

# Voice Services with **Phoenix** and Amazon Echo

Elixir Daze  
Bryan Weber - Cobenian  
February 28, 2017

# What we will cover

- Voice Services
- Echo and Alexa
- Account Creation and Setup
- Phoenix
- Deployments
- Play!

# Instructor

- Bryan Weber
  - @brweber2
  - @cobenian
- Founder of Cobenian
- Elixir Mastery
- Organizer of Northern Virginia Elixir Meetup

# Voice Services

# Voice Services



Way Oversimplified and Very Unofficial  
History of Voice Services Timeline

Not to scale

# What about....?

- Cortana
- Phone Menus
- Etc.

# Voice Services



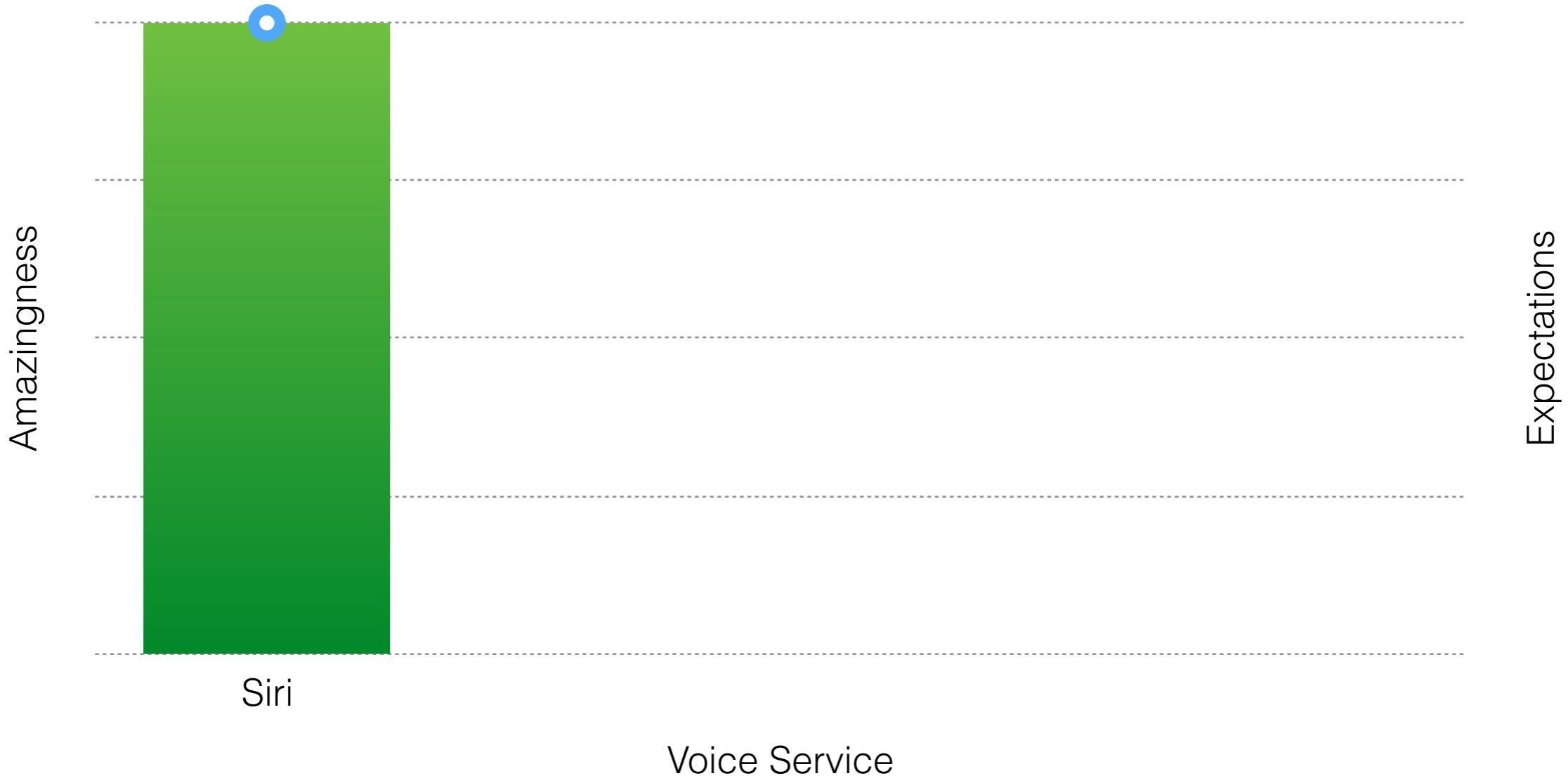
Way Oversimplified and Very Unofficial  
History of Voice Services Timeline

[https://www.youtube.com/watch?v=xaVgRj2e5\\_s](https://www.youtube.com/watch?v=xaVgRj2e5_s)

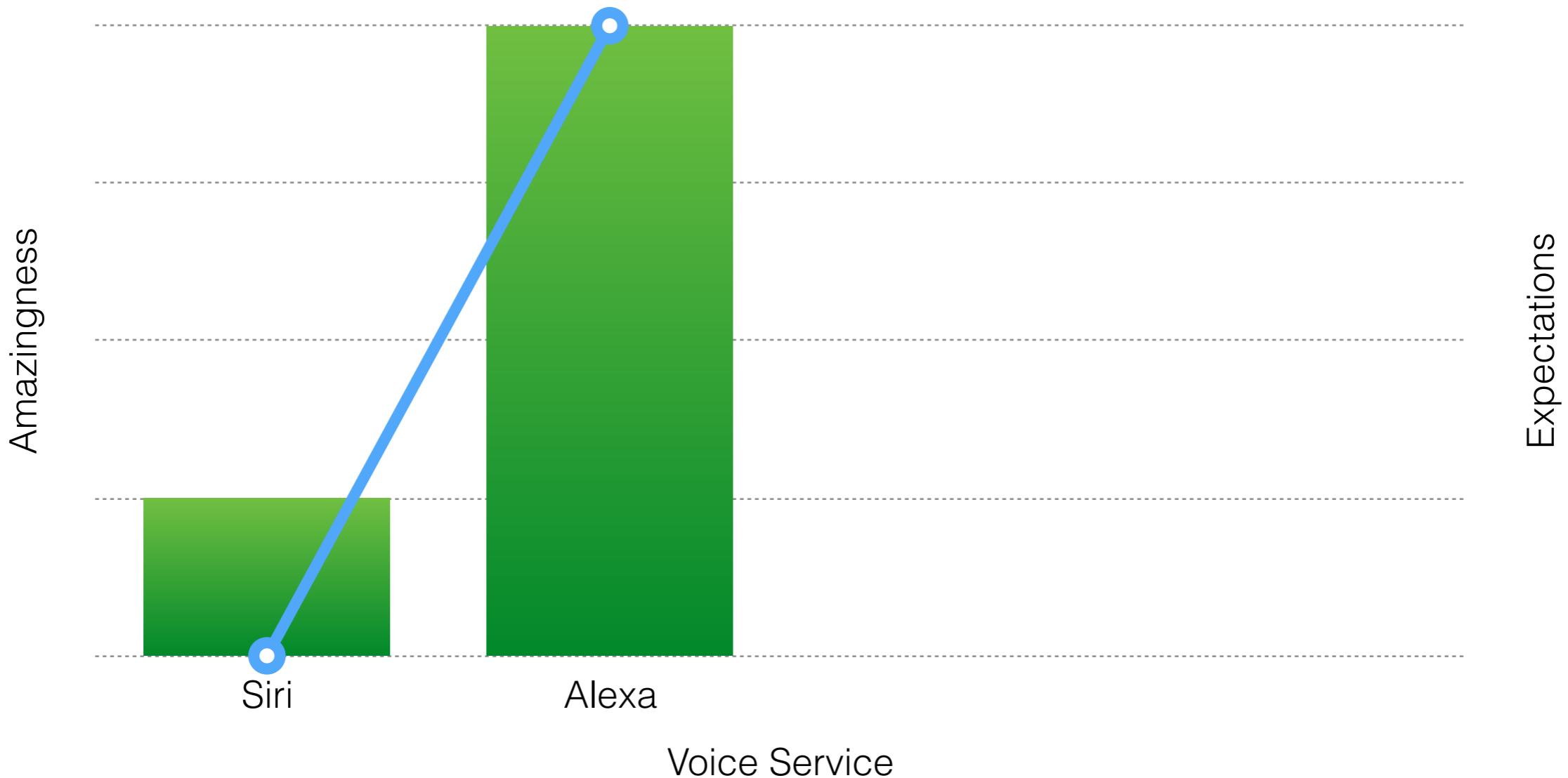
# Dark Ages

- <https://www.youtube.com/watch?v=AgF8-nTwu00>
- <https://www.youtube.com/watch?v=DDqrfCmIPxI>

# Voice Services



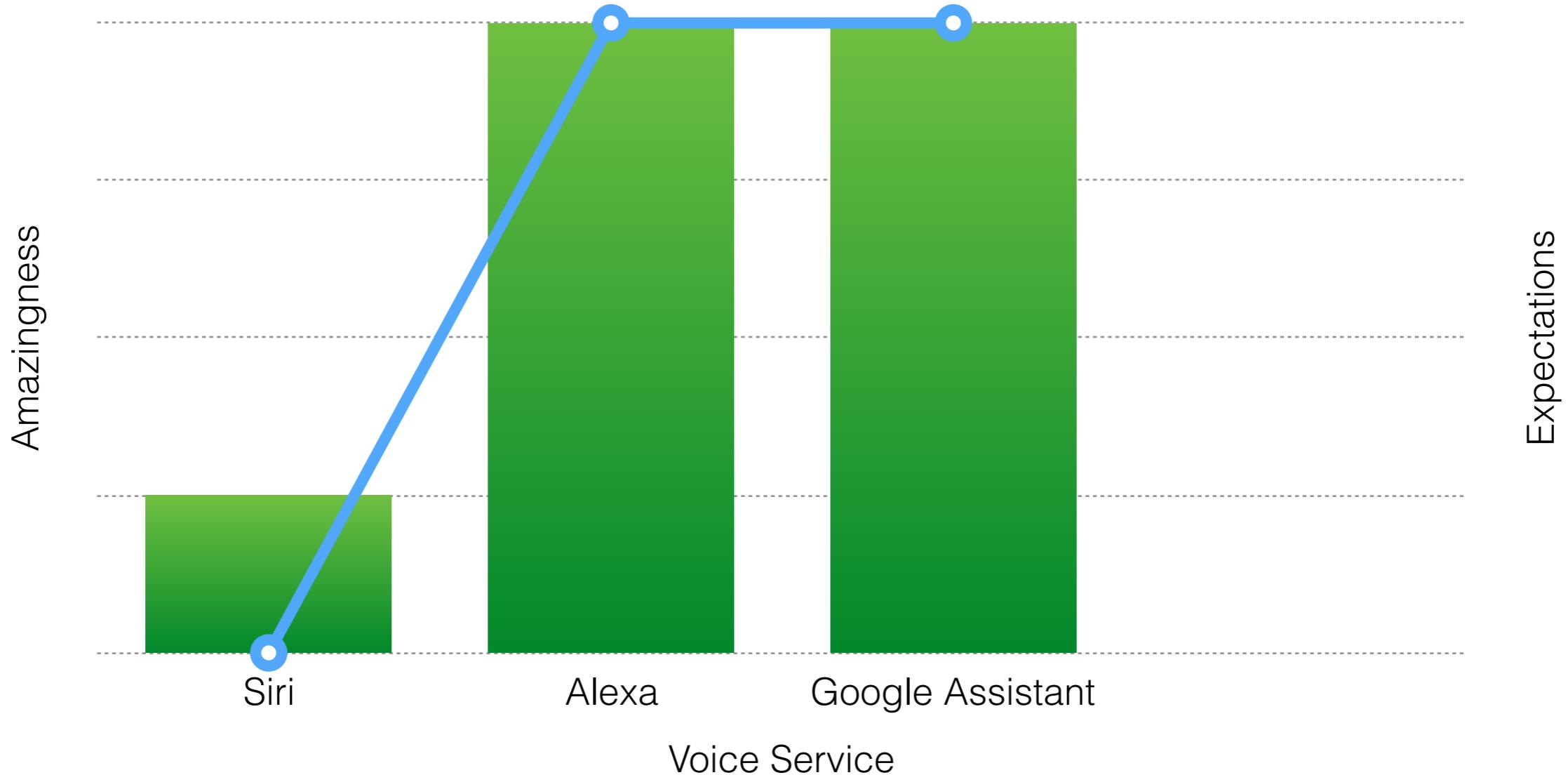
# Voice Services



# What happened?

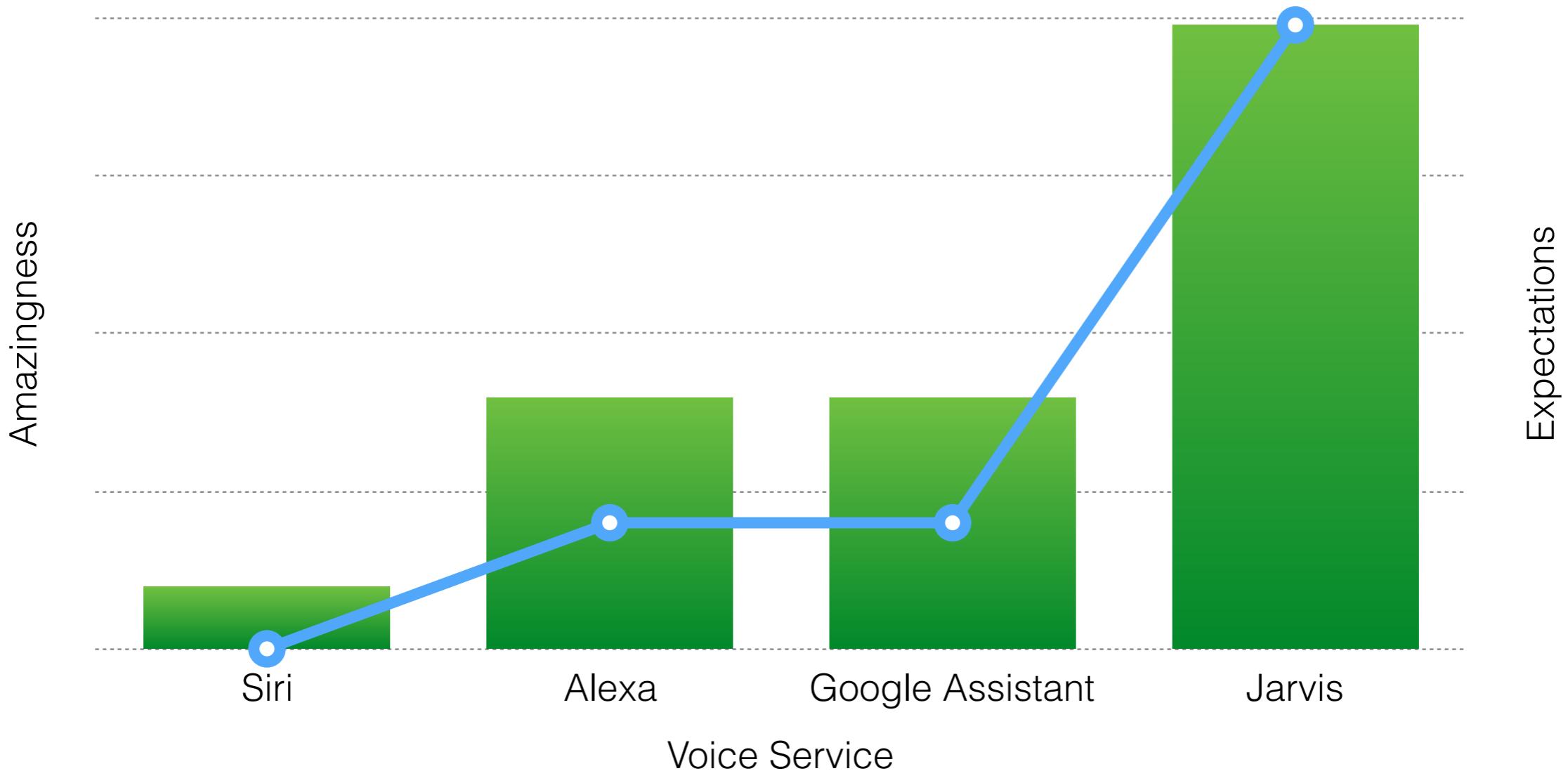
- Apple iPhone - first release, *NO* 3rd party apps
- Apple iPhone - App Store
- Apple Siri - *NO* 3rd party
- Amazon Alexa - 3rd party apps

