

Cloud Based Telephony Applications

In an instant with Twilio and Heroku

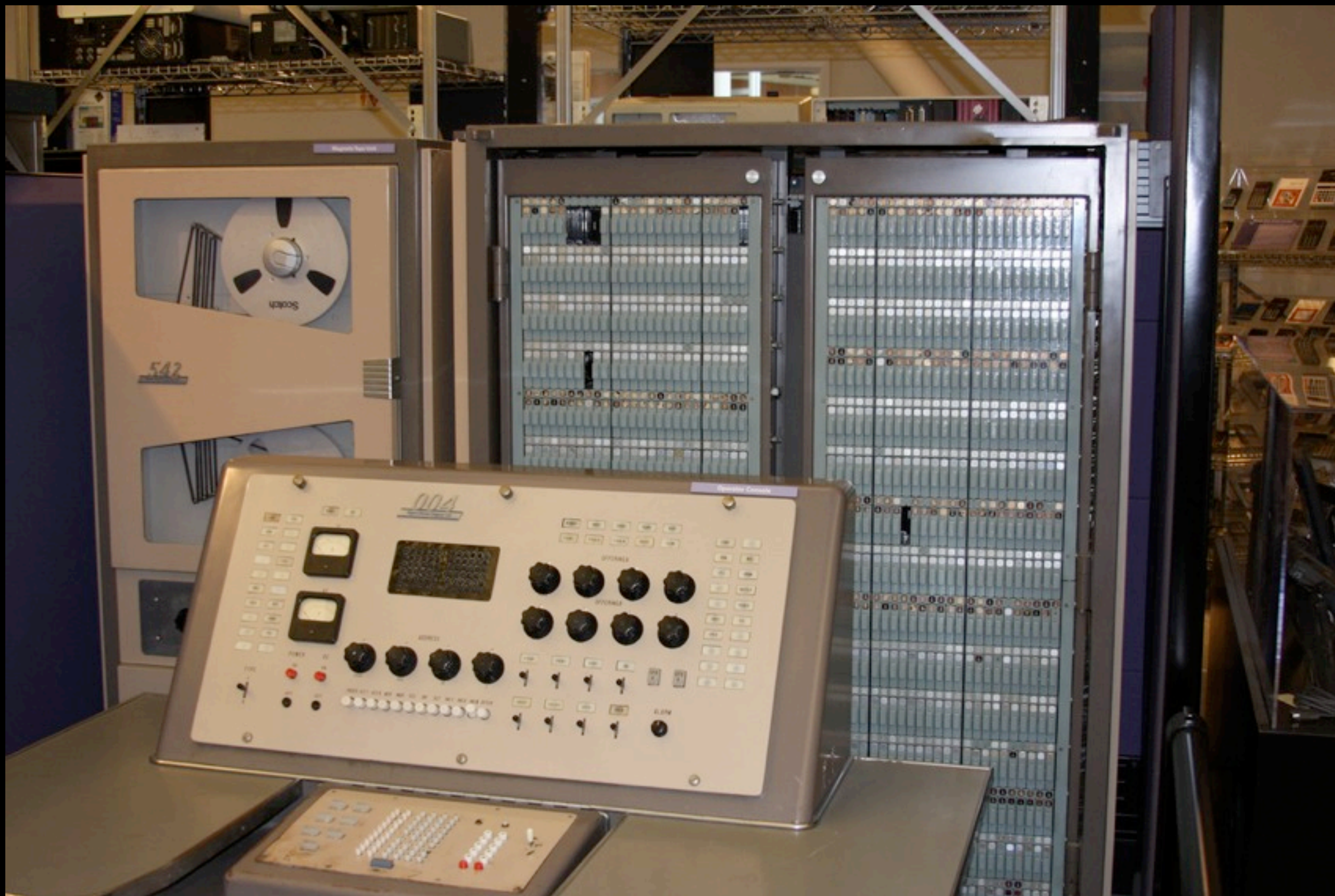
Philly Lambda: April 18th 2011

But First!

a Story...

