Patterns for Building a Chatbot

(that doesn't suck)

CSE

Steve Bohlen
Principal Software Engineer

Microsoft

sbohlen@microsoft.com http://blog.unhandled-exceptions.com @sbohlen

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http://codecampnyc.org

Who am I?

- …and why should you care?
- Steve Bohlen
- I Read Books + Write Software
  - vs. “Read Software + Write Books” ☺
- Blog, Screencast, Speak, Share, Learn

Steve Bohlen

Over 25 years as a software developer
LISP, Delphi, C/C++, VB, VB.NET, Java, Ruby, C#, JavaScript, node.js
Principal Software Engineer & Technical Evangelist, Microsoft
Co-Founder, NYC Alt.Net User Group
Co-Organizer, NYC DDD User Group
Contributor: various OSS projects
- NHibernate
- Spring.NET http://www.springframework.net
- Common.Logging http://github.com/net-commons/common-logging

blog: http://blog.unhandled-exceptions.com
e-mail: sbohlen@gmail.com
twitter: @sbohlen
Membership: ASP Insiders, C# Insiders, Telerik Insiders, INETA Board of Directors

Alumni

I am a

employee…

…but these thoughts are my own!

The Bot Landscape

And Why You Should Care

What is your Chatbot Strategy?

What is your…

…cloud strategy?

…big data strategy?

…social media strategy?

…app strategy?

…mobile web strategy?

…SEO strategy?

…web strategy?

…SOA Strategy?

…<your meme here> strategy?

CALIFORNIA GOLD RUSH 1849

1999

Mike Keefe The Denver Post 03/16/07 www.caglecartoons.com
I'D LIKE TO QUESTION THE LEADER-SHIP ON THIS MOVE!
SHUT UP! YOU'RE UNDER-MINING THE TROOPS!

Emergent Tech ▸ Artificial Intelligence

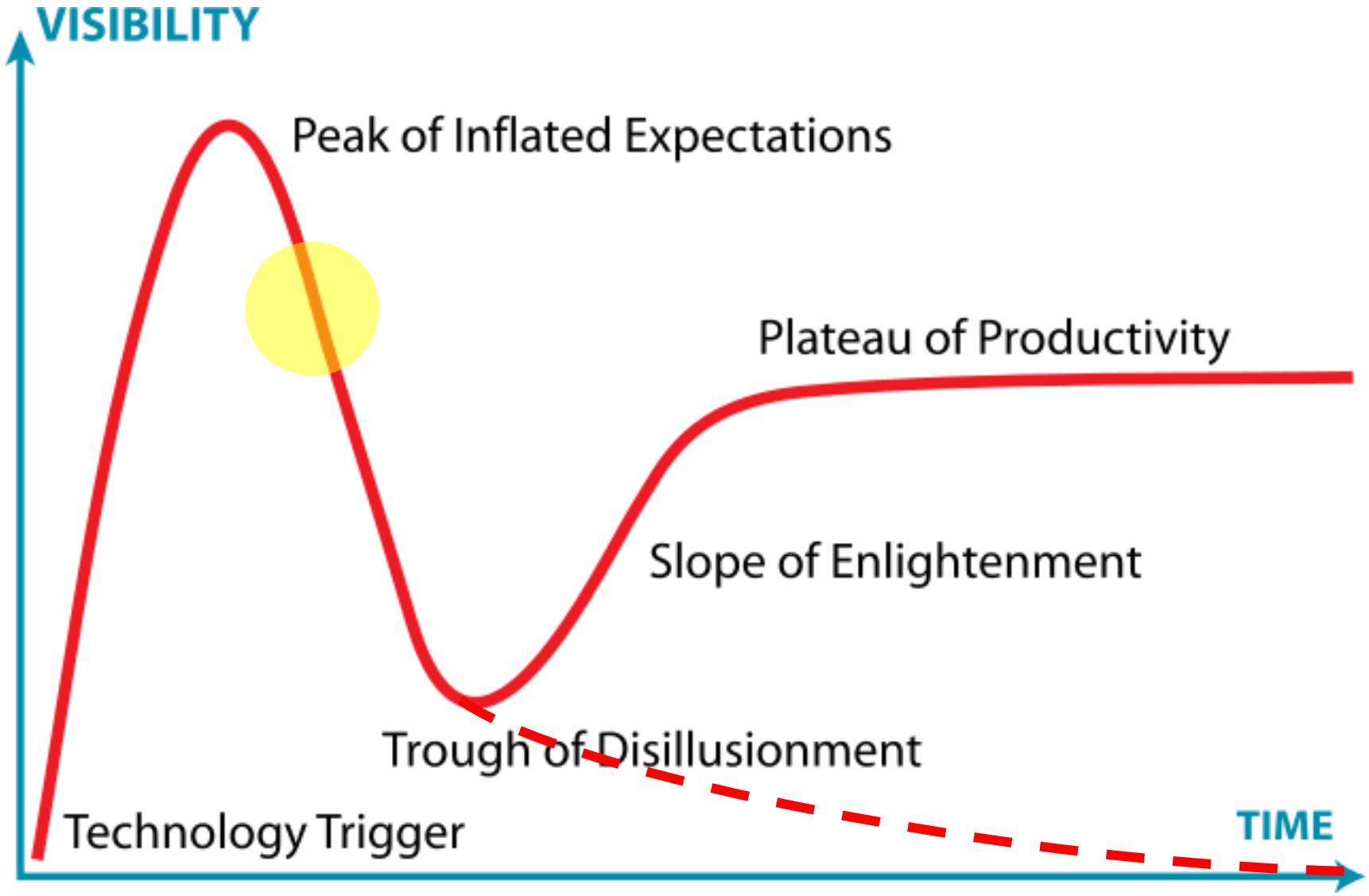
Facebook scales back AI flagship after chatbots hit 70% f-AI-lure rate