# Voice Services



<https://www.youtube.com/watch?v=Wx7RCJvoCMc>

# Voice Services



# Greatest Alarm Clock?

- <https://qz.com/900195/amazons-alexa-isnt-the-future-of-ai-its-a-glorified-radio-clock-and-stupid-otherwise/>

# DEMO

# Echo and Alexa

Echo



Tap



Dot



Echo

Alexa

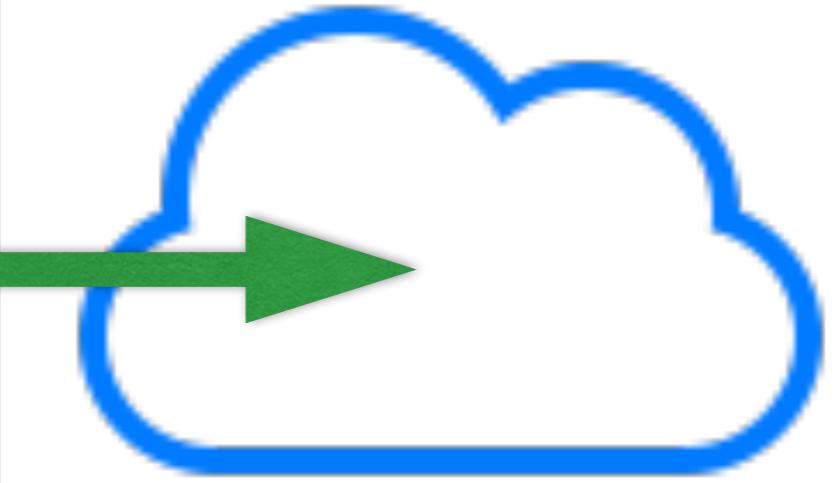
Your Code



Echo



Alexa



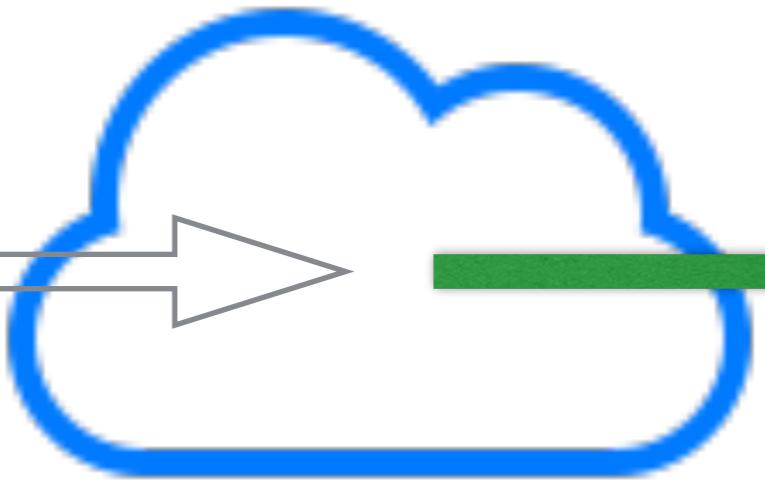
Your Code



# Echo



# Alexa



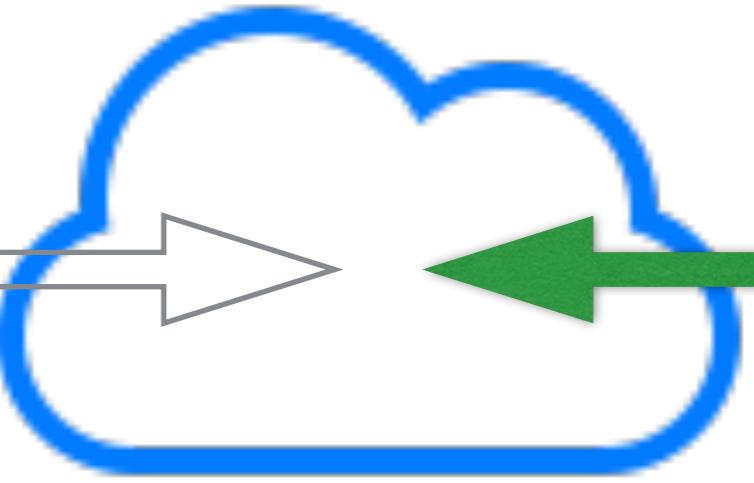
# Your Code



# Echo



# Alexa



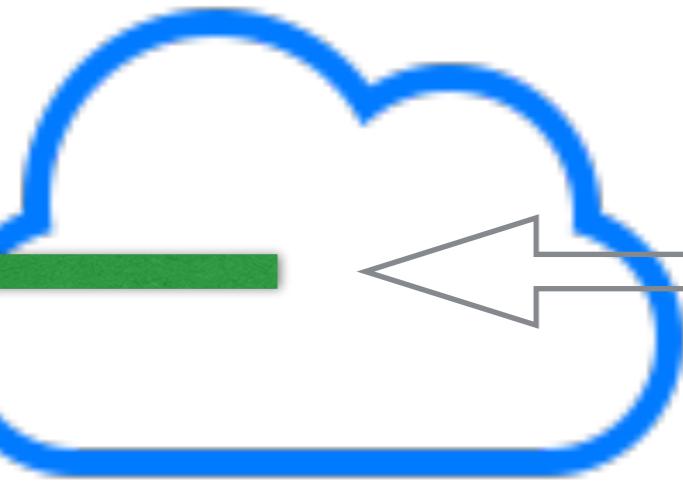
# Your Code



# Echo



# Alexa



# Your Code

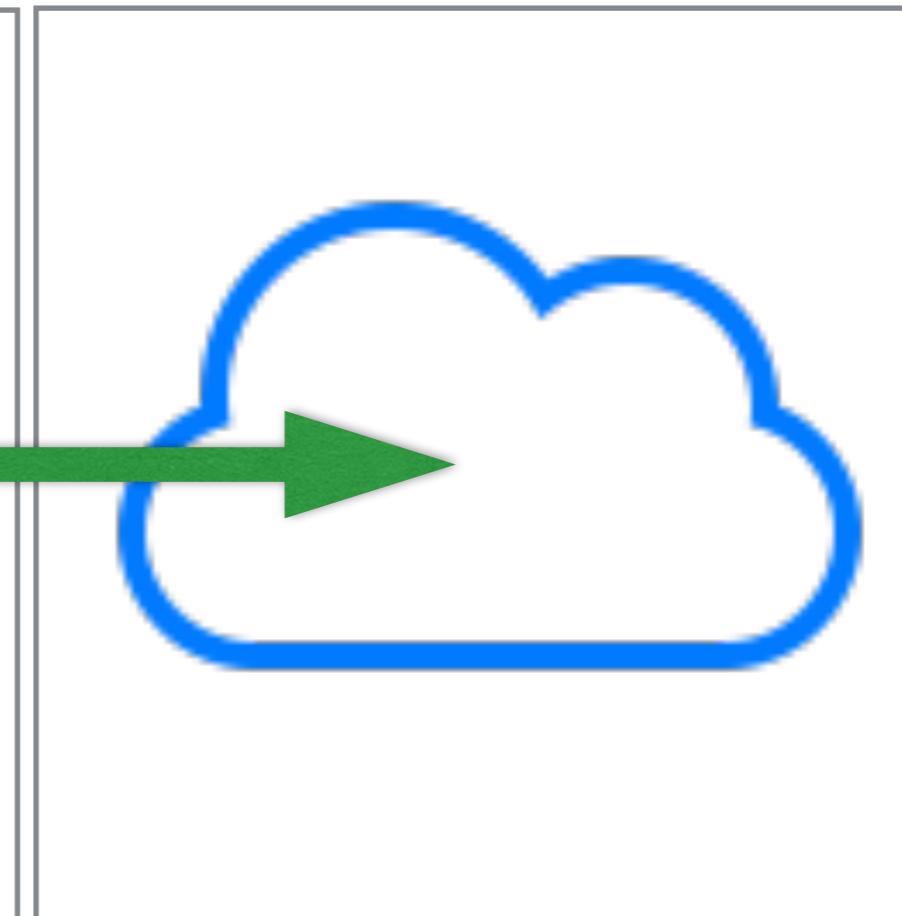


# Home Automation

Echo



Alexa



Your Code



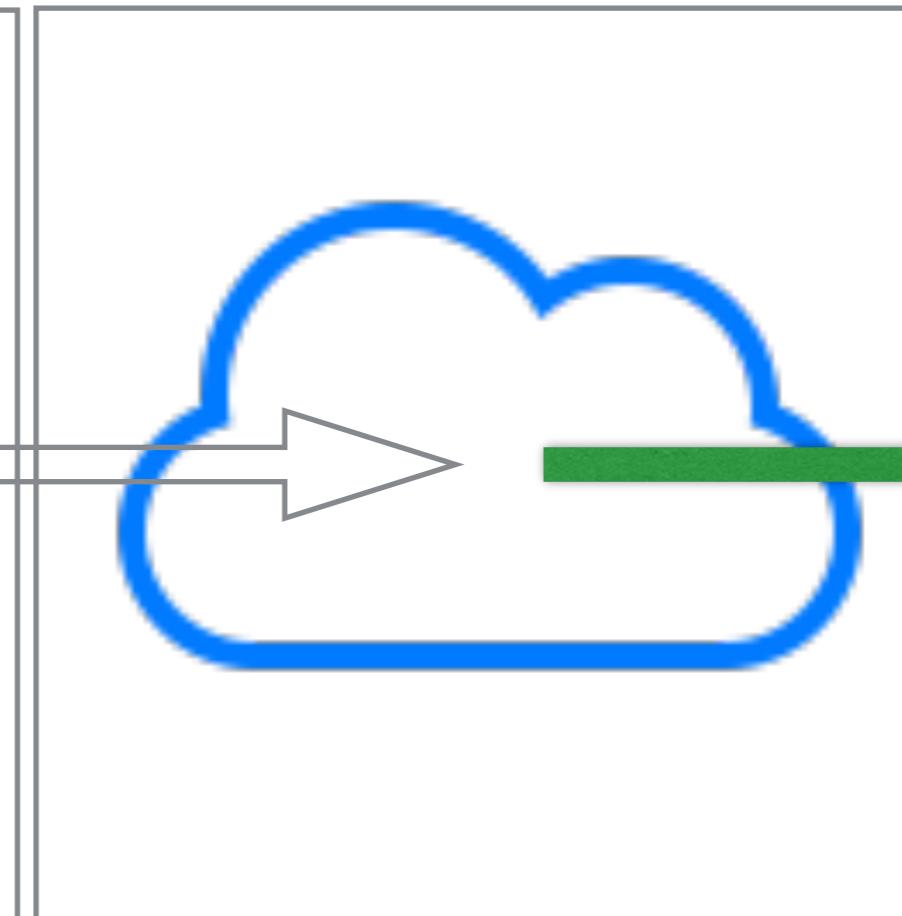
Your Devices



Echo



Alexa



Your Code



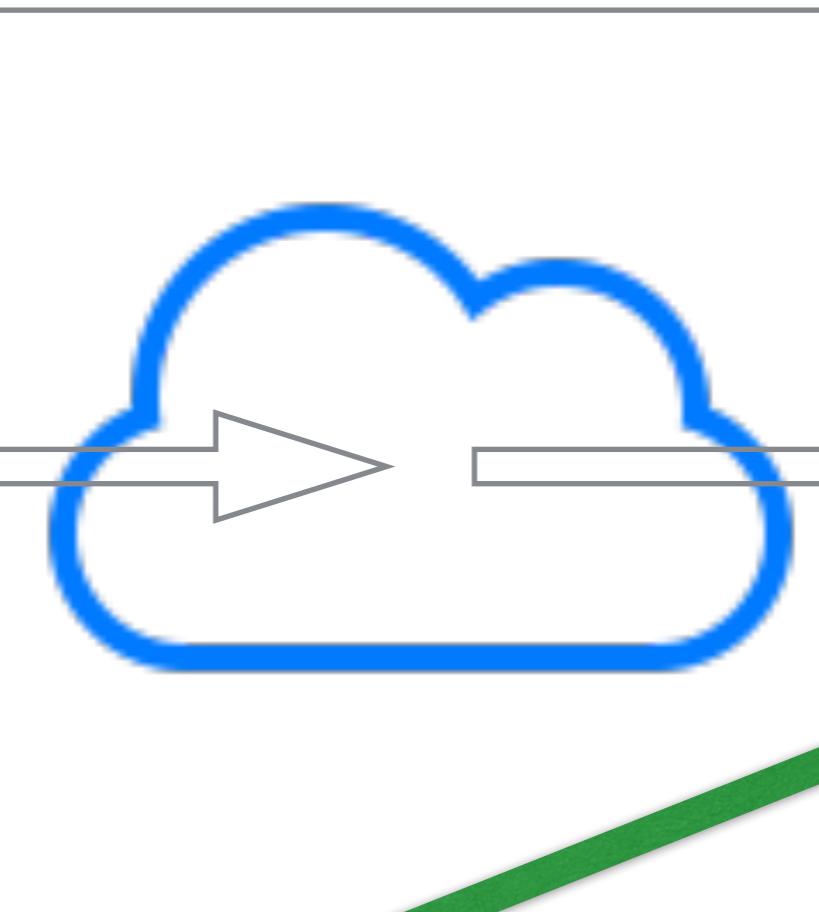
Your Devices



Echo



Alexa



Your Code



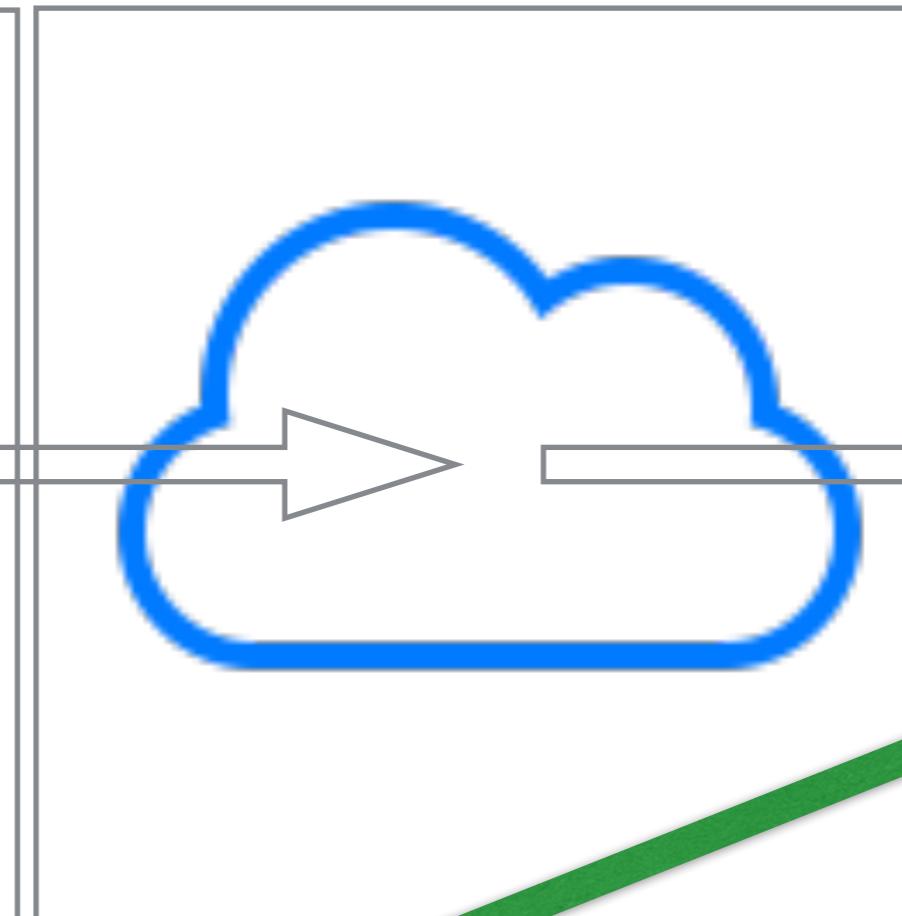
Your Devices



Echo



Alexa



Your Code



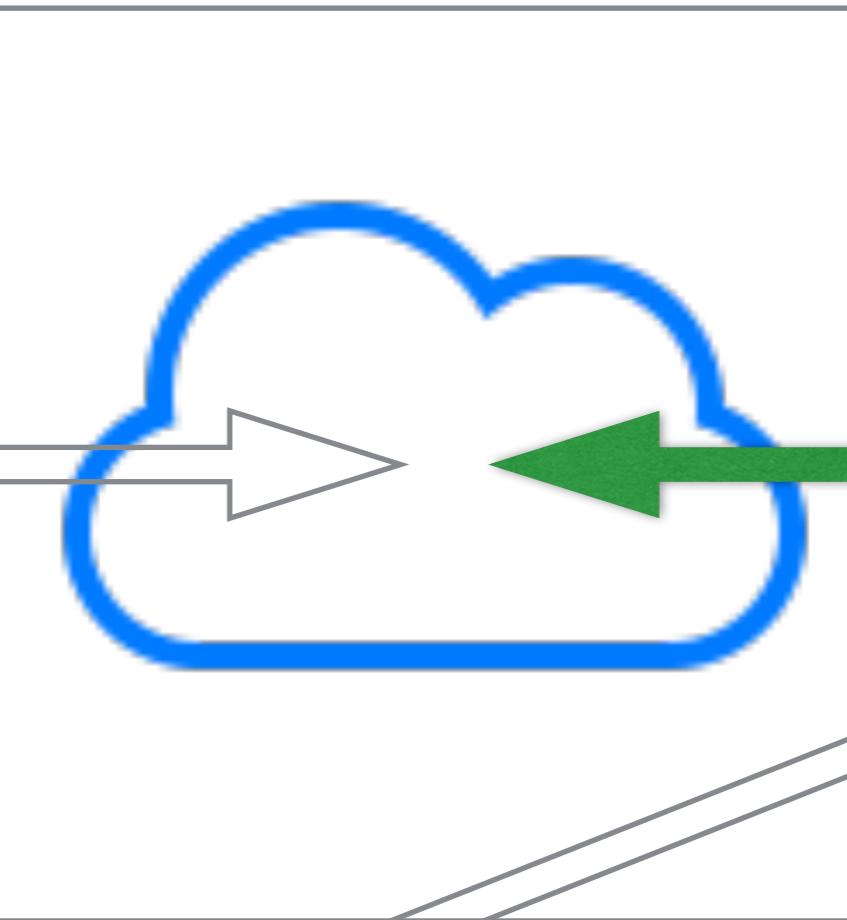
Your Devices



Echo



Alexa



Your Code



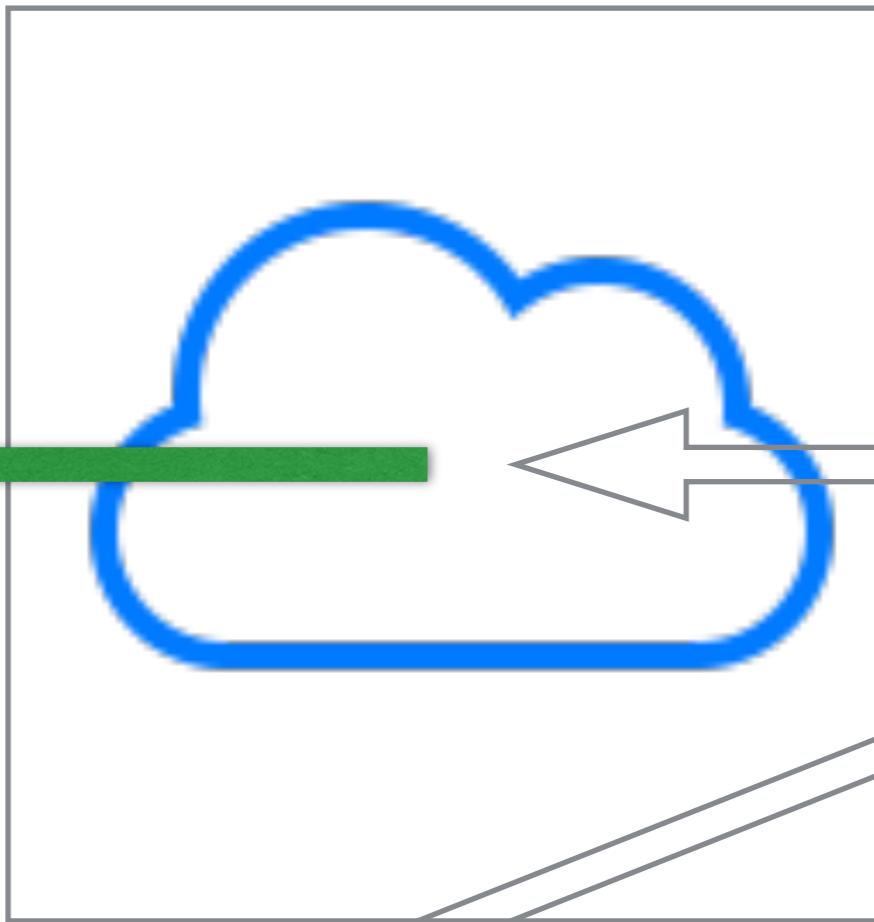
Your Devices



Echo



Alexa



Your Code



Your Devices



# Account Creation

# Accounts

- GitHub
- Amazon
- Heroku

# Why not AWS?

- Requires a credit card for account registration
- Lambda does not support Elixir
- Deployments slightly more involved
- Highly recommended

# GitHub

- github.com



# How people build software

Millions of developers use GitHub to build personal projects, support their businesses, and work together on open source technologies.

Pick a username

Your email address

Create a password

Use at least one letter, one numeral, and seven characters.

**Sign up for GitHub**

By clicking "Sign up for GitHub", you agree to our [terms of service](#) and [privacy policy](#). We'll occasionally send you account related emails.





# Welcome to GitHub

You've taken your first step into a larger world, **@alexadaze**.



Completed  
Set up a personal account



Step 2:  
Choose your plan



Step 3:  
Tailor your experience

## Choose your personal plan

- Unlimited public repositories for free.

- Unlimited private repositories for \$7/month.

Don't worry, you can cancel or upgrade at any time.

**Help me set up an organization next**

Organizations are separate from personal accounts and are best suited for businesses who need to manage permissions for many employees.

[Learn more about organizations.](#)

**Continue**



## Both plans include:

- ✓ Collaborative code review
- ✓ Issue tracking
- ✓ Open source community
- ✓ Unlimited public repositories
- ✓ Join any organization



# Welcome to GitHub

You'll find endless opportunities to learn, code, and create, @alexadaze.



Completed

Set up a personal account



Step 2:

Choose your plan



Step 3:

Tailor your experience

How would you describe your level of programming experience?

Totally new to programming

Somewhat experienced

Very experienced

What do you plan to use GitHub for? (check all that apply)

Project Management

School projects

Development

Design

Research

Other (please specify)

Which is closest to how you would describe yourself?

I'm a hobbyist

I'm a professional

I'm a student

Other (please specify)

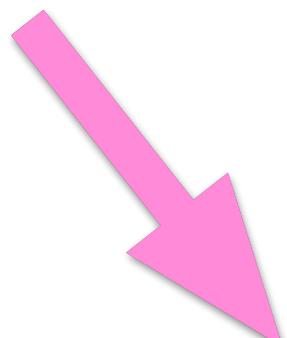
What are you interested in?

elixir

e.g. tutorials, android, ruby, web-development, machine-learning, open-source

**Submit**

[skip this step](#)



## Learn Git and GitHub without any code!

Using the Hello World guide, you'll create a repository, start a branch, write comments, and open a pull request.

[Read the guide](#)

[Start a project](#)





## Please verify your email address

Before you can contribute on GitHub, we need you to verify your email address.  
