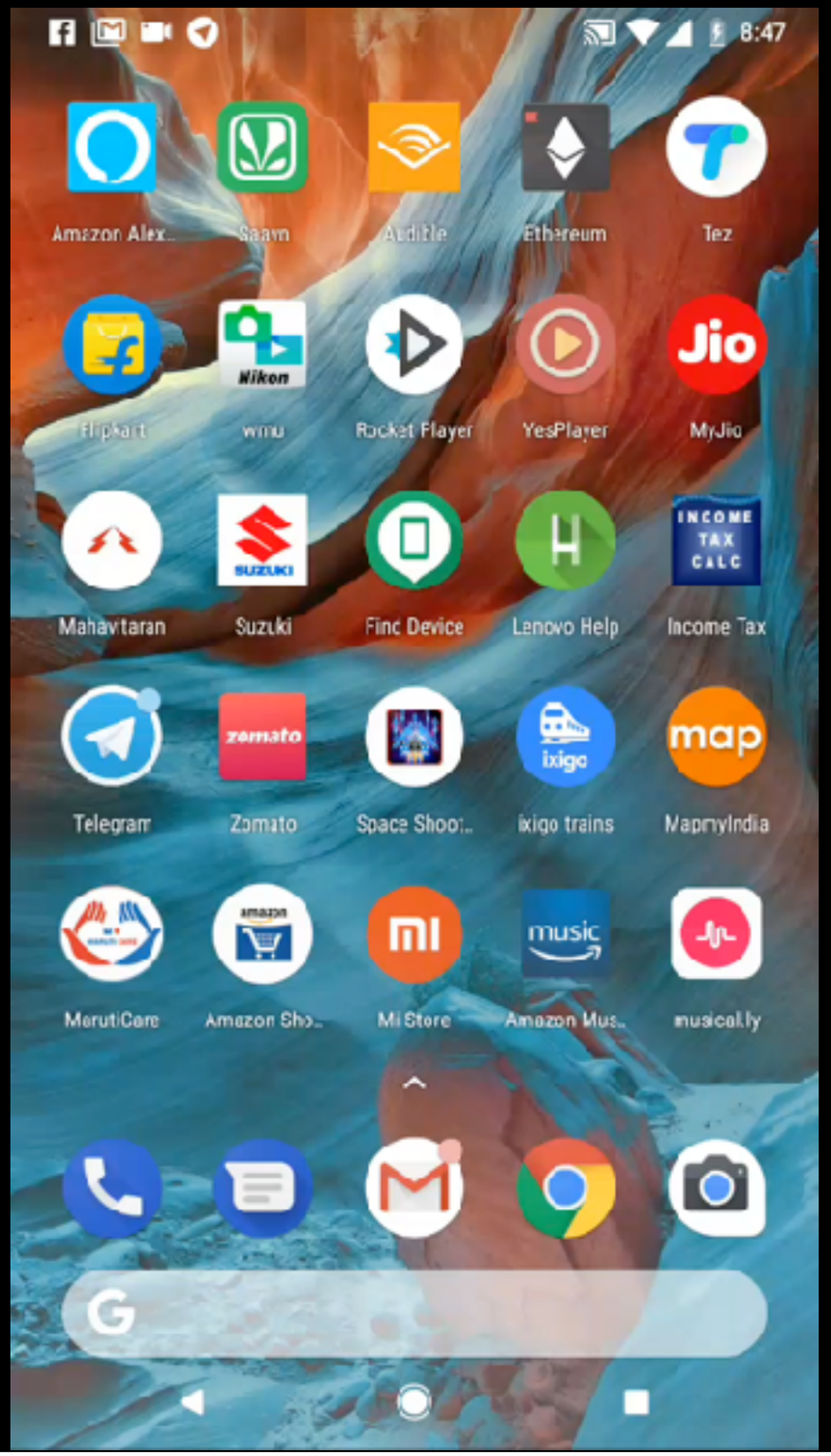


Alexa Request-Response



DEMO

User Linking



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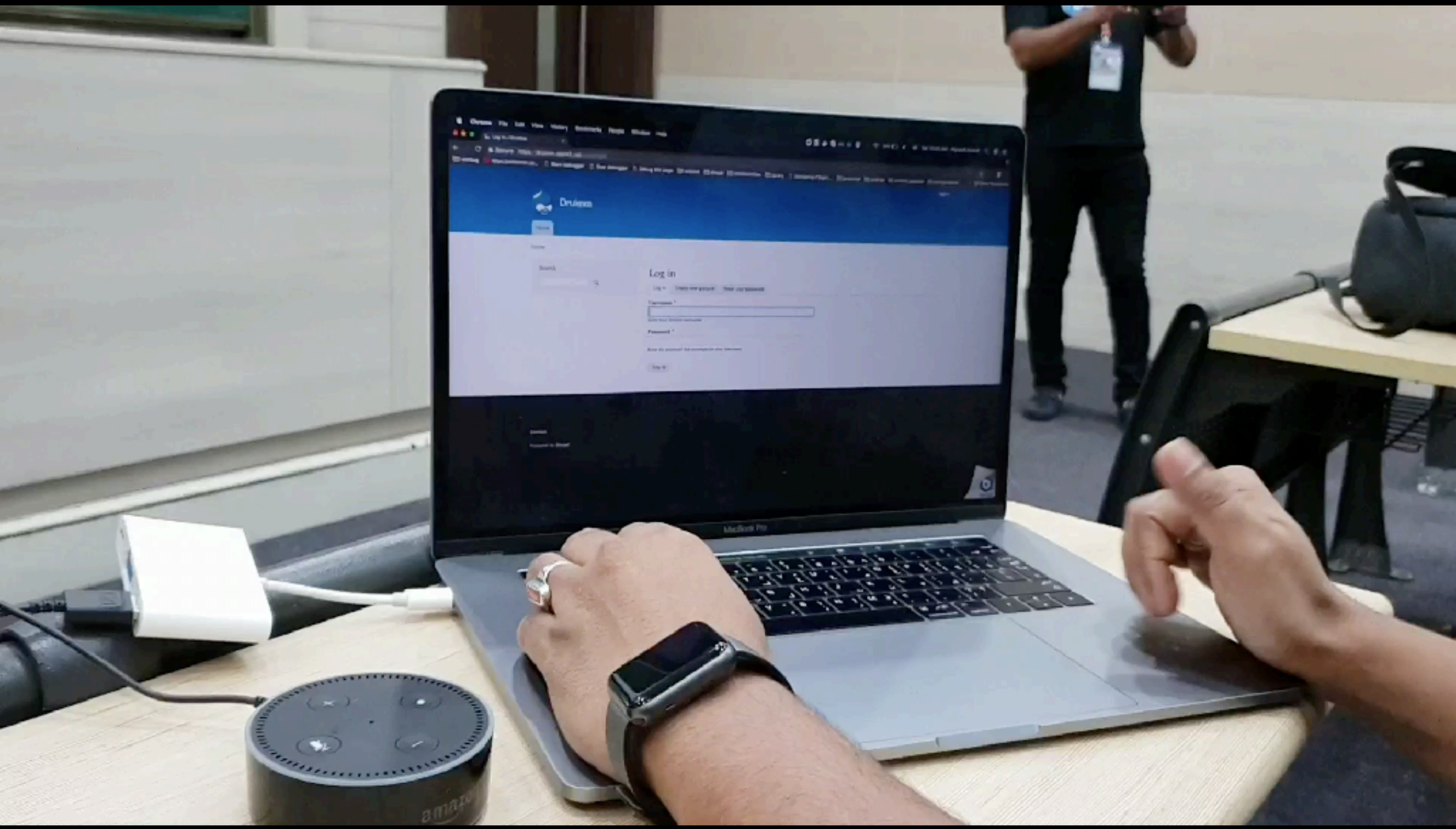
Talking to Drucom



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Packaging & Future plans

- Make Drucom support transactions with card on file. (Need D8 port for https://www.drupal.org/project/commerce_cardonfile)
- Commerce entities to be synced in as valid slot values in Alexa app. (Webhook to POST data to Alexa for this)
- Making Product search conversational
- Packaging this up & releasing as a plug-in for Drupal commerce Distribution.

Thank You!