'The limitations of automation'

By Andrew Orlowski 22 Feb 2017 at 17:46 23 SHARE ▼

So it begins.

Facebook has scaled back its ambitions and refocused its application of "artificial intelligence" after its AI bots hit a 70 per cent failure rate.


VISIBILITY
Peak of Inflated Expectations
Plateau of Productivity
Slope of Enlightenment
Trough of Disillusionment
Technology Trigger
TIME

https://make.crowdflower.com/jobs

Apps | ThisIsWhyImBroke.c | Grand St. | Shut Up And Take M | Weird Gifts | Grommet | » | Other Bookmarks

- Your Jobs
- Templates
- Job Tools
- Customers
- Contributors
- Channels

5 7 7 14

Your Jobs

Wil Stevens

Search jobs | Search Options | Filter by: All Jobs

	Title	Tags	Status
○	411018 | Evaluation of Persuasive Messages 1 unit	external survey, from template	Not Ordered
○	410900 | VU Drinking Survey 1 unit		Not Ordered
○	410663 | Transcibe Text from an Image 0 units	receipt, transcription	Not Ordered
○	409238 | Automated Blogger Email Collection 1 units	automated	Not Ordered

https://make.crowdflower.com/jobs

Bot Anti-Patterns

And Patterns Too

Anti-Pattern:
Magic Phrases

Pattern:
Obey Postel's Law

Anti-Pattern: Magic Words

Pattern:
Do what I *meant*,
not what I *said*!