Credit Card Activation

IVR Vendor



Really Good At:

Being Robust

Handling Lots of Simultaneous Calls

Reporting / Metrics

Did I mention Being Reliable?

Mon: Submit updated Flow

Tue: Not Ready Yet?

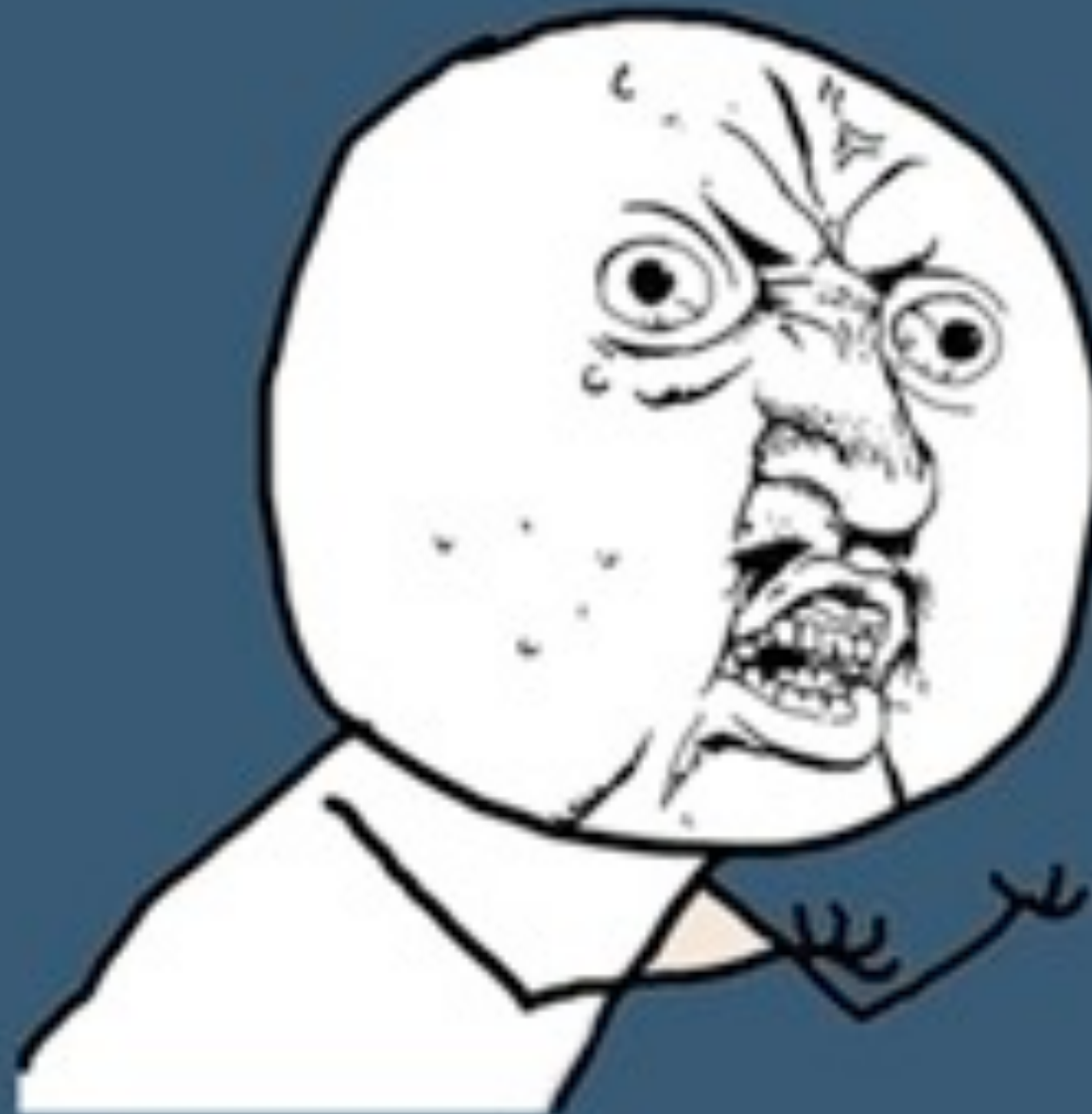
Wed: Ready? Great!