An email containing verification instructions was sent to [daze@cobenian.com](mailto:daze@cobenian.com).

Didn't get the email? [Resend verification email](#) or [change your email settings](#).

## GitHub

[GitHub] Please verify your email address.

To: alexadaze

---

Hi @alexadaze!

Help us secure your GitHub account by verifying your email address ([daze@cobenian.com](mailto:daze@cobenian.com)). This lets you access all of GitHub's features.

[Verify email address](#)

---

Button not working? Paste the following link into your browser:

[https://github.com/users/alexadaze/emails/28862565/confirm\\_verification/e3b6fdcc3ae24c3cc94901e997e3390015e693d5](https://github.com/users/alexadaze/emails/28862565/confirm_verification/e3b6fdcc3ae24c3cc94901e997e3390015e693d5)

You're receiving this email because you recently created a new GitHub account or added a new email address. If this wasn't you, please ignore this email.



Your email was verified.

X

## Learn Git and GitHub without any code!

Using the Hello World guide, you'll create a repository, start a branch,  
write comments, and open a pull request.

[Read the guide](#)

[Start a project](#)



This repository Search Pull requests Issues Gist + ⌂

alexadaze / alexa Watch 0 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Pulse Graphs Settings Edit

Alexa Workshop at Elixir Daze 2017

New Add topics

1 commit 1 branch 0 releases 1 contributor Apache-2.0

Branch: master ▾ New pull request Create new file Upload files Find file Clone or download ▾

alexadaze Initial commit Latest commit 40c6e37 3 hours ago

LICENSE Initial commit 3 hours ago

Help people interested in this repository understand your project by adding a README. Add a README



[This repository](#)[Search](#)[Pull requests](#) [Issues](#) [Gist](#)[+](#) [alexadaze / alexa](#)[Watch](#)

0

[Code](#)[Issues 0](#)[Pull requests 0](#)[Projects 0](#)[Wiki](#)[Pulse](#)[Graphs](#)[Settings](#)

# Alexa Workshop at Elixir Daze 2017

[New](#) [Add topics](#)[1 commit](#)[1 branch](#)[0 releases](#)[1 contributor](#)Branch: [master](#) ▾[New pull request](#)[Create new file](#)[Upload file](#)[Find file](#)

alexadaze Initial commit

Latest commit 40c6e37 3 hours ago

[LICENSE](#)

Initial commit

3 hours ago

Help people interested in this repository understand your project by adding a README.

[Add a README](#)



Search GitHub

Pull requests Issues Gist

+

Personal settings

**Profile**

Account

Emails

Notifications

Billing

SSH and GPG keys

Security

Blocked users

Repositories

Organizations

Saved replies

Authorized applications

Installed integrations

Developer settings

OAuth applications

Integrations

Personal access tokens

## Public profile

**Name****Public email**

Don't show my email address

You can manage verified email addresses in your [email settings](#).

**Tell a little about yourself**

You can @mention other users and organizations to link to them.

**URL****Company**

You can @mention your company's GitHub organization to link it.

**Location****Update profile**

We store your personal data in the United States. See our [privacy policy](#) for more information.

**Profile picture****Upload new picture**

Personal settings

Profile

Account

Emails

Notifications

Billing

**SSH and GPG keys**

Security

Blocked users

Repositories

Organizations

Saved replies

Authorized applications

Installed integrations

Developer settings

OAuth applications

Integrations

Personal access tokens

## SSH keys

New SSH key

There are no SSH keys with access to your account.

Check out our guide to [generating SSH keys](#) or troubleshoot [common SSH Problems](#).