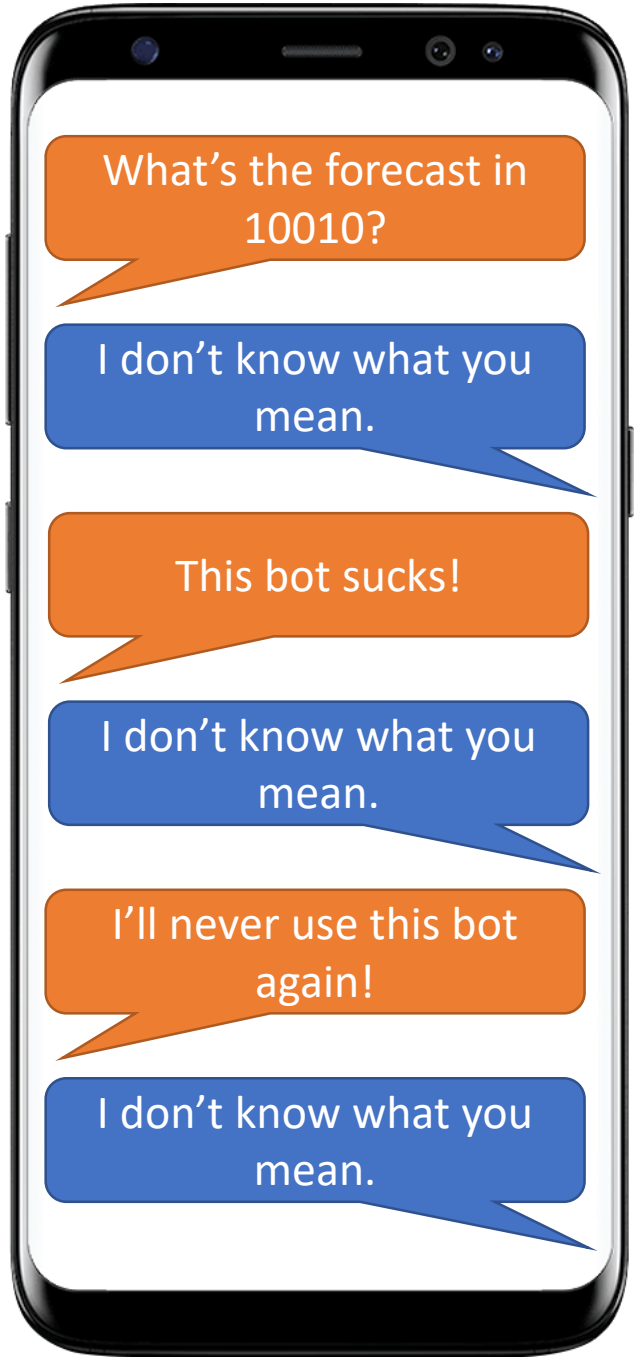
Anti-Pattern:
Magic Language

Pattern:
U.N. Interpreter

Pattern:
World Traveler

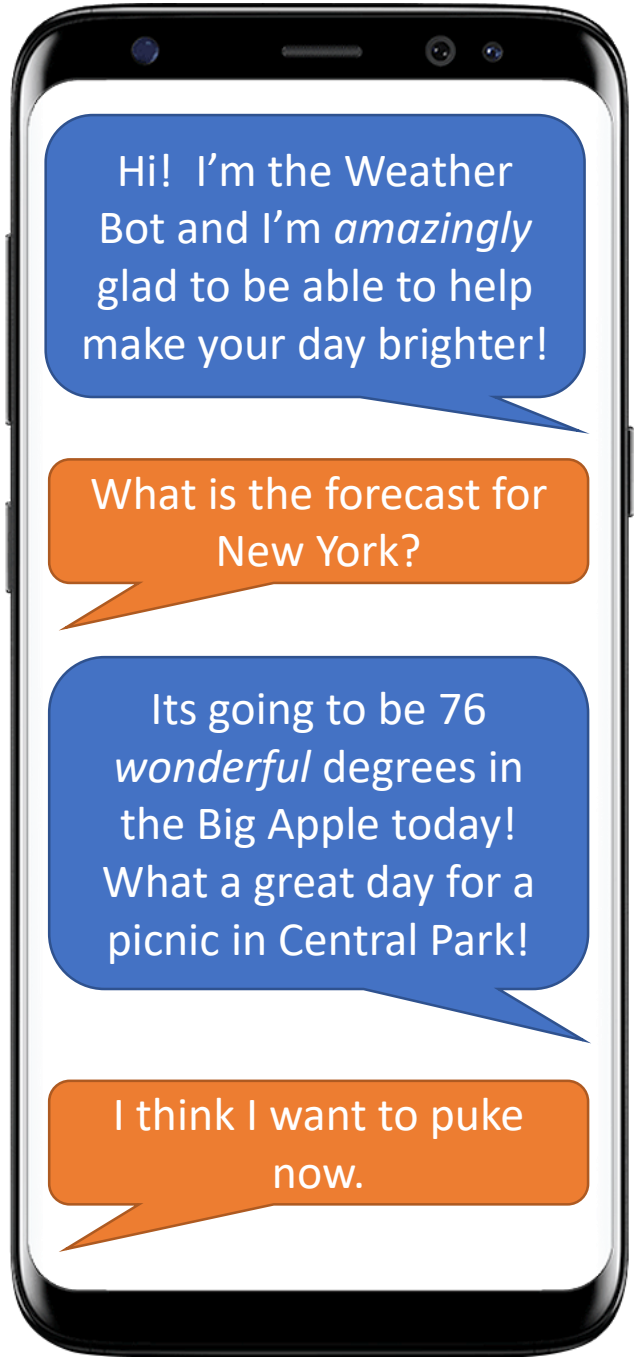
Anti-Pattern:
The Sociopath

Pattern:
The Empath



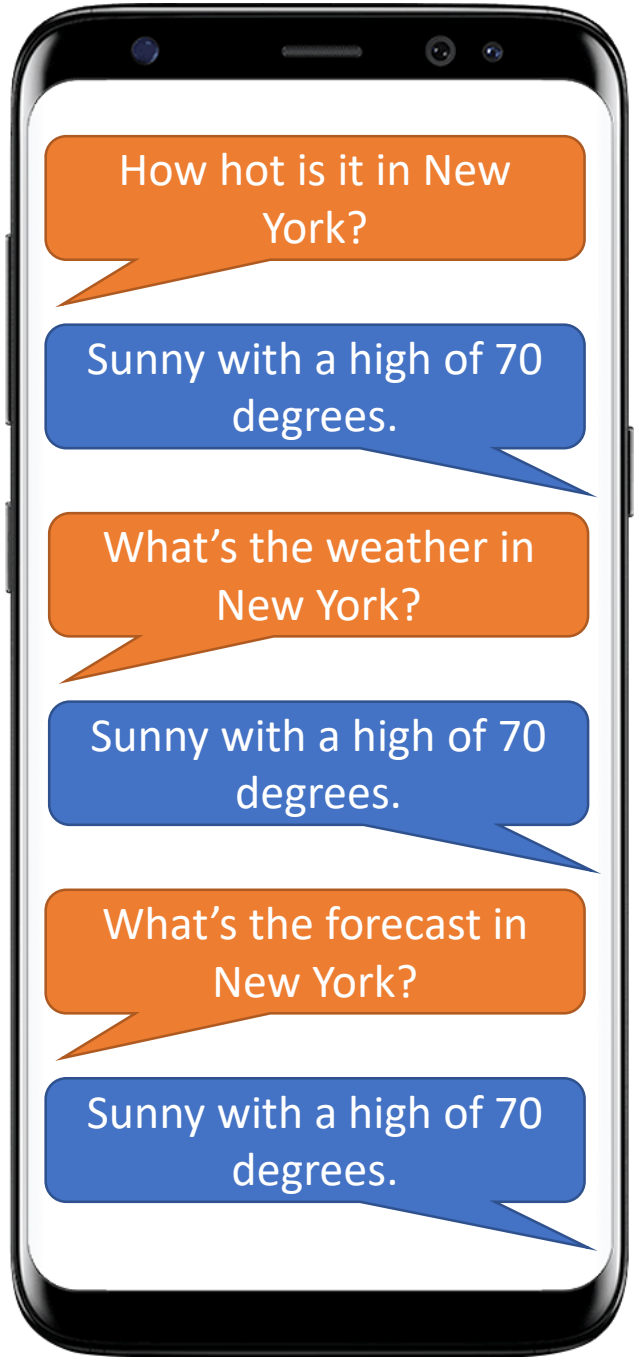