We test it...and want changes

Thu: Submit updated Flow

Fri: Not Ready Yet? Er, my week's over.

VENDOR



Y U NO UPDATE FASTER!

memegenerator.net

Idea #1


```
function voice_prompt () {  
    echo "    SPEAKING: $1"  
    say -v "Vicki" "$1"  
}
```

```
function get_user_keypress () {  
    KEY=""  
    echo -n "Press a Key: "  
    read KEY  
    export KEY  
}
```

I know: I'll use Bash!

```
echo "Pretending I'm an IVR..."
```

```
function say_top_menu () {  
    voice_prompt "Press 1 to hear your current balance."  
    voice_prompt "Press 2 to make a payment."  
    voice_prompt "Press star to hear this menu again."  
    voice_prompt "Press 0 to disconnect."  
}
```



kyleburton kyleburton

quickly prototype an IVR interaction? OSX: use 'say' and some bash if/else logic, made some product people real happy in about 60s :)

16 Feb

— in reply to @kyleburton ↑



@kyleburton you are an OS X "say" addict.

16 Feb via [Twitter for iPhone](#) ☆ [Favorite](#) ↺ [Retweet](#) ↩ [Reply](#)



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@[redacted] here: <https://gist.github.com/830204> too much?

16 Feb

— in reply to @kyleburton ↑



@kyleburton sweet. Poor man's IVR
prototyping.

16 Feb via [Twitter for iPhone](#) ☆ Favorite ↺ Retweet ↻ Reply

Idea #2

The Services
I'm About
To Discuss
Didn't Exist
5 Years Ago

Twilio

Cloud Based Telephony

Internet Based API

I couldn't find a reference for
when Twilio was founded.

(domain registered since 2007)

“In telecommunication, telephony encompasses the general use of equipment to provide voice communication over distances, specifically by connecting telephones to each other”