## GPG keys

New GPG key

There are no GPG keys with access to your account.

Learn how to [generate a GPG key](#) and add it to your account.

# SSH Key

- <https://help.github.com/articles/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent/>
- *Skip key generation if you want to use your existing key (commonly ~/.ssh/id\_rsa)*

# Key Generation

```
>> ssh-keygen -t rsa -b 4096 -C "daze@cobenian.com"
```

**Be sure to use your email address!**

```
~/C/P/E/alex (master<-> ) : ssh-keygen -t rsa -b 4096 -C "daze@cobenian.com"
Generating public/private rsa key pair.
Enter file in which to save the key (/Users/bryan/.ssh/id_rsa): /Users/bryan/.ssh/daza_rsa
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /Users/bryan/.ssh/daza_rsa.
Your public key has been saved in /Users/bryan/.ssh/daza_rsa.pub.
The key fingerprint is:
SHA256:VpTQUJR1DuBzVWh02Sz7MgNvmJzktcK7F4s1GfR4vCg daze@cobenian.com
The key's randomart image is:
+---[RSA 4096]----+
|   o*==o o*B|
|   o+  =+.+|
|   + ... * |
|   . oo  = +|
|   S  = B.*.|
|   . E0.%..|
|       .* B |
|       o o  |
|       .o  |
+---[SHA256]----+
~/C/P/E/alex (master<-> ) :
```

- >> vi ~/.ssh/config

```
Host github.com
User alexadaze
IdentityFile ~/.ssh/daze_rsa
~
```

- >> ssh-add ~/.ssh/daze\_rsa

## Create a new repository

A repository contains all the files for your project, including the revision history.

Owner



Repository name

alexा



Great repository names are short and memorable. Need inspiration? How about [fluffy-barnacle](#).

Description (optional)

Public

Anyone can see this repository. You choose who can fork it.

Private

You choose who can see and commit to this repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None ▾

Add a license: Apache License 2.0 ▾



**Create repository**

Naming things is hard

## Create a new repository

A repository contains all the files for your project, including the revision history.

Owner



Repository name

/ alexa



Great repository names are short and memorable. Need inspiration? How about [fluffy-barnacle](#).

Description (optional)



**Public**

Anyone can see this repository. You choose who can



**Private**

You choose who can see and commit to this repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None**

Add a license: **Apache License 2.0**



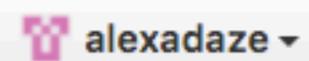
**Create repository**

Describing things  
is hard

## Create a new repository

A repository contains all the files for your project, including code, assets, and documentation.

Owner



Repository name

/ alexa

Great repository names are short and memorable, like your GitHub username.

Public for the workshop

Description (optional)

Public

Anyone can see this repository. You choose who can commit.

Private

You choose who can see and commit to this repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None ▾

Add a license: Apache License 2.0 ▾

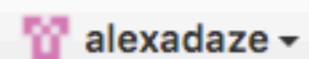


**Create repository**

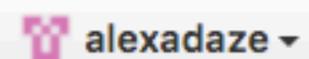
## Create a new repository

A repository contains all the files for your project, including the revision history.

Owner



Repository name



/ alexa

Great repository names are short and memorable.

Description (optional)



Public

Anyone can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None ▾

Add a license: Apache License 2.0 ▾



**Create repository**

No README for now

## Create a new repository

A repository contains all the files for your project, including the revision history.

Owner



Repository name

/ alexa

Great repository names are short and memorable.

Description (optional)

Public

Anyone can see this repository. You choose what gets committed.

Private

You choose who can see and contribute to this repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None ▾

Add a license: Apache License 2.0 ▾



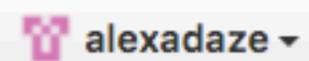
**Create repository**

No .gitignore for now

## Create a new repository

A repository contains all the files for your project, including the revision history.

Owner



alexadaze ▾

Repository name

/ alexa

Great repository names are short and memorable.

Description (optional)

Public

Anyone can see this repository. You choose who can commit.

Private

You choose who can see and commit to this repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None ▾

Add a license: Apache License 2.0 ▾



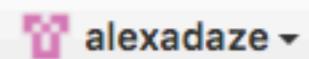
**Create repository**

# Choose a license

## Create a new repository

A repository contains all the files for your project, including the revision history.

Owner



Repository name



/ alexa



Great repository names are short and memorable. Need inspiration? How about [fluffy-barnacle](#).

Description (optional)

Public

Anyone can see this repository. You choose who can commit.

Private

You choose who can see and commit to this repository.

Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None ▾

Add a license: Apache License 2.0 ▾



**Create repository**



[Code](#)[Issues 0](#)[Pull requests 0](#)[Projects 0](#)[Wiki](#)[Pulse](#)[Graphs](#)[Settings](#)

## Alexa Workshop at Elixir Daze 2017

[Edit](#)[New](#) [Add topics](#)[1 commit](#)[1 branch](#)[0 releases](#)[1 contributor](#)[Branch: master](#)[New pull request](#)[Create new file](#)[Upload files](#)[Find file](#)[Clone or download](#) alexadaze Initial commitLatest commit `40c6e37` just now LICENSE

Initial commit

just now

Help people interested in this repository understand your project by adding a README.

[Add a README](#)

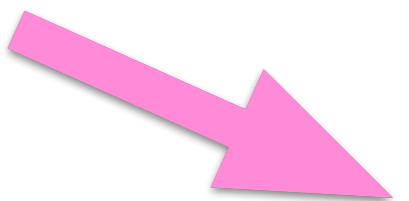
# Amazon

- [developer.amazon.com](https://developer.amazon.com)



Apps & Games Alexa AWS Services & APIs Devices Blog Support

Sign In English



## New Amazon Alexa Skills Competition

Create an original skill and compete for over \$40,000 in prizes on DevPost.com

[Learn more »](#)



### Apps & Games

Develop and publish for mobile devices and Amazon Fire TV



### Alexa

Build voice experiences for your services and devices



### AWS

Reliable, scalable, and inexpensive cloud computing services



### Services & APIs

Create better experiences to improve reach and monetization



### Devices

Reach millions of users on Amazon's best-selling devices



## Sign In

What is your email (phone for mobile accounts)?

E-mail or mobile number:

Do you have an Amazon.com password?

- I am a new customer. (you'll create a password later)  
 I am a returning customer, and my password is:

[Sign in using our secure server](#) 

[Forgot your password?](#)



[FAQ](#) [Contact Us](#) [App Distribution Agreement](#) [Trademark Guidelines](#) [Terms of Use](#) [Blog](#)

© 2010-2015, Amazon.com, Inc. or its affiliates. All Rights Reserved.



## Registration

New to Amazon.com? Register Below.

My name is:

My e-mail address is:

Type it again:

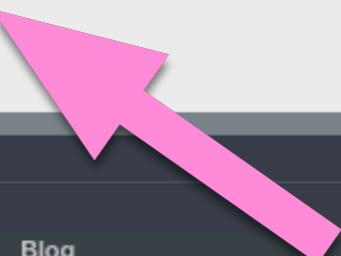
### Protect your information with a password

This will be your only Amazon.com password.

Enter a new password:

Type it again:

[Create account](#)



# Registration

1. Profile Information    2. App Distribution Agreement    3. Payments

\* indicates a required field.

Country/Region \*

United States 

First name \*

Bryan

Last name \*

Weber

Email address \*

daze@cobenian.com

Phone number \*

e.g. 212-555-1212, +44 0161 715 3369

Fax number

Developer name or company name \*

Displayed on your apps at Amazon.com

Developer description

Maximum characters: 4000, Remaining: 4000

Address 1 \*

Address 2

City \*

State \*

Please select 

Zip code/Postal code \*

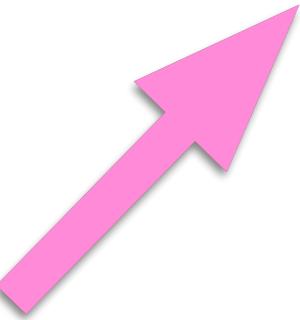
**Customer support email address**

**Customer support phone**

**Customer support website**

**Cancel**

**Save and Continue**



**Policies**"). However, the terms in each Schedule only apply to you if you engage in the activity or use the Program Materials (defined in Section 3) to which the Schedule applies (for instance, the terms of the Distribution Schedule only apply to you if you submit a product to us to sell, distribute, or promote). Please carefully read the Agreement before clicking to accept it.

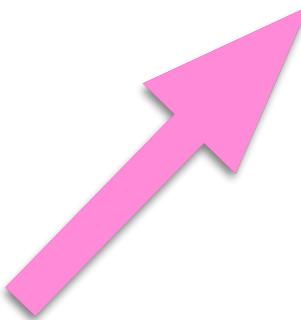
2. **Our Program.** Our program (the "**Program**") allows end users to purchase, download, and access mobile and non-mobile software applications, games, and other digital products, and to use related services that we make available (for instance, Amazon GameCircle). "**Apps**" are software applications, games, and other digital products that you submit to us for sale, distribution, or promotion through the Program, or with which you use any Program Materials, together with their enhancements, upgrades, updates, bug fixes, new versions and other modifications and amendments. "**Content**" means your Apps, all content, ads, services, technology, data and other digital materials included in or made available through your Apps, and all Product Information (if applicable, defined in the Distribution Schedule).
3. **Program Materials.** We may make available certain software, software development kits, libraries, application programming interfaces, services, documentation, sample code, and related materials and information for use in connection with the Program (collectively, the "**Program Materials**"). If you use any Program Materials, you are subject to and agree to comply with our Program Materials License Agreement (the "**Program Materials License**"), located at <https://developer.amazon.com/sdk/pml.html>. Your use of certain Program Materials is also subject to the additional terms in any Schedules that apply to those Program Materials (for instance, your use of the Program Materials that we make available for sale of In-App Products is subject to the terms

[Print Agreement](#)

**\*Please note:** All non-English translations are provided for informational purposes only and are non-binding. By clicking "Accept and Continue" below, you agree to the English language version of the Mobile App Distribution Agreement.

[Cancel](#)

[Accept and Continue](#)



# Registration

1. Profile Information

2. App Distribution Agreement

3. Payments

\* indicates a required field.

**Do you plan to monetize apps by charging for apps or selling in-app items? \***

No

Yes

**Do you plan to monetize apps by displaying ads from the Amazon Mobile Ad Network or Mobile Associates? \***

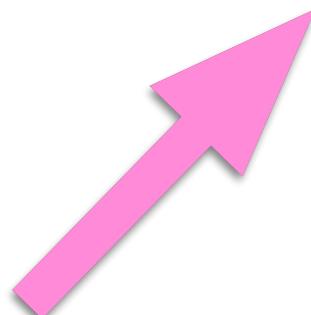
No

Yes

**Note:** You may still monetize later if you select "No" by entering payment and tax information from the Settings menu.

[Cancel](#)

[Save and Continue](#)



DASHBOARD

APPS &amp; SERVICES

ALEXA

REPORTING

SUPPORT

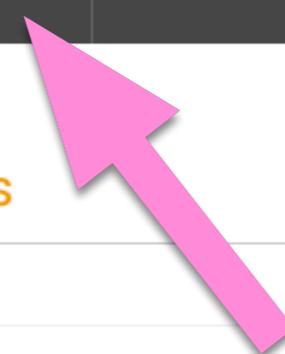
DOCUMENTATION

SETTINGS

## Developer Communications

[Announcements](#) | [Notifications](#)

<a href="#">AVS Now Available for the UK and Germany</a>	Feb 7, 2017
<a href="#">AVS Terms and Agreements Updated</a>	Jan 30, 2017
<a href="#">Introducing the ASK Built-in Library Developer Preview</a>	Dec 7, 2016
<a href="#">Announcing the 12 Sponsored Teams for the Alexa Prize</a>	Nov 14, 2016
<a href="#">Announcing the List Skill API</a>	Oct 13, 2016
<a href="#">New Hands-Free Capabilities from the Alexa Voice Service (AVS)</a>	Oct 6, 2016



Introducing  
**underground**  
apps & games

[Does my app qualify?](#)[How do I get started?](#)[How much can I earn?](#)[Learn More](#)

## Dashboard

[App Sales \(Units\)](#) | [In-App Item Sales \(Units\)](#) | [Mobile Ad Earnings](#)

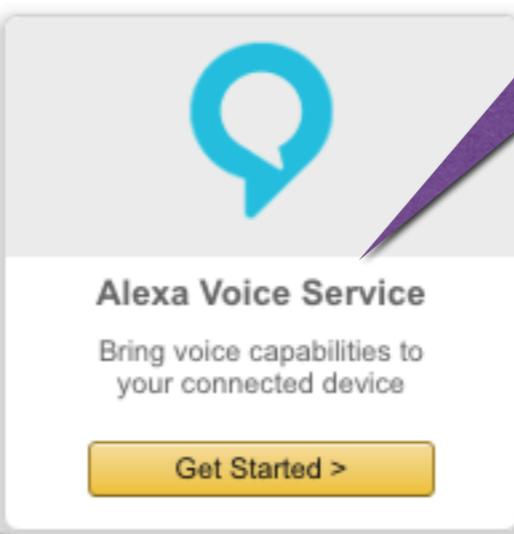
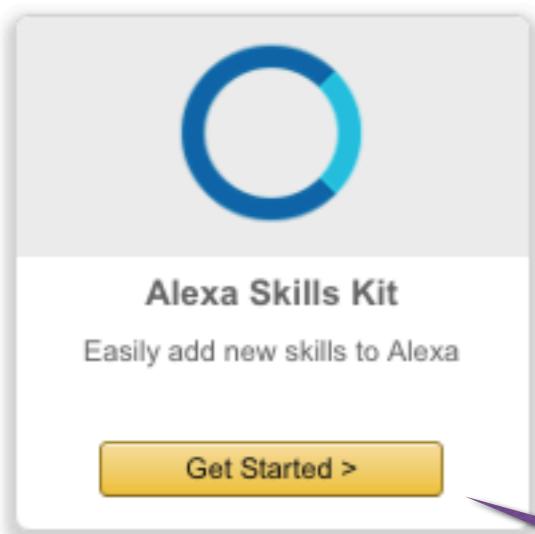
Nothing Found

[Add a New App](#)

# IoT

## Get started with Alexa

Add new voice-enabled capabilities using the Alexa Skills Kit, or add voice-powered experiences to your connected devices with the Alexa Voice Service.



# Echo

DASHBOARD

APPS &amp; SERVICES

ALEXA

REPORTING

SUPPORT

DOCUMENTATION

SETTINGS

## Get started with Alexa

Add new voice-enabled capabilities using the Alexa Skills Kit, or add voice-powered experiences to your connected devices with the Alexa Voice Service.