Anti-Pattern:
Snuggles the Bear

Pattern:
Situational Awareness



Anti-Pattern:
Robotic Response

Pattern:
Variety is the Spice of Life



Anti-Pattern: Spelling-Bee

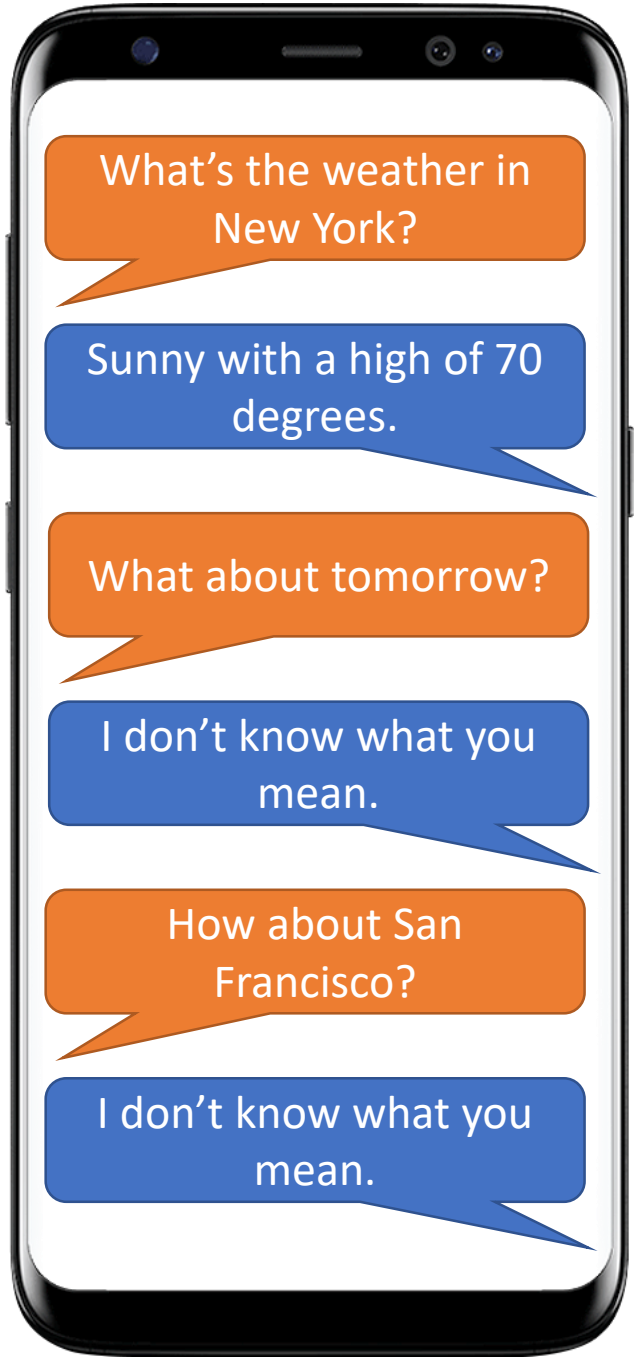
Pattern: F7

Anti-Pattern:
You ain’t from ‘round here, are you?

Pattern:
Know Your Audience

Anti-Pattern:
WWW, circa 1995

Pattern:
Session State



Anti-Pattern:
Location Ignorance

Pattern:
Assuming makes an **ass** out of **u** and **me**

Anti-Pattern:
para el español, presione dos

Pattern:
Just don’t. Please.