- Wikipedia

Twilio

- Receive Calls
- Initiate Calls
- Conference and Forward
- SMS Send / Receive

Twilio

Simple HTTP Interface
+ some *Simple* XML

Heroku

Founded in 2007

PaaS

Ruby on Rails

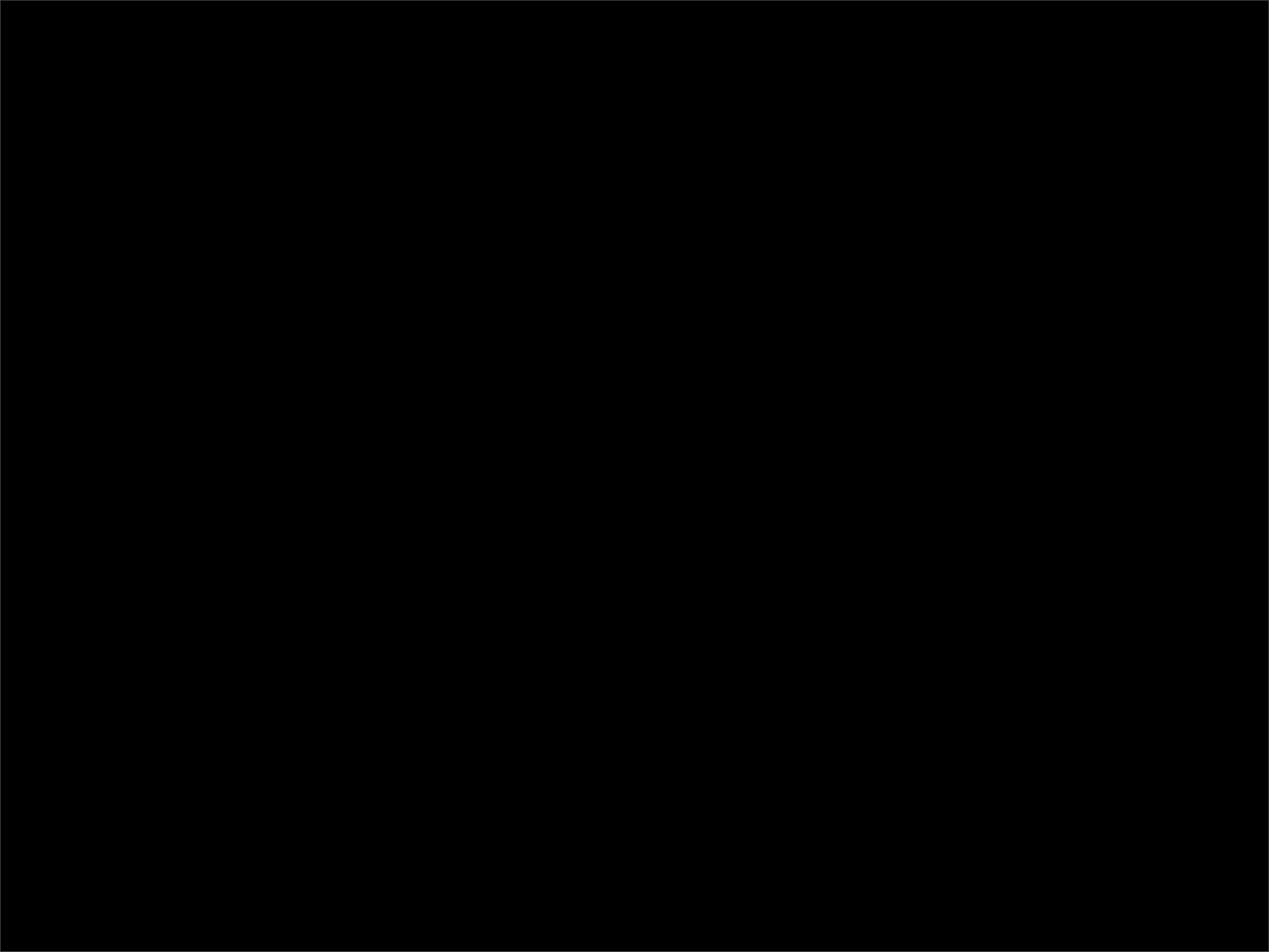
Tons of Add Ons

Awesome: Check

What Do They Have In Common?

You can try
them...