### Alexa Skills Kit

Easily add new skills to Alexa

[Get Started >](#)

### Alexa Voice Service

Bring voice capabilities to  
your connected device

[Get Started >](#)

[DASHBOARD](#)[APPS & SERVICES](#)[ALEXA](#)[REPORTING](#)[SUPPORT](#)[DOCUMENTATION](#)[SETTINGS](#)

## Building Alexa Skills with the Alexa Skills Kit

[Add a New Skill](#)

To learn more about building Alexa skills, see [Getting Started with the Alexa Skills Kit](#). To start building an Alexa skill for free using AWS Lambda, see [Creating an AWS Lambda Function for a Custom Skill](#).

We encourage you to visit the [Alexa Developer Forum](#) to collaborate with Alexa team members and fellow Alexa developers.

[Your skills](#)[Skill Metrics](#)[Skill Name](#)[Language](#)[Skill Type](#)[Modified](#)[Status](#)[Actions](#)

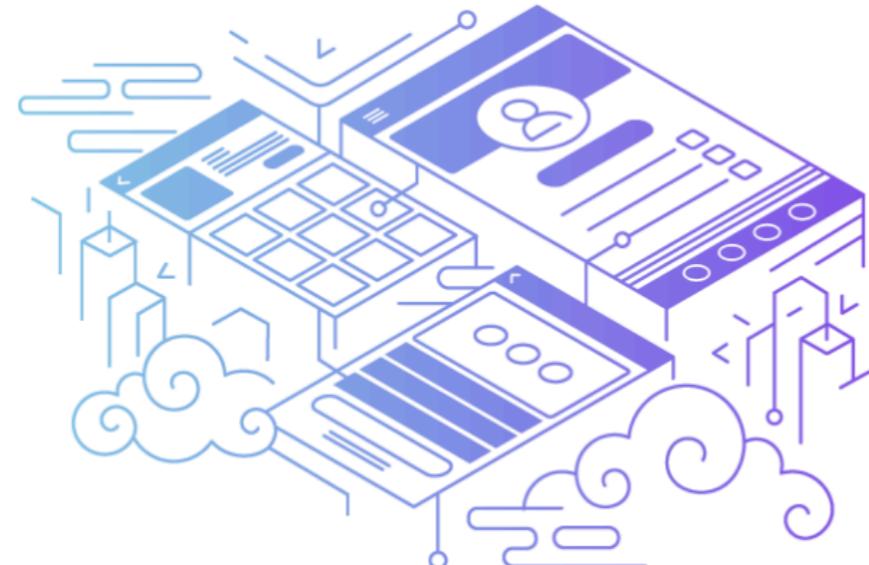
# Heroku

- [heroku.com](http://heroku.com)



Products ▾ Elements ▾ Pricing Documentation Support More ▾

Log in or [Sign up](#)



#### ENTERPRISE

## Turn your company into an apps company

Today every company needs apps to engage their customers and run their businesses. Step up your ability to build, manage, and deploy great apps at scale with Heroku.

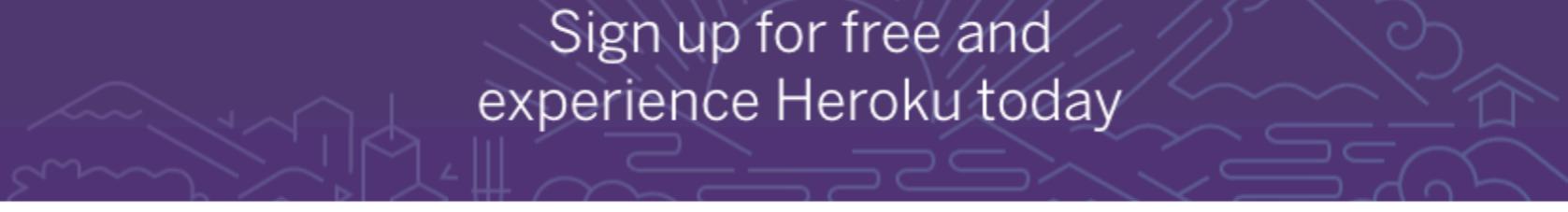
[SIGN UP FOR FREE](#)

[Explore Heroku Enterprise](#)



## Get straight to building apps

Setting up, operating and maintaining your own platform is not where the race is won. Avoid the risk and complexity, and dedicate your energy to what really matters: building great apps.



Sign up for free and  
experience Heroku today

## Free account

Create apps, connect databases and add-on services, and collaborate on your apps, for free.

## Your app platform

A platform for apps, with app management & instant scaling, for development and production.

## Deploy now

Go from code to running app in minutes. Deploy, scale, and deliver your app to the world.

First name\*

Last name\*

Email Address\*

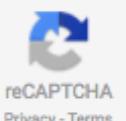
Company name

Country\*

Primary Development Language\*



I'm not a robot

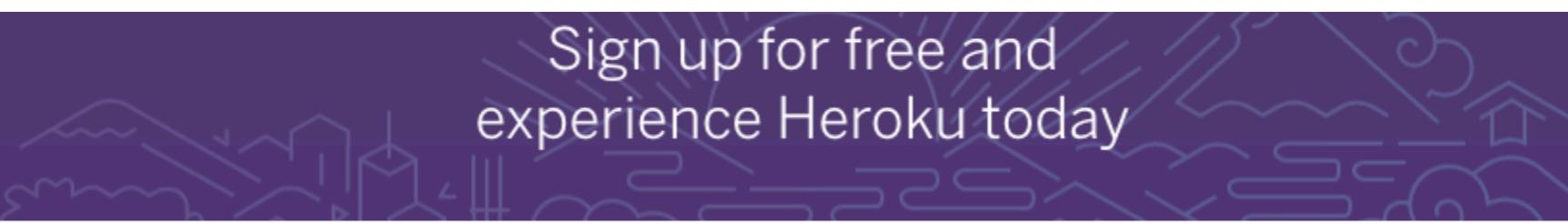


reCAPTCHA

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**CREATE FREE ACCOUNT**

Signing up signifies that you have read and agree  
to the [Terms of Service](#) and our [Privacy Policy](#).



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Go from code to running app in minutes. Deploy, scale, and deliver your app to the world.



What, No Elixir???

First name\*

Bryan

Last name\*

Weber

Email Address\*

daze@cobenian.com

Company name

Cobenian

Country\*

United States

Primary Development Language\*

I use another language

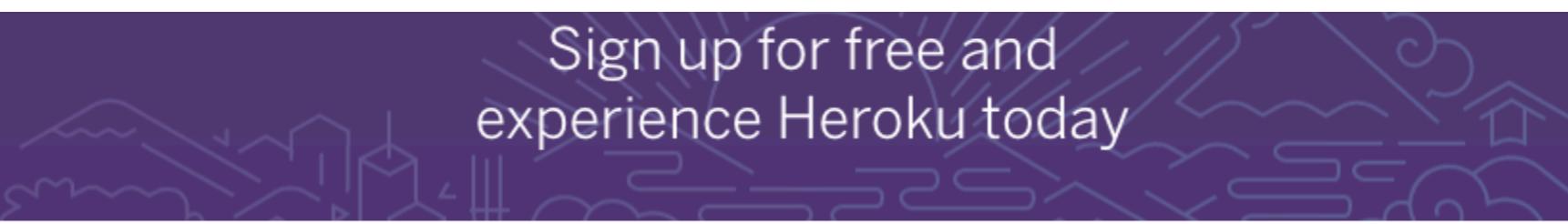
I'm not a robot



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Debatable...

First name\*

Bryan

Last name\*

Weber

Email Address\*

daze@cobenian.com

Company name

Cobenian

Country\*

United States

Primary Development Language\*

I use another language

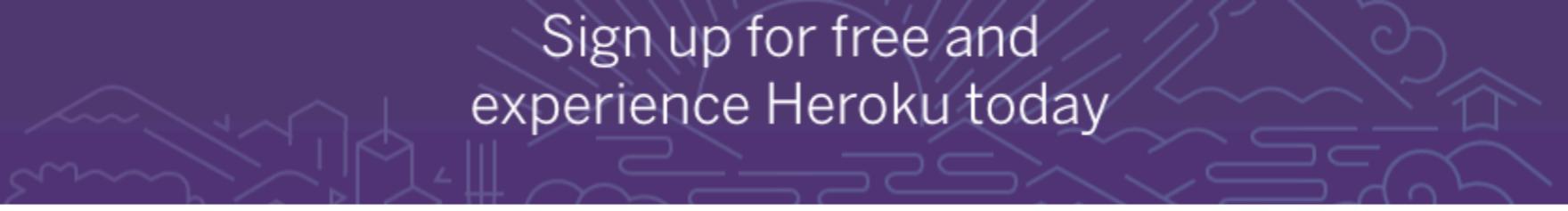
I'm not a robot



Privacy - Terms

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Email Address\*

daze@cobenian.com

Company name

Cobenian

Country\*

United States

Primary Development Language\*

I use another language

I'm not a robot

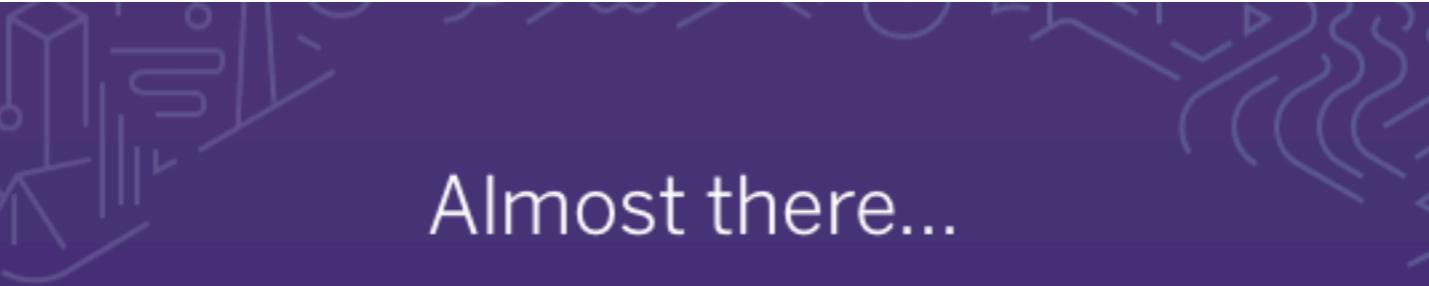


reCAPTCHA  
Privacy - Terms

**CREATE FREE ACCOUNT**

Signing up signifies that you have read and agree to the [Terms of Service](#) and our [Privacy Policy](#).





## Almost there...

Please check your email ([daze@cobenian.com](mailto:daze@cobenian.com))  
to confirm your account.

---

If [daze@cobenian.com](mailto:daze@cobenian.com) is not your email address,  
please [go back](#) and enter the correct one.

If you haven't received our email in 15 minutes,  
please check your spam folder.

If you still haven't received it, please [email us](#).



Thanks for signing up with Heroku! You must follow this link to activate your account:

<https://id.heroku.com/account/accept/4504415/c07c5194e19866bdb904636951d0b5e>

Have fun, and don't hesitate to contact us with your feedback.

The Heroku Team

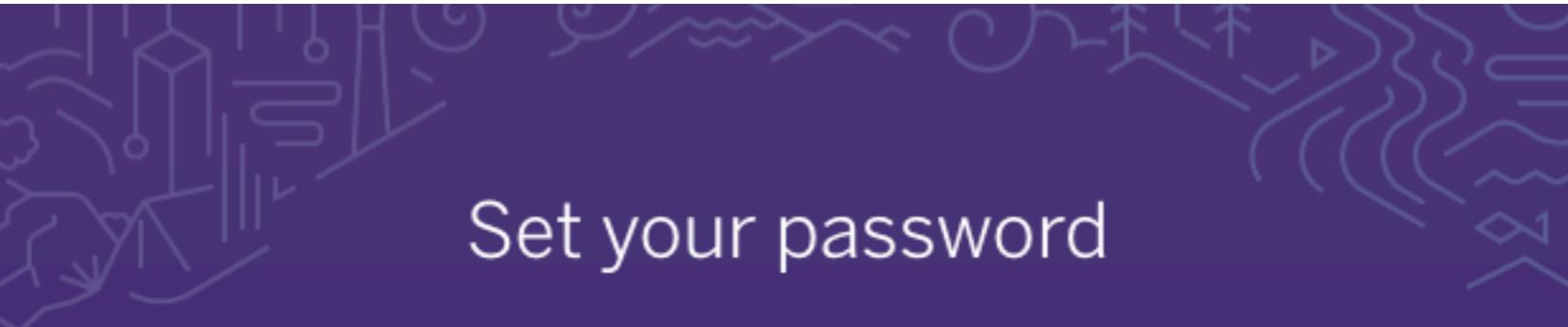
<https://heroku.com>

---

Heroku is the cloud platform for rapid deployment and scaling of web applications. Get up and running in minutes, then deploy instantly via Git.

To learn more about Heroku and all its features, check out the Dev Center:

<https://devcenter.heroku.com/articles/quickstart>



## Set your password

Create your password and log in to your Heroku account.

Password\*

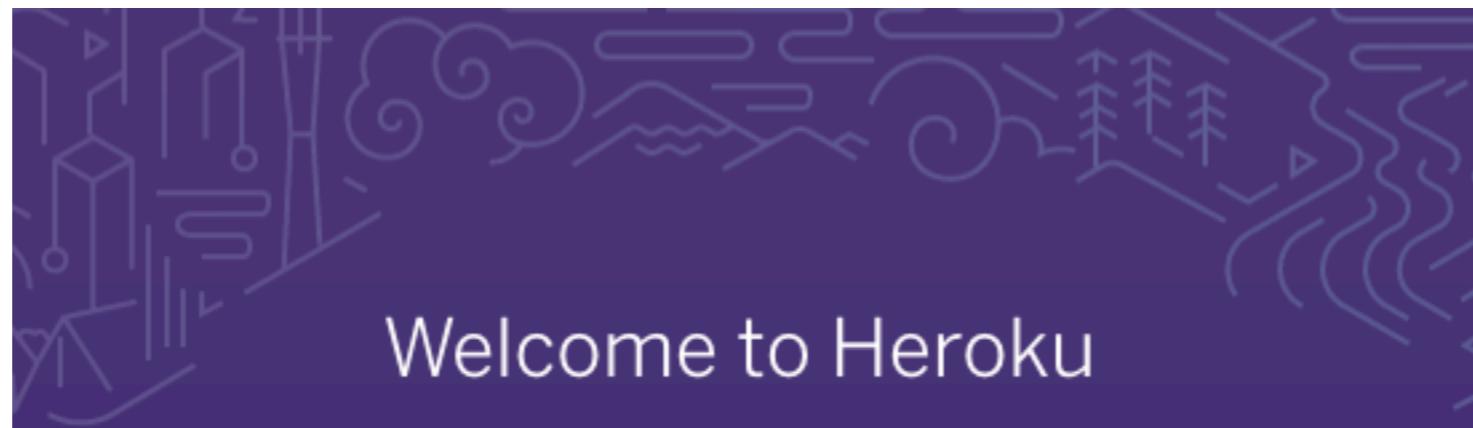
Minimum 8 characters: Letters, numbers, and/or symbols

Password Confirmation\*

Confirm your password

**SET PASSWORD AND LOG IN**





# Welcome to Heroku

Your new account is all set up

[Click here to proceed as daze@cobenian.com](#)



## Getting Started with Heroku

If you're new to Heroku, choose your language and follow our Getting Started guide to create a new app.