Anti-Pattern:
Mobile Web Experience

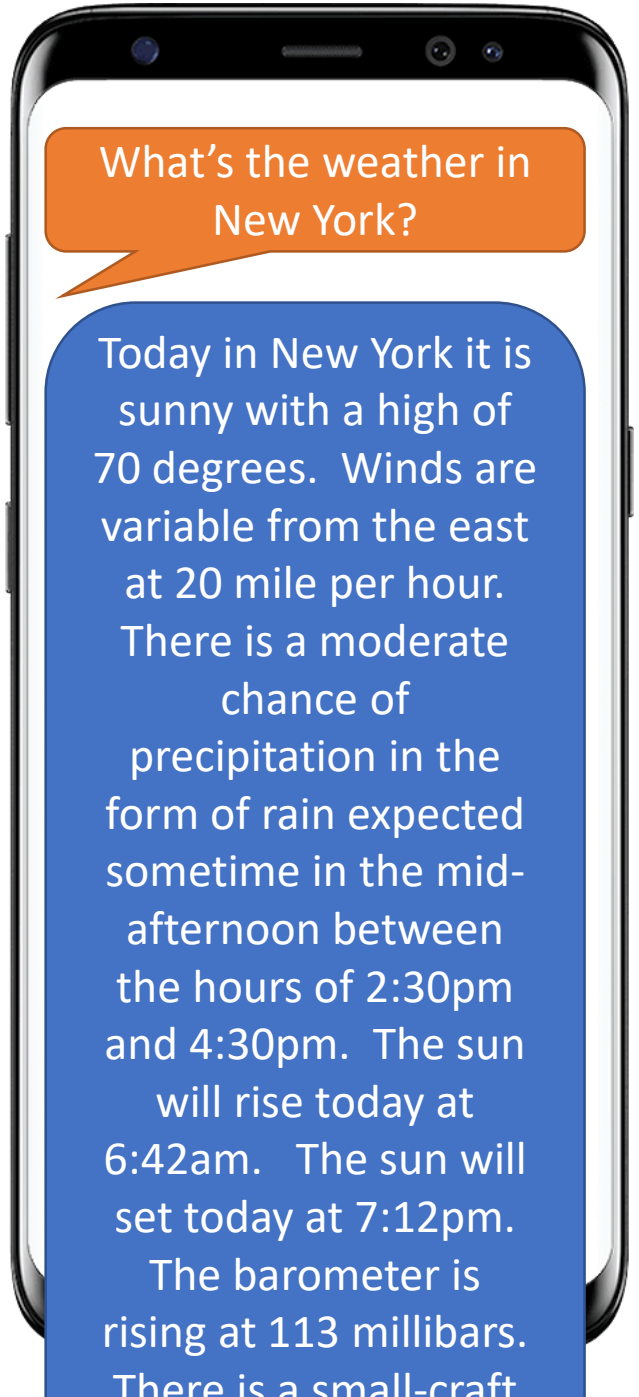
Pattern:
Stay true to the medium.