*for free**





IVR

Activate Your Credit Card

Collect Info Ahead of Customer
Service

Banking by Phone

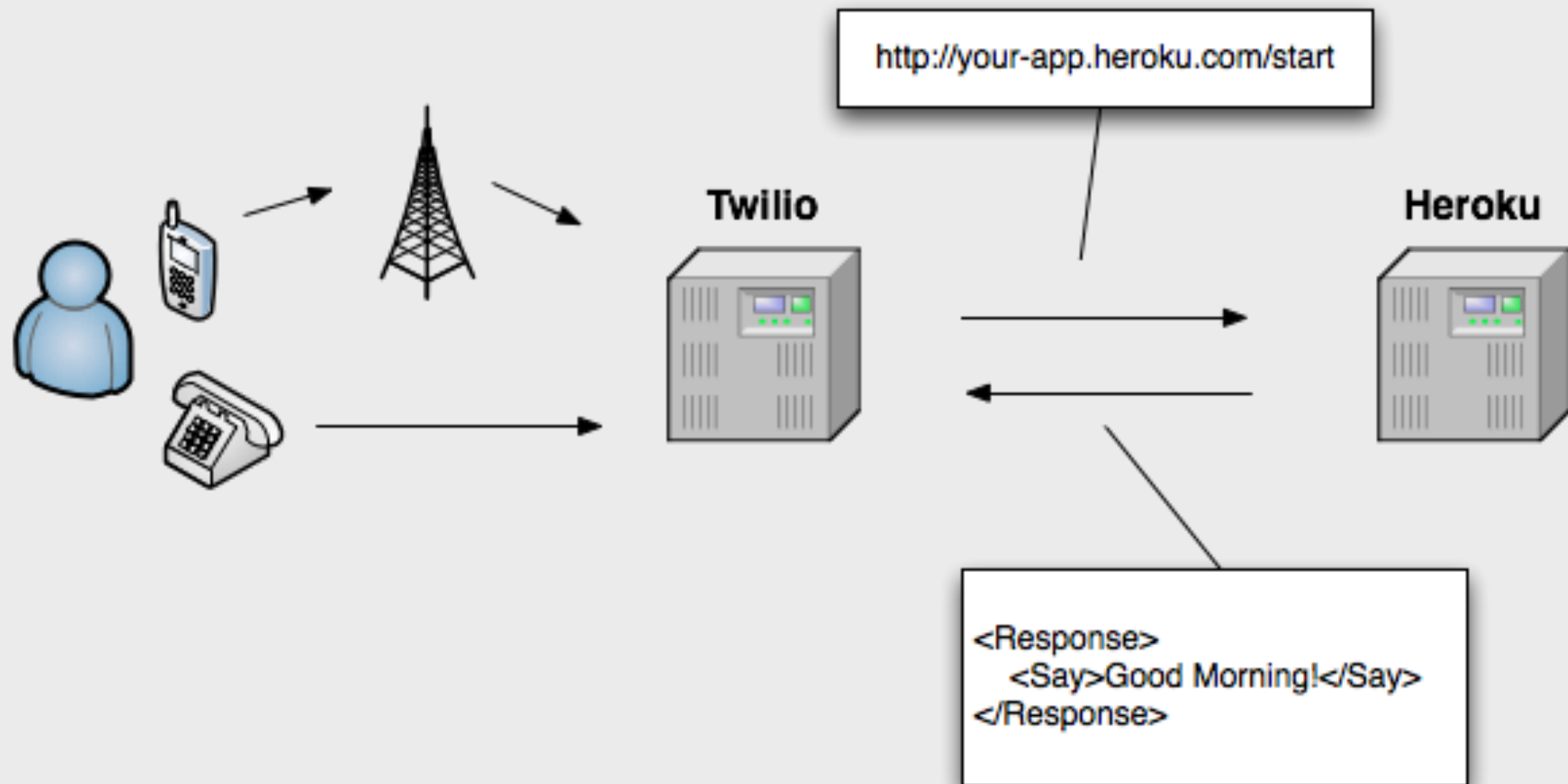
