

# Amazon's voice service: Alexa

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## Concept :

- Amazon voice service the brain behind millions of devices including Amazon Echo.
- Alexa provides skills, enabling customers to create a more personalized experience.

## Technical Skills/Tools:

- Terminal for Mac
- CMD for Windows
- Flask-Ask Library
- Amazon Developer Account
- Ngrok Tunneling Service





- Flask is a microframework for Python based on Werkzeug, Jinja 2 and good intentions.
- Flask-Ask makes it easy to write Amazon Echo apps with Flask and the Alexa Skills Kit.
- Developed by John Wheeler

Github [johnwheeler/Flask-Ask](https://github.com/johnwheeler/Flask-Ask)

**Learn More About Flask-ASK and ngrok**

```
Documents — ngrok http 3000 — 80x24
ngrok by @inconshreveable (Ctrl+C to quit)

Session Status      online
Version             2.1.18
Region              United States (us)
Web Interface        http://127.0.0.1:4040
Forwarding           http://df48ea08.ngrok.io -> localhost:3000
Forwarding           https://df48ea08.ngrok.io -> localhost:3000

Connections          ttl      opn      rt1      rt5      p50      p90
                   2        0        0.00     0.00     60.14    120.27

HTTP Requests
-----
GET /                200 OK
GET /favicon.ico     404 Not Found
GET /                200 OK
```

- To test locally and efficiently  
Flask-Ask uses Ngrok
- Ngrok is a multiplatform  
tunnelling, reverse proxy  
software that establishes secure  
tunnels from a public endpoint  
such as internet to a locally  
running network service while  
capturing all traffic for detailed  
inspection and replay.





- Developing a Flask application locally is easy. However, getting it up and running on production infrastructure is the tough part.
- Flask-Live-Starter prescribes a set of best-of-breed infrastructure components that make deploying to VPS instances a snap. It includes Fabric tasks that automate provisioning, deployment, and common post-deployment operations (database backup and log tailing).



- Future Concepts
- Piano notes recognition and tutoring via Sound Fingerprinting – Python Dejavu Library





- Future Concepts
- Use Amazon's LEX AI to interpret what people are whispering by reading lips using camera, computer vision and tensor flow library

# Thank you





## References

- <https://developer.amazon.com/alexa-skills-kit/alexa-skill-quick-start-tutorial>
- <https://developer.amazon.com/blogs/post/8e8ad73a-99e9-4c0f-a7b3-60f92287b0bf/New-Alexa-Tutorial-Deploy-Flask-Ask-Skills-to-AWS-Lambda-with-Zappa>
- <https://developer.amazon.com/blogs/post/Tx14R0IYYGH3SKT/flask-ask-a-new-python-framework-for-rapid-alexa-skills-kit-development>
- <https://ngrok.com>
- <https://github.com/johnwheeler/flask-ask>
- <http://flask.pocoo.org/extensions/>
- <https://github.com/johnwheeler/flask-live-starter>