**Ruby**  
Get Started



**PHP**  
Get Started



**Node.js**  
Get Started



**Python**  
Get Started



**Java**  
Get Started



**Go**  
Get Started



**Clojure**  
Get Started



**Scala**  
Get Started

**Create New App**

# Phoenix

# Phoenix

- Install Elixir (1.4) and Erlang (19)
  - <http://elixir-lang.org/install.html>
- Install Phoenix
  - <http://www.phoenixframework.org/docs/installation>
- **SKIP THE NODE.JS SECTION!**

# Phoenix

- mix local.hex
- mix local.rebar
- mix archive.install [https://github.com/phoenixframework/archives/raw/master/phoenix\\_new.ez](https://github.com/phoenixframework/archives/raw/master/phoenix_new.ez)

# GitHub

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+

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Alexa Workshop at Elixir Daze 2017

[Edit](#)[New](#) [Add topics](#)

1 commit

1 branch

0 releases

1 contributor

Branch: master ▾

[New pull request](#)[Create new file](#)[Upload files](#)[Find file](#)[Clone or download](#) ▾

alexadaze Initial commit

Latest commit 40c6e37 3 hours ago

LICENSE

Initial commit

3 hours ago

Help people interested in this repository understand your project by adding a README.

[Add a README](#)

[This repository](#)[Search](#)[Pull requests](#) [Issues](#) [Gist](#)[+](#) [alexadaze / alexa](#)[Watch](#) 0[Star](#) 0[Fork](#) 0[Code](#)[Issues 0](#)[Pull requests 0](#)[Projects 0](#)[Wiki](#)[Pulse](#)[Graphs](#)[Settings](#)

## Alexa Workshop at Elixir Daze 2017

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Branch: master ▾

[New pull request](#)[Create new file](#)[Upload files](#)[Find file](#)[Clone or download](#) ▾[alexadaze Initial commit](#)[LICENSE](#)

Initial commit

### Clone with HTTPS ⓘ

Use Git or checkout with SVN using the web URL.

<https://github.com/alexadaze/alexa.git>

Copied!

[Open in Desktop](#)[Download ZIP](#)

```
>> git clone https://github.com/alexadaze/alexa.git
```

Be sure to replace <https://github.com/alexadaze/alexa.git> with your URL!

```
>> git branch --set-upstream-to=origin/master master
```

*Depending on your git version and settings....*

# Phoenix

```
>> cd alexa
```

```
>> mix phoenix.new --no-ecto --no-brunch .
```

*When it prompts with:*

Fetch and install dependencies? [Yn]

*Type Y and hit enter*

# Git

*Notice the .gitignore and README were created*

```
>> git add .
```

```
>> git commit -am "initial commit"
```

# GitHub

- >> git push origin master

# Heroku

- Toolbelt
- Buildpack
- <http://www.phoenixframework.org/docs/heroku>

# Heroku Toolbelt

- <https://devcenter.heroku.com/articles/heroku-cli>
- Mac OS X
  - >> brew install heroku

```
~/C/P/E/alex (master↑) : heroku login
Enter your Heroku credentials.
Email: daze@cobenian.com
Password (typing will be hidden):
Logged in as daze@cobenian.com
~/C/P/E/alex (master↑) :
```

# Elixir Heroku Buildpack

```
>> heroku create --buildpack "https://github.com/  
HashNuke/heroku-buildpack-elixir.git"
```

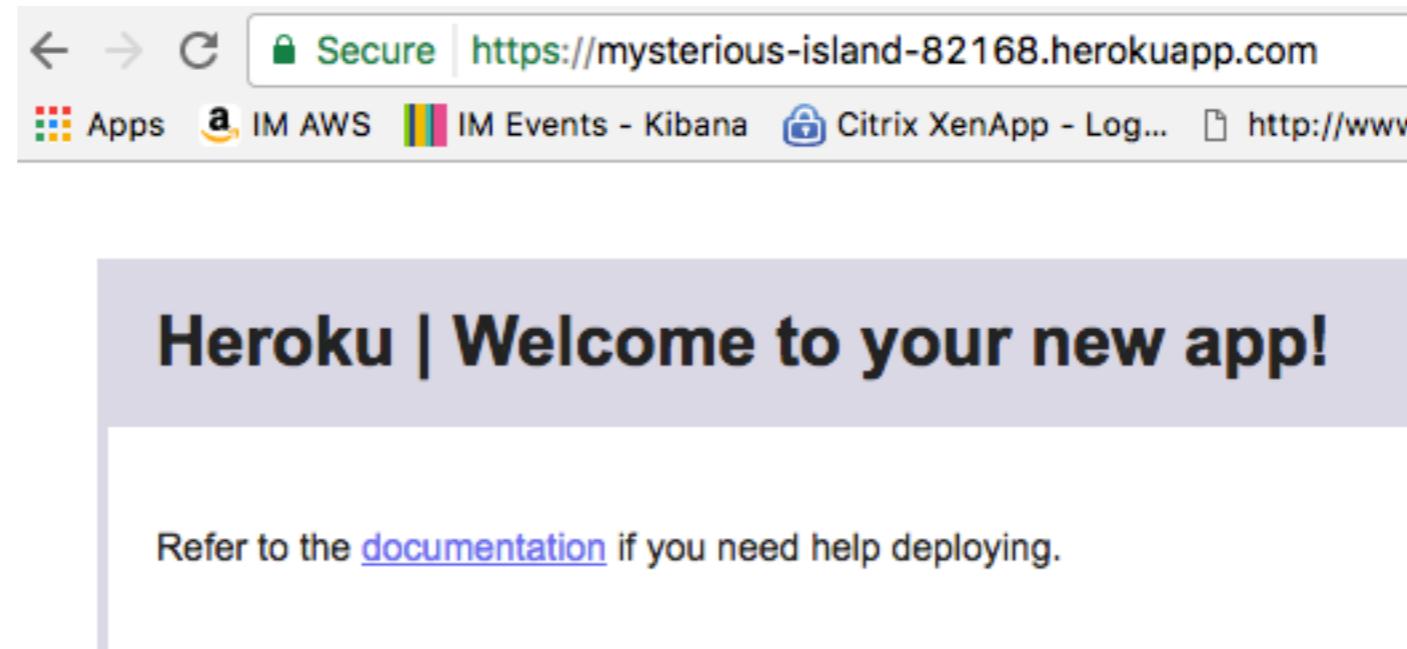
```
~/C/P/E/alex (master↑) : heroku create --buildpack "https://github.com/HashNuke/heroku-buildpack-elixir.git"  
Creating app... done, ⚙ mysterious-island-82168  
Setting buildpack to https://github.com/HashNuke/heroku-buildpack-elixir.git... done  
https://mysterious-island-82168.herokuapp.com/ | https://git.heroku.com/mysterious-island-82168.git
```

```
>> git remote -v
```

```
~/C/P/E/alex (master↑) : git remote -v  
heroku https://git.heroku.com/mysterious-island-82168.git (fetch)  
heroku https://git.heroku.com/mysterious-island-82168.git (push)  
origin https://github.com/alexadaze/alex.git (fetch)  
origin https://github.com/alexadaze/alex.git (push)
```

# In Browser

- Go to your app url (from output of command in previous slide)



# Buildpacks

**DO NOT DO THIS STEP (we ran no-brunch)**

```
>> heroku buildpacks:add https://github.com/gjaldon/heroku-buildpack-phoenix-static.git
```

Static asset build pack

# Configuration

In config/prod.exs add the bold line

```
config :alexa, Alexa.Endpoint,  
  http: [port: {:system, "PORT"}],  
  url: [host: "example.com", port: 80],  
  cache_static_manifest: "priv/static/manifest.json",  
secret_key_base: System.get_env("SECRET_KEY_BASE")
```

# More Configuration

In the same config block make these changes:

```
# url: [host: "example.com", port: 80], # remove this line
# cache_static_manifest: "priv/static/manifest.json", # remove this line
url: [scheme: "https", host: "mysterious-island-82168.herokuapp.com", port: 443],
force_ssl: [rewrite_on: [:x_forwarded_proto]],
```

Remove the following line from config/prod.exs:

**import\_config "prod.secret.exs"**

# Do NOT do this step!

In config/prod.exs add the following:

```
# Configure your database
config :alexa, Alexa.Repo,
  adapter: Ecto.Adapters.Postgres,
  url: System.get_env("DATABASE_URL"),
  pool_size: String.to_integer(System.get_env("POOL_SIZE") || "10"),
  ssl: true
```

# Create Procfile

*In the root of your project create a file named ‘Procfile’ with the following contents:*

```
web: MIX_ENV=prod mix phoenix.server
```

# Environment Variables

```
>> heroku addons:create heroku-postgresql:hobby-dev
```

# Generate New Secret

```
>> mix phoenix.gen.secret
```

*It will output the secret. Copy the secret and paste it in the following command:*

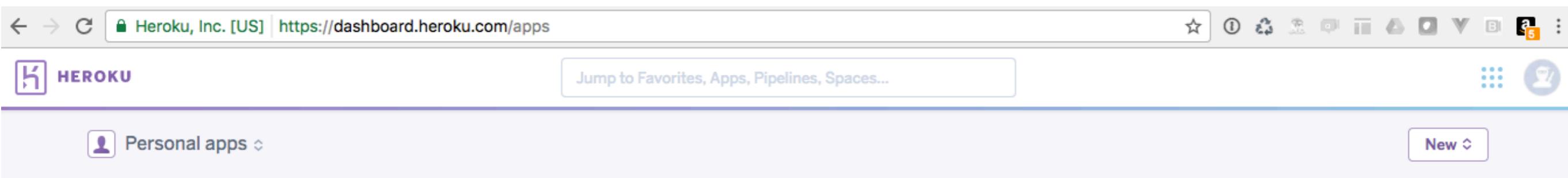
```
>> heroku config:set SECRET_KEY_BASE=<secret>"
```

# Deploy

```
>> git add --all
```

```
>> git commit -m "adding Heroku config"
```

```
>> git push heroku master
```





# Welcome to Phoenix!

A productive web framework that does not compromise speed and maintainability.

## Resources

- Guides
  - Docs
  - Source

Help

- Mailing list
  - #elixir-lang on freenode IRC
  - @elixirphoenix

# Account Setup

# AWS

- [developer.amazon.com](https://developer.amazon.com)

[DASHBOARD](#)[APPS & SERVICES](#)[ALEXA](#)[REPORTING](#)[SUPPORT](#)[DOCUMENTATION](#)[SETTINGS](#)

## Building Alexa Skills with the Alexa Skills Kit

[Add a New Skill](#)

To learn more about building Alexa skills, see [Getting Started with the Alexa Skills Kit](#). To start building an Alexa skill for free using AWS Lambda, see [Creating an AWS Lambda Function for a Custom Skill](#).

We encourage you to visit the [Alexa Developer Forum](#) to collaborate with Alexa team members and fellow Alexa developers.

[Your skills](#)[Skill Metrics](#)

Skill Name

Language

Skill Type

Modified

Status

Actions

DASHBOARD

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Your skills

Skill Metrics

Skill Name

Language

Skill Type

Modified

Status

Actions



[DASHBOARD](#)[APPS & SERVICES](#)[ALEXA](#)[REPORTING](#)[SUPPORT](#)[DOCUMENTATION](#)[SETTINGS](#)< Back to All Skills

## Create a New Alexa Skill

<b>Skill Information</b>	
Interaction Model	
Configuration	
SSL Certificate	
Test	
Publishing Information	
Privacy & Compliance	

**Skill Type**

Define a custom interaction model or use one of the predefined skill APIs. [Learn more](#)

 Custom Interaction Model Smart Home Skill API Flash Briefing Skill API**Language**

Language of your skill

**Name**

Name of the skill that is displayed to customers in the Alexa app. Must be between 2-50 characters.

**Invocation Name**

The name customers use to activate the skill. For example, "Alexa ask Tide Pooler...".

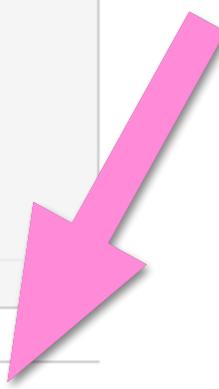
[Invocation Name Guidelines](#)

## Global Fields

These fields apply to all languages supported by the skill.

**Audio Player**

Does this skill use the audio player directives?

 Yes  No[Learn more](#)

English (U.S.)

Add New Language

**Skill Information**



**Interaction Model**



**Configuration**



**Test**



**Publishing Information**



**Privacy & Compliance**



**Intent Schema**

The schema of user intents in JSON format. For more information, see [Intent Schema](#).

Also see [built-in slots](#) and [built-in intents](#).

```
1 {
2   "intents": [
3     {
4       "intent": "HelloWorld"
5     }
6   ]
7 }
```

**Custom Slot Types (Optional)**

Custom slot types to be referenced by the Intent Schema and Sample Utterances

For general information about custom slots, see [Custom Slot Types](#).

Example: TOPPINGS - cheese | onions | ham (note: newlines displayed as | for brevity)

Add Slot Type

**Sample Utterances**

These are what people say to interact with your skill. Type or paste in all the ways that people can invoke the intents. [Learn more](#)

Up to 3 of these will be used as Example Phrases, which are hints to users.

```
1 HelloWorld hello world
2 HelloWorld hello
3 HelloWorld say hello
```



Save

Submit for Certification

Next

English (U.S.)

Add New Language

Skill Information

Interaction Model

Configuration

SSL Certificate

Test

Publishing Information

Privacy & Compliance

## Global Fields

These fields apply to all languages supported by the skill.

### Endpoint

Service Endpoint Type:

AWS Lambda ARN (Amazon Resource Name)

HTTPS

*Recommended*

AWS Lambda is a server-less compute service that runs your code in response to events and automatically manages the underlying compute resources for you.