Snow Day Hotline / Robo Caller

RSVP Service

Reminder Service

Two Factor Authentication





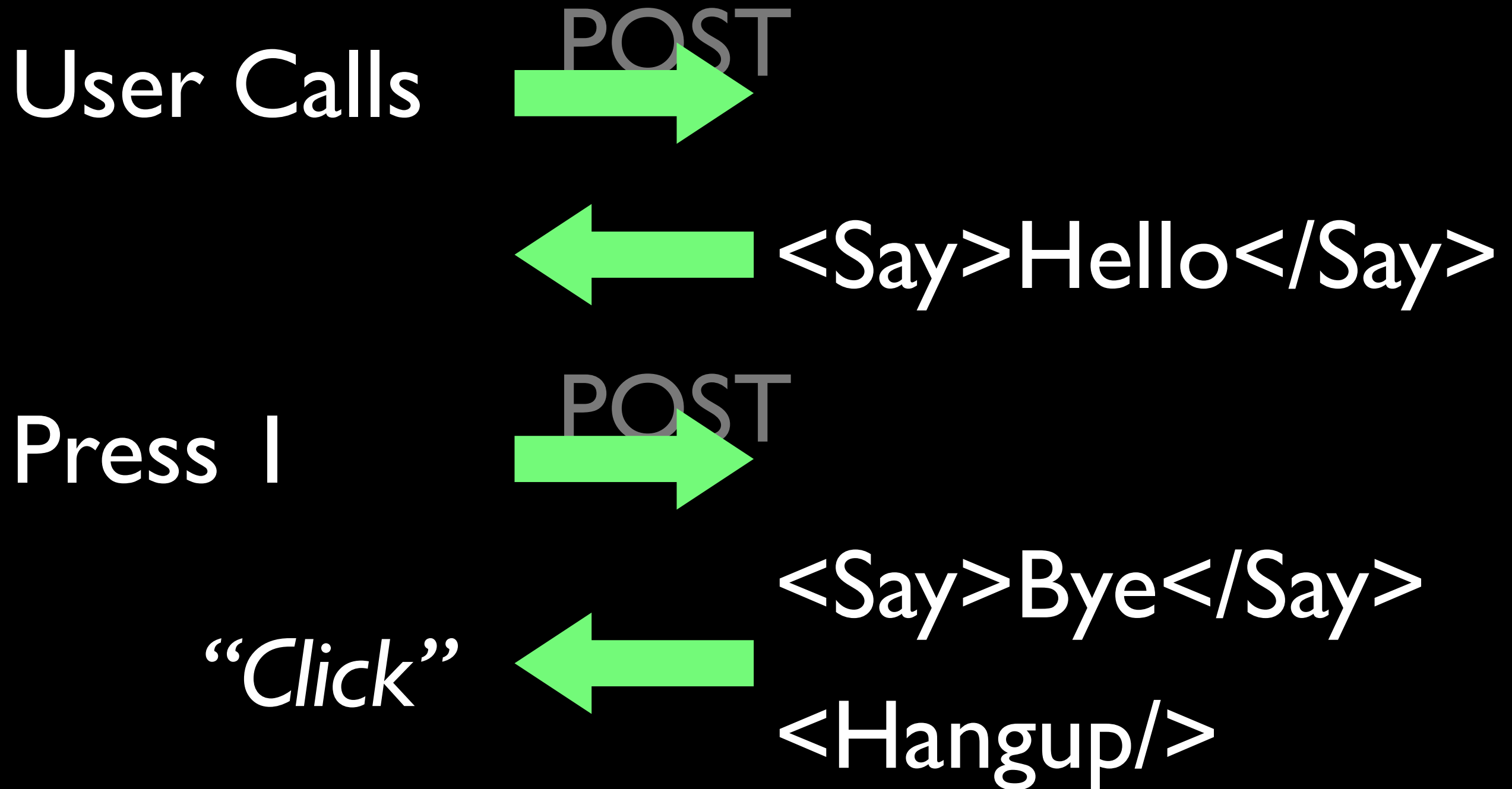
TWML

