# Should ChatBots play a role in your software development project



# 1. WHAT ARE BOTS AND THEIR HISTORY

[Peggy

(shift from "human" imposter to being recognized as "scripts" or "agents" that are conversational in style)

# 2. WHY ARE THEY SO POPULAR NOW

(timing of platforms and chat environments) Is this really new?

# 3. BOTOLOGY: TYPES / ROLES OF BOTS

Not just development roles, more general roles (e.g., transactional, informational, productivity, collaboration...)

Give general examples as well as some specific SE examples throughout

# 4. HOW TO CREATE BOTS AND WHERE TO HOST THEM

[Carly]

Although simple chatbots can easily be built from scratch, many developers choose to use a variety of technologies that are currently available. There is a need to distinguish between the platforms used to create bots, and the platforms used to distribute them.

Many large companies offer platforms that support both the creation and distribution of chatbots: WeChat, Facebook, Microsoft, Telegram, Kik, Slack, Alassian, Teams, etc? Technologies offer parts of the creation or distribution platforms. A summary of popular technologies is shown in table X.

# 4.1 Distribution Platforms

Their technical platforms and what is involved to create them (Add a Table / viz similar to the one in the included above to summarize the above) - OSS/Price - Platforms / languages

The distribution platforms are where the bots live after they are created. Distribution platforms offer the following

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WOODSTOCK '97 El Paso, Texas USA Copyright 20XX ACM X-XXXXX-XX-X/XX/XX ...\$15.00. benefits: (1) access to an existing user base, (2) ability to market or promote the bots, and (3) means of monetization<sup>1</sup>.

The distribution platforms also define how users can interaction with the bots. Common styles supported are usually voice and/or text.

# 4.2 Design guidelines

#### 4.3 Creation Platforms

Developer ecosystem for the different platforms... plug in to these communities...

The creation platforms are where the bots are designed and built. A successful creation platform offers (1) software foundations in the form of APIs, toolsets, services, or frameworks and (2) a developer ecosystem for support <sup>2</sup>1.

Many of the popular distribution platforms also have their own "bot stores". Slack's App Directory or Cortana's skills is a great example of this. Users can peruse the various bots that are available, and install their new virtual team members.

# 5. TAKEAWAYS

Bots are everywhere: pay attention to how bots are used around you, in cars, in the home but also watch how other developers use Bots in their development activities (reference FSE visions paper)

Bot ethics: Reference Asimov's rules for Robots here.. Should this be updated for Bots?

Bots may ease or increase collaboration friction... choose Bots not to remove collaboration (and in turn creativity) but use them to enhance collaboration (reference CSCW workshop paper)

#### 6. SIDEBAR

Software bot usage in software development.

#### 7. REFERENCES

 $<sup>^1 \</sup>rm https://medium.com/mobile-lifestyle/messenger-vs-skype-vs-slack-vs-telegram-how-to-spot-the-winners-adc34b4ca066$