[More info about AWS Lambda](#)

[How to integrate AWS Lambda with Alexa](#)

Pick a geographical region that is closest to your target customers:

North America

Europe

North America

`https://mysterious-island-82168.herokuapp.com/api`

### Account Linking

Do you allow users to create an account or link to an existing account with you?

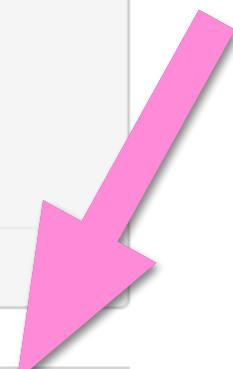
Yes  No

[Learn more](#)

[Save](#)

[Submit for Certification](#)

[Next](#)



[https://mysterious-island-82168.herokuapp.com/api/  
alexa](https://mysterious-island-82168.herokuapp.com/api/alexa)

**We did NOT create this endpoint yet!**

English (U.S.) 

Add New Language

Skill Information	
Interaction Model	
Configuration	
SSL Certificate	
Test	
Publishing Information	
Privacy & Compliance	

## Global Fields

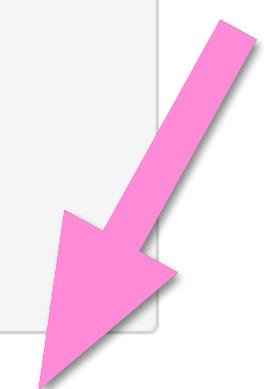
These fields apply to all languages supported by the skill.

To protect your security and the security of end users, we require that you use a certificate while developing an Alexa skill. For more information, see [Registering and Managing Alexa Skills - About SSL Options](#).

### Certificate for NA Endpoint:

Please select one of the three methods below for the web service:

- My development endpoint has a certificate from a trusted certificate authority
- My development endpoint is a sub-domain of a domain that has a wildcard certificate from a certificate authority
- I will upload a self-signed certificate in X.509 format. [Learn how to create a self signed certificate](#).



Save

Submit for Certification

Next

# Endpoint

*Now we have to add our endpoint!*

*So back to the Phoenix app...*

in web/router.ex

**scope "/api", Alexa do**

**pipe\_through :api**

**post "/alexa", AlexaController, :teamsnap**

**end**

# Controller

Create a new file web/controllers/alexa\_controller.ex

```
defmodule Alexa.AlexaController do
  use Alexa.Web, :controller

  def teamsnap(conn, _params) do
    json conn,
      %{
        "version" => "1.0",
        "response" => %{
          "outputSpeech" => %{
            "type" => "PlainText",
            "text" => "Hello World!",
          },
          "shouldEndSession" => true
        }
      }
    end
  end
```

```
defmodule Alexa.AlexaController do
  use Alexa.Web, :controller
  def teamsnap(conn, _params) do
    json conn,
    %{
      "version" => "1.0",
      "response" => %{
        "outputSpeech" => %{
          "type" => "PlainText",
          "text" => "Hello World!",
        },
        "shouldEndSession" => true
      }
    }
  end
end
```



What Alexa will say!

# Deploy

```
>> git add --all
```

```
>> git commit -m "hello world"
```

```
>> git push heroku master
```

# Service Simulator

Use Service Simulator to test your HTTPS endpoint: <https://mysterious-island-82168.herokuapp.com/api/alexa>

**Note:** Service Simulator does not currently support testing audio player directives and customer account linking.

**Text**   **JSON**

Enter Utterance

hello X

Ask Teamsnap by Cobenian   Reset

Service Request

```
1 {
2     "session": {
3         "sessionId": "SessionId.b7513763-fdce-462d-
4             "application": {
5                 "applicationId": "amzn1.ask.skill.c5d0592
6             },
7             "attributes": {},
8             "user": {
9                 "userId": "amzn1.ask.account.AGXFHAYY67RO
10            },
11            "new": true
12        },
13        "request": {
14            "type": "IntentRequest",
15            "requestId": "EdwRequestId.c2fa24d9-1879-49
16            "locale": "en-US",
17            "timestamp": "2018-06-12T13:45:00Z"
18        }
19    }
20}
```

Service Response

```
1 {
2     "version": "1.0",
3     "response": {
4         "outputSpeech": {
5             "type": "PlainText",
6             "text": "Hello World!"
7         },
8         "shouldEndSession": true
9     },
10    "sessionAttributes": {}
11 }
```

**Listen** 

Next

# Congratulations!

- You just created your first Alexa service!

# A better way to test

- The test screen is ok, but...

echosim.io

# Alexa Skill Testing Tool

Amazon account is required, please login.

 [Login with Amazon](#)





## Sign in to Echosim.io using your Amazon account

E-mail or mobile number:

daze@cobenian.com

What is your password?

.....

Keep me signed in. [Details](#)

[Sign in using our secure server](#)

[Forgot your password?](#)

[Create an Amazon.com account.](#)



### Login without hassle

Use Amazon to log into this site without another password.



### Login safely

Amazon does not share your password with this site.



[Learn More](#)



Hi Bryan Weber (daze@cobenian.com) [Not Bryan Weber?](#)

When you click "Okay", we'll provide Echosim.io:

- Connectivity to Alexa so that you can interact with it using your voice.

By clicking "Okay", you also accept: [All Amazon terms found here](#)

Alexa processes and retains audio and other information in the cloud to provide and improve our services, and may exchange information with third party services to fulfill your requests.

[Cancel](#)

[Okay](#)

To remove access, visit [Your Account at Amazon](#).

#### Login without hassle

Use Amazon to log into this site without another password.



#### Login safely

Amazon does not share your password with this site.



[Learn More](#)

Echosim.io provided by iQuarius Media. Special thanks to Sam Machin for his Alexa in the Browser [project](#).

## Alexa Skill Testing Tool

Click and **hold** the microphone button  
or hold down the space bar on your keyboard to activate the microphone.

Ready...



# Testing

- Push the button, say your command  
"Ask team snap hello"

# Our App

# Cards

To show a card in the Alexa mobile app, add a card to your response:

```
"response" => %{

    "outputSpeech" => %{

        "type" => "PlainText",

        "text" => "Hello World!",

    },

    "card" => %{

        "type" => "Simple",

        "title" => "Your upcoming practices and games.",

        "content" => "Your team snap information will go here."

    },

    "shouldEndSession" => true

},
```

# Cards

- The user experience is focused on voice, use cards sparingly (for account setup, etc.)

# Account Linking

- Can track by userId
- However, when authentication is needed, you must link your Amazon account to a third party account
- This is done via OAuth2

# OAuth2 Roles

- Resource owner - the person
- Resource server - TeamSnap in our example
- Client - Alexa
- Authorization server - TeamSnap

# Account Linking

- Users MUST use the app to link accounts
- They CAN NOT do this by voice
- Your app returns a special type of card, a **LinkAccount** card
- You can use Authorization Code Grant **OR** Implicit Grant flows

# Account Creation

[TEAMS](#)[CLUBS & LEAGUES](#)[COMMUNITY](#)[ABOUT](#)[CONTACT](#)[LOG IN](#)[SIGN UP](#)

# Save Time Communicating with Your Team

[Sign Up](#)



## Enter your email address

To begin the sign up process, please provide your email address below.

A text input field containing the email address "daze@cobenian.com".

Continue ➔

A green rectangular button with the text "Continue" and a right-pointing arrow.

Already have an account? [Log in](#)

TeamSnap is an online team manager used by millions of people worldwide to organize sports teams, groups and organizations.





## What's your role on the team?



Coach/Manager

+ Create Team



Team Member

Find Team



League/Club Admin

Get a free demo from one of our specialists. No commitment!

Request Demo



## Start Your Free 21-Day Trial — No Credit Card Required!

### Create My Team:

**Team Name:**

Yankees

This can always be changed later.

**Sport:**

Baseball



### Create My Account:

**Email Address:**

daze@cobenian.com

## Create My Account:

Email Address:

daze@cobenian.com

Confirm Email Address:

daze@cobenian.com

Create a Password:

.....

Show Password

Password must include at least 8 characters.

Continue >





FANTASTIC! Now let's customize a few things...

**Tell us where Yankees is located:**

**Country:**

United States



This helps us customize to your country.

**ZIP/Postal Code:**

20120

This helps us customize weather and maps.

**Time Zone:**

(GMT-05:00) Eastern Time (US & Canada)



This is so we can properly record your dates and times.

## Tell us about yourself:

Nothing about you or your team is ever shared publicly.

**First Name:**

Bryan

**Last Name:**

Weber

**Birth Month & Year:**

September

1976

**You must be 13 or older to create an account.**

Children under 13 should have a parent create an account on their behalf, using the parent's birthdate. [More Info](#)

Send me occasional TeamSnap news. I like knowing stuff.

(By checking this box, you are providing your consent for TeamSnap to send you our newsletter, updates on TeamSnap and special offers. If you don't like what we send, you may withdraw your consent at any time.)



I'm not a robot



reCAPTCHA  
[Privacy - Terms](#)

**Create New Team**

By clicking this button I agree to the [TeamSnap Terms of Service](#).

 Add Players Schedule Game Team Settings

## Roster

First, let's add some players to your Roster! Just enter the name and email address for as many players as you like. You'll be able to add more info for each player later, and you can easily add new players to the Roster at any time!

**TIP FOR YOUTH TEAMS:** Your players may be too young to have their own email address, so enter a parent's email instead. When that parent joins the team, they'll be encouraged to invite their spouse or other key contacts to join as well!

Bryan

Weber

## Add Players

First Name

Last Name

Email Address

First Name

Last Name

Email Address

Bryan

Weber

## Add Players

Ben

Weber

ninja@cobenian.com|

First Name

Last Name

Email Address

First Name

Last Name

Email Address

Send invitations to join my team

 **Create Team**

# Want Some Help?

Invite a coach/team parent to help manage your team!

First Name

Last Name (Optional)

Email Address

Back

Skip this Step

Send Invite



[!\[\]\(0d8da9bcb0ffd14c70b21ee88d1975a4\_img.jpg\) Add Players](#)[!\[\]\(ee28bce606e2d37171120e83682c1db9\_img.jpg\) Schedule Game](#)[!\[\]\(4f97e81895879c5a84ed037660a7e593\_img.jpg\) Team Settings](#)

## Schedule

Now let's schedule your first Game. You'll be able to schedule additional games later on the Schedule tab. If you're not ready to schedule a game right now, you can just skip this step and set up your schedule later.

\*Opponent Name:

\* Indicates a required field

\*Date:



Time:



\*Location Name:

Location Address:

[!\[\]\(8c6201f328a35689c6e41dc80a02b3e8\_img.jpg\) Back](#)[!\[\]\(2ef9ffc87b0eb3c8a29df133195d6ee9\_img.jpg\) Save and Continue](#)



a particular field, it's okay to just skip it for now. And don't worry — it's easy to change these settings later.

Gender:

- Men/Boys
- Women/Girls
- Coed

Level:

- Recreational
- Competitive
- School

Age Group (*choose most appropriate group for your team*):

- Make this an adult team

8 & under



League:

NVTBL

League Website URL:

nvtbl.org

Division:

Metro

Season:

Spring 2017



Save and Continue ➤



## TEAM SETUP

[SKIP SETUP →](#)



### Setup Complete!

If you like, you can upload a **Team Logo** to appear at the top of every page for your team! For best results, team logos should be a [transparent PNG image](#). If you'd rather wait until later, just click "Take me to my Team!" and you're off!

Select an image from your computer to use for your logo:

No file chosen

### Use TeamSnap on the go!

Download our iPhone, iPad and Android apps.



**IMPORTANT:** Don't miss out on upcoming events. Enable [email notifications](#). Don't show again

Message from the Team Manager...

[Add a Home Page Message](#)

[Page Photo](#)

[Upload a Team Home Photo](#)

Snap Features

Roster

See the people on your team and get their contact information

Schedule

View the schedule of games and events, get directions

### Sharing

Turn On Facebook Posting

Public Access is **On**

<https://yankees-757.teamsnap.com>

Give this link to friends and family so they can keep up on your team.

[Edit Public Preferences](#)

### Status Report

Team Record:

0

Wins

0

Losses

Last Game:

[Help](#)

# Welcome to **TeamSnap**. Now Start Saving Time!

Thanks for creating an account with TeamSnap. **Set up your team now in minutes so that TeamSnap can save you hours (literally) in the future.**

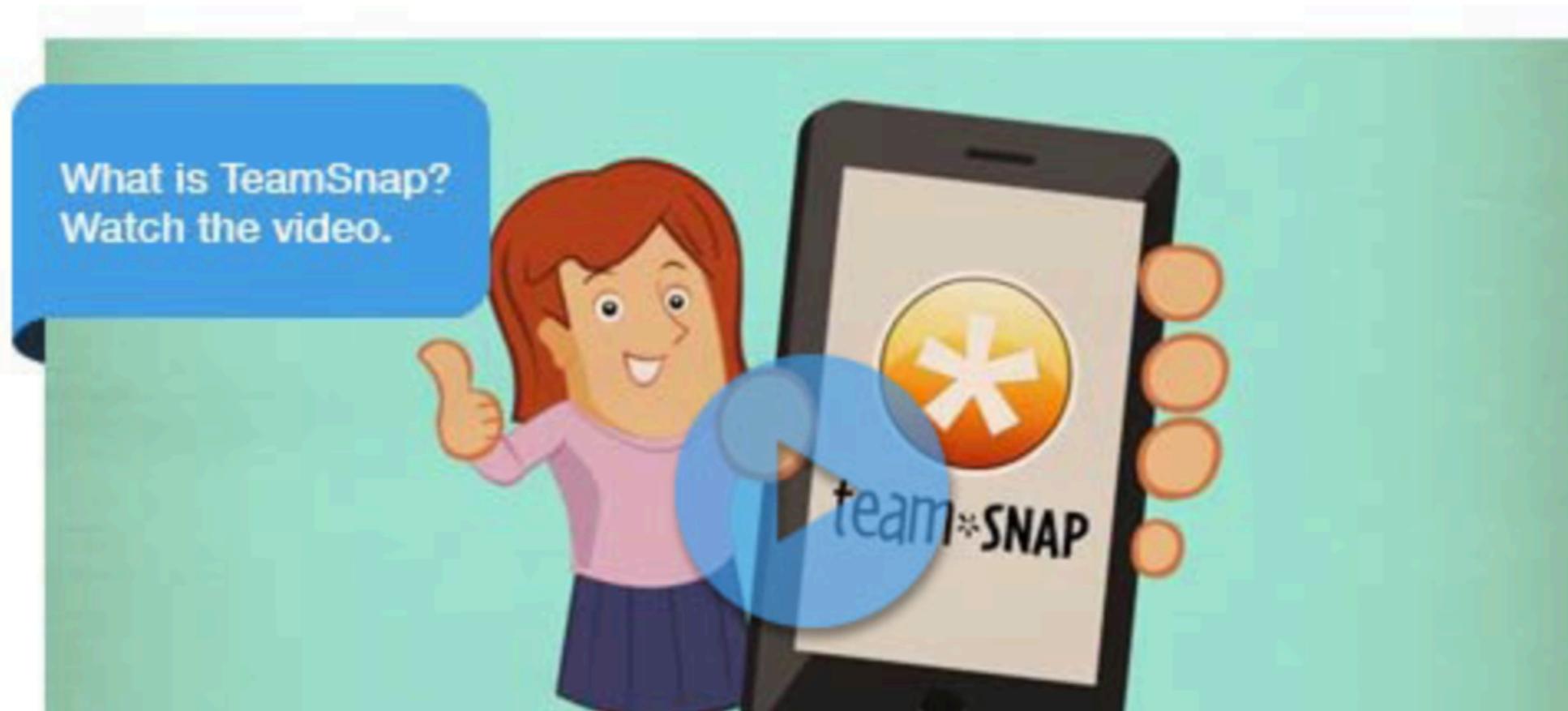
[Visit Your Team Site](#)





Join Now

Hi Ben Weber!  
Join Yankees on TeamSnap!