Anti-Pattern:
Nigerian Prince

Pattern:
Respect User Preferences

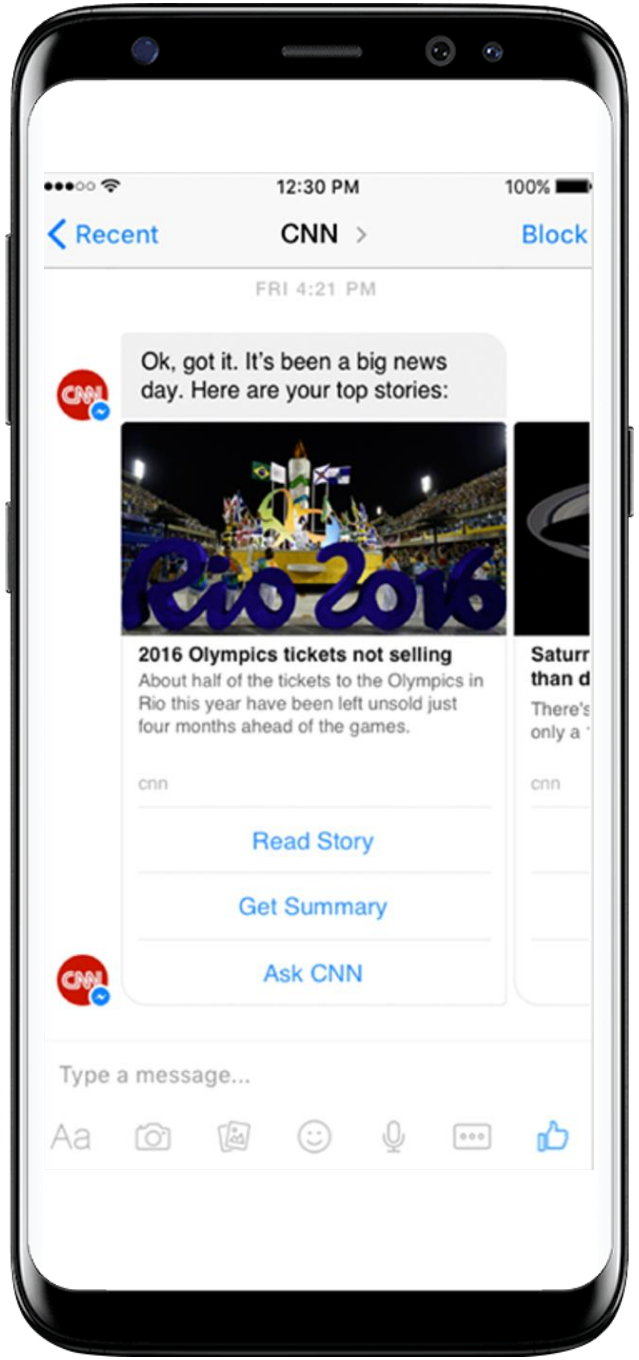
Anti-Pattern: Monologue

Pattern: Dialog

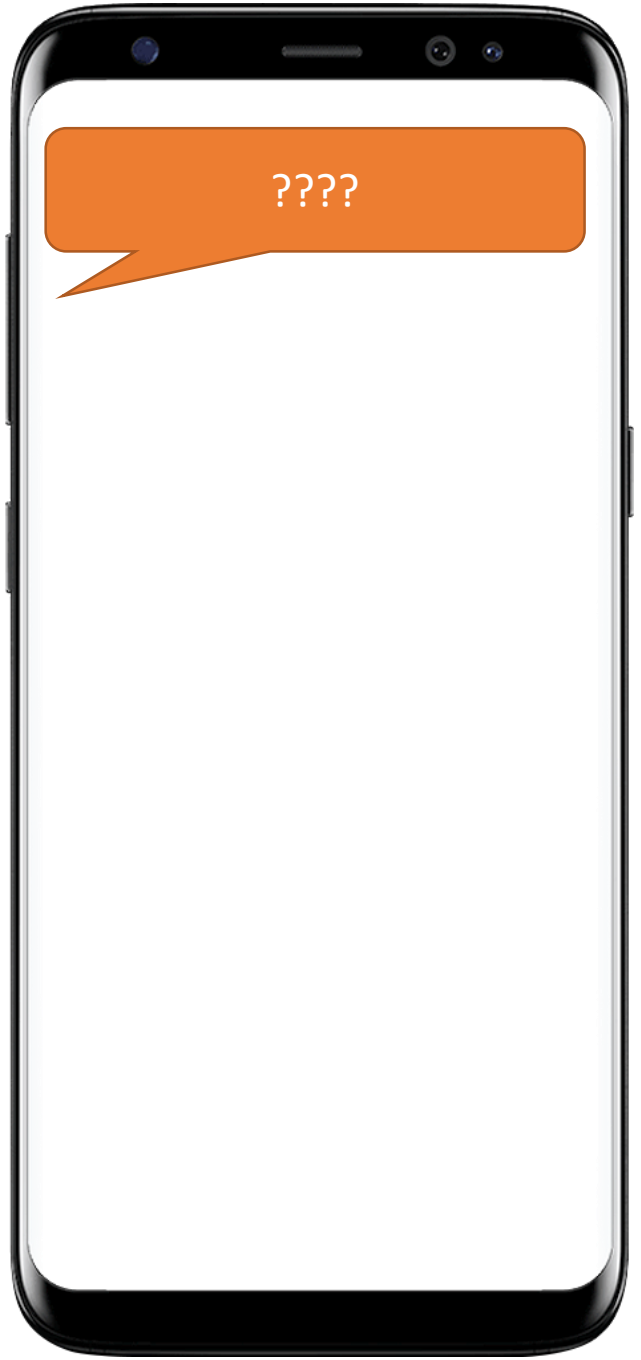


Anti-Pattern: Pointless

Pattern: Raison D’être



