James,

**Q) Would it be possible to integrate the existing Online Reporting functionality to work with a Voice-First digital assistant like Amazon Alexa?**

A) Yes!

**Q) What would it take?**

A) First, create a Custom Skill with the Alexa Developer Kit. This skill would expect specific arguments from the user, and then process the Report Creation.

* **Invocation Name**: the user includes this name when activating the skill
* **Sample Utterances**: possible combination of words/phrases users can say to invoke commands
* **Conducting a conversation with the user**: the Skill can interact with the user, letting them know there is an important argument missing, or listing possible commands.

B) Host the Custom skill: Amazon provide AWS Lambda, a hosting service that runs on Python or C#. This Script would receive the arguments/inputs from the user, parse them, and as a Reponse, create the correct Service Request.

C) Having a better back-end system for the Online Report function – like an API – would make it a lot easier to create the correct service request

Example:

User: “Alexa, report a concern to the **City of Sugar Land**”

*Alexa: “Ok. What seems to be the problem?” (expects a specific category/sub-category)*

User: “There was a bad traffic signal at SH6 and Lexington. I was waiting to make a left turn and got skipped.”

(The service understand *Traffic Signal* and access the respective url to report)

*Alexa: “So it is a Traffic Signal under Traffic Department. To the best of your abilities, please describe when and at what time the issue happened, providing detailed information about the location and movement”*

<https://developer.amazon.com/docs/custom-skills/understanding-custom-skills.html>