# TeamSnap Auth

<https://auth.teamsnap.com>



Log In

**Username**

daze@cobenian.com

**Password**

Remember me [Forgot Your Password?](#)

**Log In**





 Bryan Weber ▾

Log Out

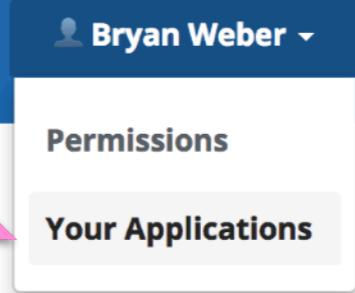
## Your Authorized Applications

Application	Created At	
NextJenn	2014-01-06 20:21:59	<a href="#">Revoke</a>
Classic	2014-11-13 17:31:04	<a href="#">Revoke</a>

NAP

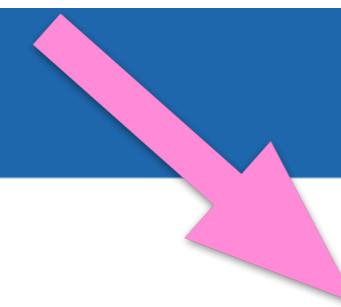
## Your Authorized Applications

Application	Created At	
NextJenn	2014-01-06 20:21:59	<a href="#">Revoke</a>
Classic	2014-11-13 17:31:04	<a href="#">Revoke</a>



Log Out

NAP



 Bryan Weber ▾

Log Out

## Applications

Name	Callback URL			

+ New Application

DASHBOARD

APPS &amp; SERVICES

ALEXA

REPORTING

SUPPORT

DOCUMENTATION

SETTINGS

&lt; Back to All Skills

Getting Started



## Teamsnap by Cobenian

Custom

ID: amzn1.ask.skill.c5d0592d-b402-4373-a0a7-071a571b5c81

English (U.S.)

Add New Language

Skill Information	
Interaction Model	
Configuration	
SSL Certificate	
Test	
Publishing Information	
Privacy & Compliance	

## Global Fields

These fields apply to all languages supported by the skill.

### Endpoint

Service Endpoint Type:

 AWS Lambda ARN (Amazon Resource Name) *Recommended*

AWS Lambda is a server-less compute service that runs your code in response to events and automatically manages the underlying compute resources for you.

[More info about AWS Lambda](#)[How to integrate AWS Lambda with Alexa](#) HTTPS

Pick a geographical region that is closest to your target customers:

 North America Europe

#### North America

<https://mysterious-island-82168.herokuapp.com/api>

## Account Linking

Do you allow users to create an account or link to an existing account with you?

[Learn more](#) Yes No[Save](#)[Submit for Certification](#)[Next](#)

## Linking

Allow users to create an account or link an existing account with you?

Yes  No

### Authorization URL

Customers will be redirected in the skill to enter login credentials.

String used to identify the client during authentication.

(Optional) The port number that the authorization URL will be served from. You can provide up to 15 digits.

(Optional) The scopes to request from the skill user. You can provide up to 15 scopes.

(Optional) HTTPS redirection endpoints that are requested during authorization to redirect the user after the authorization process.

<https://mysterious-island-82168.herokuapp.com/api>

<https://auth.teamsnap.com/oauth/authorize>

[Add domain](#)

1



[Add scope](#)

<https://layla.amazon.com/api/skill/link/M31MD488YQFW6M>  
<https://pitangui.amazon.com/api/skill/link/M31MD488YQFW6M>



## New application

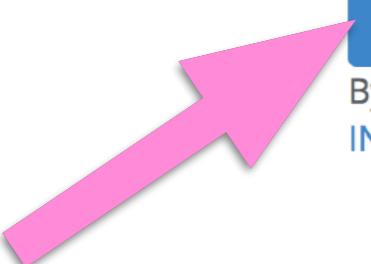
**Name**

Elixir Daze

**Redirect URI**

https://layla.amazon.com/api/skill/link/M31MD488YQFW6M  
https://pitangui.amazon.com/api/skill/link/M31MD488YQFW6M

Use one line per URI

Use `urn:ietf:wg:oauth:2.0:oob` for local testsSubmit

Cancel

By clicking this button I agree to the [TEAMSNAP, INC. API AND DATA LICENSE AGREEMENT](#).



Bryan Weber ▾

Log Out

e created an application.

## Application: Elixir Daze

Client ID:

c71df24bf6c6ac78b52f29519b9e1a78b436f6e80fe928c82b01c1a78a71af50

Client Secret:

[REDACTED]

Callback urls:

<https://layla.amazon.com/api/skill/link/M31MD488YQFW6M>

Authorize

<https://pitangui.amazon.com/api/skill/link/M31MD488YQFW6M>

Authorize

### Actions

Edit

Destroy

## Linking

Users to create an account or link their account with you?

Yes  No

L

Members will be redirected in the skill to enter login credentials.

used to identify the skill during authentication.



<https://auth.teamsnap.com/oauth/authorize>

c71df24bfdc6ac78b52f29519b9e1a78b436f6e80fe928c82b01c1a78a71af50

[Add domain](#)

1 [teamsnap.com](#)

(optional)  
Enter the URL that the authorization URL will be redirected to. You can provide up to 15 URLs.

Request scopes to request from the skill user. You can provide up to 15 scopes.

(optional)  
AWS Lambda URLs or redirection endpoints that will be called during authorization to redirect the user back after the authorization process.

[Add scope](#)

<https://layla.amazon.com/api/skill/link/M31MD488YQFW6M>  
<https://pitangui.amazon.com/api/skill/link/M31MD488YQFW6M>

Grant Type (Optional)

Choose the grant type that Alexa uses to obtain an access token from your provider.

Implicit Grant  Auth Code Grant

**Grant Type (Optional)**

Auth authorization grant that Alexa can access token from your provider.

- 
- Implicit Grant
- 
- Auth Code Grant

**Access Token URI**

This URI will be used for both access token and token refresh requests.

<https://auth.teamsnap.com/oauth/token>

**Client Secret**

.....

**Client Authentication Scheme**

(Optional)

HTTP Basic (Recommended) ▾

**URL**

Policy for this skill. This is account linking.

[Create a new URL](#)

[Submit for Certification](#)



[Next](#)

# Code

```
defmodule Alexa.AlexaController do
  use Alexa.Web, :controller
  require Logger

  @api_url "https://api.teamsnap.com/v3"

  def teamsnap(conn, params) do
    Logger.info("received request: #{inspect params}")
    response =
    case get_in(params, ["context", "System", "user", "accessToken"]) do
      nil ->
        %{
          "version" => "1.0",
          "response" => %{
            "outputSpeech" => %{
              "type" => "PlainText",
              "text" => "You must log in via the mobile app.",
            },
            "card" => %{
              "type" => "LinkAccount",
            },
            "shouldEndSession" => true
          },
          "sessionAttributes" => %{}
        }
    end
  end
end
```

```
access_token ->

    Logger.info("will use access token: #{inspect access_token}")

    client = OAuth2.Client.new(token: access_token)

    path = "/me"

    resp = OAuth2.Client.get!(client, @api_url <> path).body

    items = get_in(resp, ["collection", "items"])

    Logger.info("links are #{inspect items}")

    active_team_urls =

        items |> Enum.map(fn item ->

            item["links"] |> Enum.filter_map(fn link ->

                case link do

                    %{"rel" => "active_teams"} -> true

                    _ -> false

                end

            end,

            fn link ->

                link["href"]

            end

        end) |> List.flatten

    )

    end) |> List.flatten

Logger.info("active team urls: #{inspect active_team_urls}")
```

```
teams =  
  
active_team_urls |> Enum.map(fn url ->  
  
    resp = OAuth2.Client.get!(client, url).body  
  
    Logger.info("response for #{inspect path} is #{inspect resp}")  
  
    resp["collection"]["items"]  
  
    |> Enum.map(fn item ->  
  
        item["data"] |> Enum.filter_map(fn map ->  
  
            case map do  
  
                %{"name" => "name"} -> true  
  
                _ -> false  
  
            end  
  
        end,  
  
        fn map ->  
  
            map["value"]  
  
        end  
  
    )  
  
    end) |> List.flatten  
  
end) |> List.flatten
```

```
%{  
    "version" => "1.0",  
  
    "response" => %{  
        "outputSpeech" => %{  
            "type" => "PlainText",  
  
            "text" => "Your teams are: #{Enum.join(teams, ", ")}",  
  
        },  
  
        "shouldEndSession" => true  
    },  
  
    "sessionAttributes" => %{}  
}  
  
end  
  
Logger.info("sending response: #{inspect response}")  
  
json conn, response  
  
end  
  
end
```

# Problem

- We are still asking Alexa ‘hello’
- Let’s move on to multiple intents

tion Model	<input checked="" type="checkbox"/>
uration	<input checked="" type="checkbox"/>
ertificate	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
ning Information	<input checked="" type="checkbox"/>
Y & Compliance	<input checked="" type="checkbox"/>

Also see [built-in slots](#) and [built-in intents](#).

```
1 {
2   "intents": [
3     {
4       "intent": "Teams"
5     },
6     {
7       "intent": "Schedule"
8     }
9   ]
10 }
```

### Custom Slot Types (Optional)

Custom slot types to be referenced by the Intent Schema and Sample Utterances

[Add Slot Type](#)

For general information about custom slots, see [Custom Slot Types](#).

Example: TOPPINGS - cheese | onions | ham (note: newlines displayed as | for brevity)

### Sample Utterances

These are what people say to interact with your skill. Type or paste in all the ways that people can invoke the intents. [Learn more](#)

Up to 3 of these will be used as Example Phrases, which are hints to users.

```
1 Teams what are my teams
2 Teams list my teams
3 Teams teams
4
5 Schedule when are my games
6 Schedule when are my practices
7 Schedule what is my schedule
8 Schedule what do I have this week
9 Schedule games
10 Schedule practices
11 Schedule schedule
```

# Request

- What does our request look like?

```
%{"context" => %{"AudioPlayer" => %{"playerActivity" => "IDLE"},

"System" => %{"application" => %{"applicationId" => "amzn1.ask.skill.c5d0592d-b402-4373-a0a7-071a571b5c81"},

"device" => %{"supportedInterfaces" => %{"AudioPlayer" => %{}},

"user" => %{"accessToken" => "<<REDACTED>>",

"userId" => "<<REDACTED>>"}}},

"request" => %{"inDialog" => false, "intent" => %{"name" => "Schedule"},

"locale" => "en-US",

"requestId" => "amzn1.echo-api.request.5ab5c782-9e87-4977-8e3b-14d0b41391e3",

"timestamp" => "2017-03-01T02:46:50Z", "type" => "IntentRequest"},

"session" => % {"application" => % {"applicationId" => "amzn1.ask.skill.c5d0592d-b402-4373-a0a7-071a571b5c81"},

"new" => true,

"sessionId" => "amzn1.echo-api.session.e19e49ff-668b-4f39-b7d8-d276339e22c5",

"user" => % {"accessToken" => "<<REDACTED>>",

"userId" => "<<REDCATED>>"},

"version" => "1.0"}
```

# Pattern Match the Intent

```
case get_in(params, ["request", "intent", "name"]) do
  "Teams" ->
    teams_response(access_token)
  _ ->
    unknown_response()
end
```

# What about parameters?

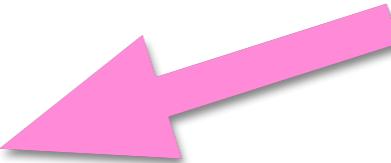
- This is what "Slots" are for
- Slots have a name and type

**Skill Information****Interaction Model****Configuration****SSL Certificate****Test****Publishing Information****Privacy & Compliance****Intent Schema**

The schema of user intents in JSON format. For more information, see [Intent Schema](#).

Also see [built-in slots](#) and [built-in intents](#).

```
5  },
6  {
7      "intent": "Schedule",
8      "slots": [
9          {
10             "name": "Date",
11             "type": "AMAZON.DATE"
12         }
13     ]
14 }
15 ]
```

**Custom Slot Types (Optional)**

Custom slot types to be referenced by the Intent Schema and Sample Utterances

For general information about custom slots, see [Custom Slot Types](#).

Add Slot Type

Example: TOPPINGS - cheese | onions | ham (note: newlines displayed as | for brevity)

**Sample Utterances**

These are what people say to interact with your skill. Type or paste in all the ways that people can invoke the intents. [Learn more](#)

Up to 3 of these will be used as Example Phrases, which are hints to users.

```
1 Teams what are my teams
2 Teams list my teams
3 Teams teams
4
5 Schedule what do I have on {Date} 
6 Schedule when are my games
7 Schedule when are my practices
8 Schedule what is my schedule
9 Schedule what do I have this week
10 Schedule games
11 Schedule practices
```

# Request with slots

```
"request" =>
  %{"inDialog" => false,
    "intent" => %{"name" => "Schedule",
      "slots" =>
        %{"Date" => %{"name" => "Date", "value" => "2017-03-01"}}}
```

# New Code

"Schedule" ->

```
schedule_response(access_token, get_in(params, ["request", "intent", "slots"]))
```

# Pattern Match on Slots

```
def schedule_response(access_token,  
  %{"Date" => %{"name" => "Date", "value" => date}}) do
```

Play!

# Resources

- [echosim.io](#)