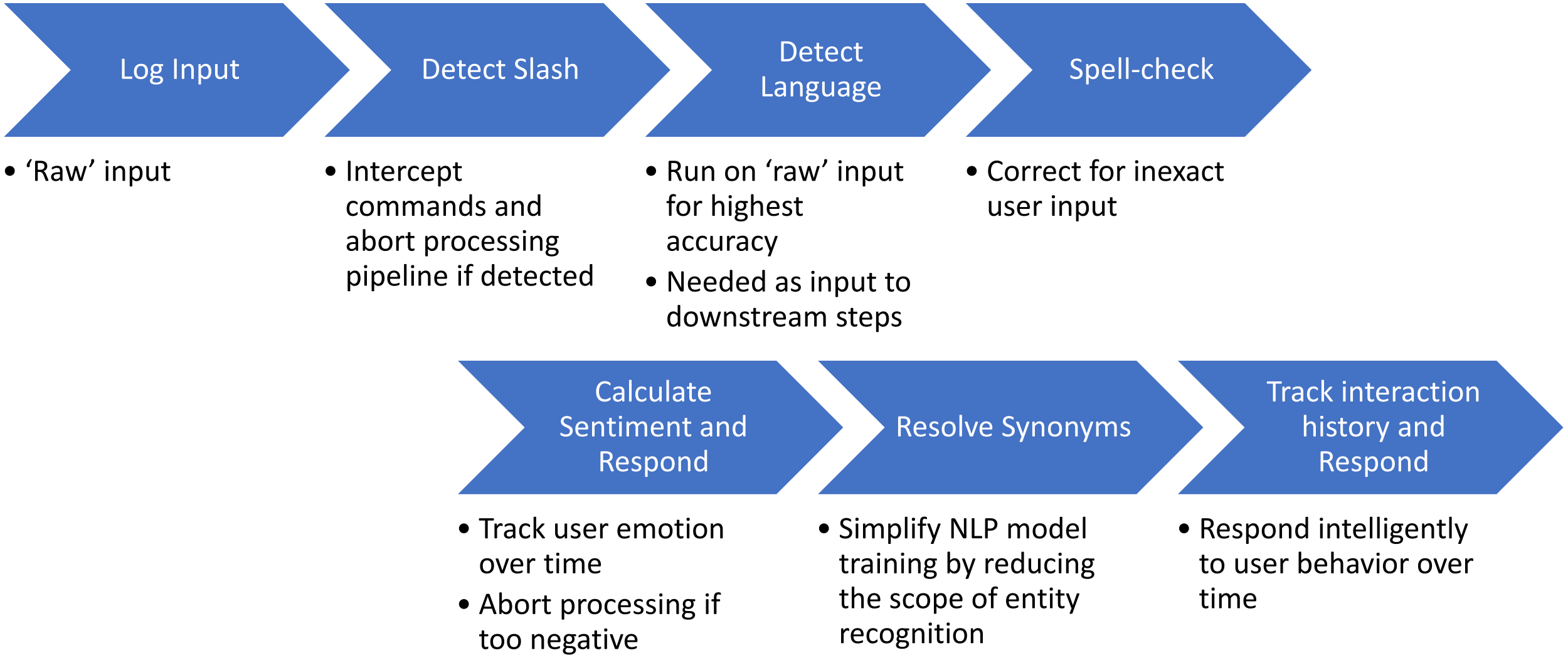
Anti-Pattern:
What else have you seen?



Demo: Exploring a Bot

(that hopefully doesn't suck *too* much!)

Input Processing Pipeline



Code: Exploring a Bot

(in moderate detail)