<Response>

<Say>Hello Monkey</Say>

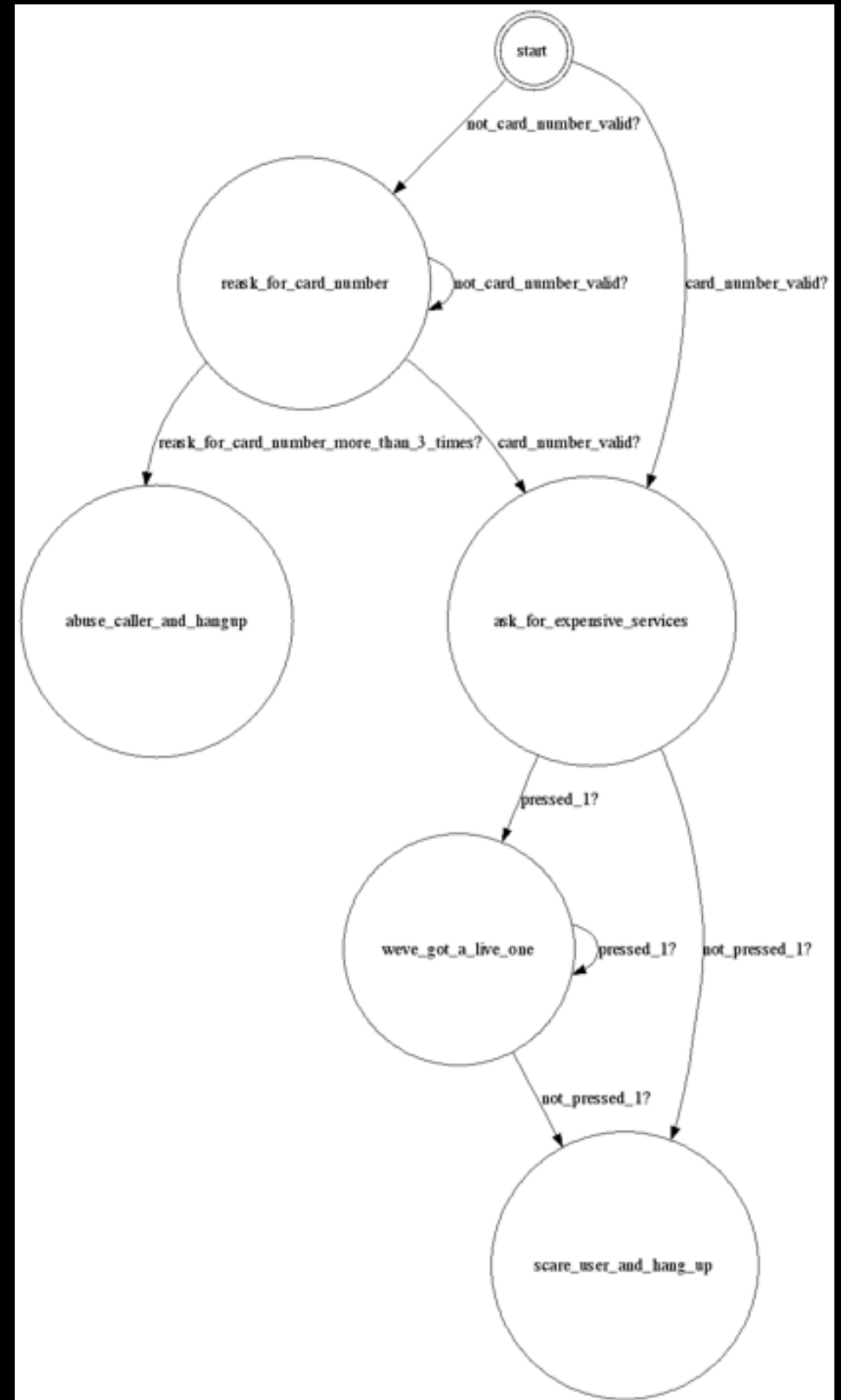
</Response>

Life Cycle



I modeled the IVR as a state machine.

See also: Newflow



Framework

State Machine

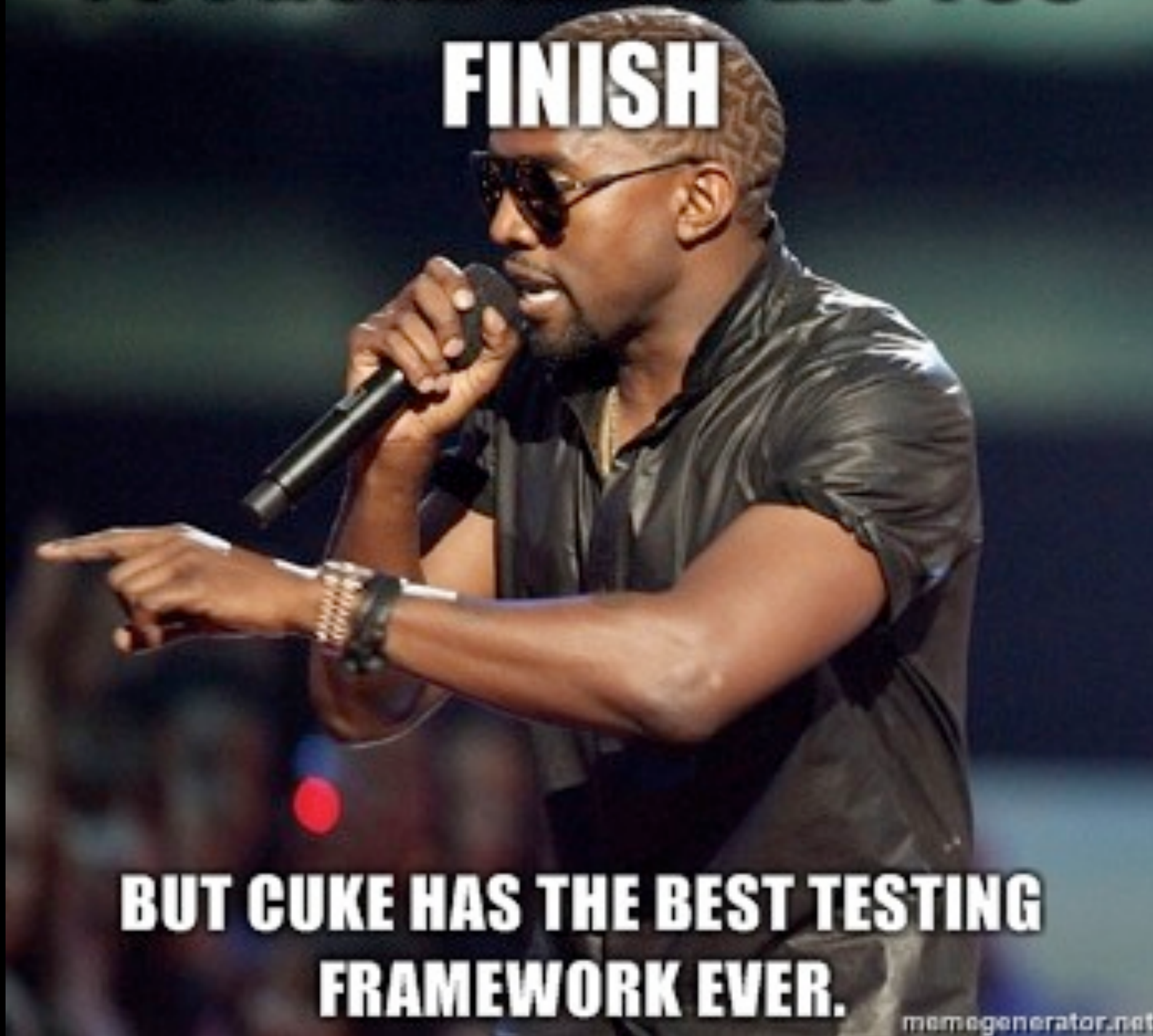
Web Console

Cucumber Integration

Would you like to see it?

Show Some Code and The App

**YO PHONE IMMA LET YOU
FINISH**



**BUT CUKE HAS THE BEST TESTING
FRAMEWORK EVER.**

memegenerator.net

Show the Cuke Features



kyleburton kyleburton

@ [redacted] this is for you [ivr]: <https://gist.github.com/833002> (does this redeem my geek cred from the bash/say script? :)

17 Feb

— In reply to @kyleburton ↑



@kyleburton oooooo much prettier! You have purged yourself of TeH sh fuglies

17 Feb via [Twitter for iPhone](#) ☆ Favorite ↺ Retweet ↻ Reply

Want to Try it?



Call, or Text:

(610) 915-8524

Go to: <http://warm-wind-609.herokuapp.com/>

Thank You

@kyleburton

github.com/kyleburton/twilio-in-ten-minutes

twilio.com

heroku.com

see [image-credits.textile](#) for Image Credits