AIDI 1001 Conversational AI – Week 10 Activity: Alexa Keynote

[Building a world of ambient intelligence | Alexa Live 2022](https://www.youtube.com/watch?v=DsQUS8iVlQ8)

As you watch Alexa Developer keynote. Answer the questions below.

1. What are 2 things you learned about machine learning from the keynote?

The first thing I learned from the keynote is that there are two ways to interact with people through machine learning techniques: one is taking people out of the physical world; the other way is to help people spend more time looking up at the real world and the people in it. This insight shows the needs of people’s life: private and fanciful personal experiences that satisfy people's imagination and makes everything to be neat and tidy with the help of ambient intelligence.

The second thing I learned from the keynote is that the implementations of ML models must both meet the requirement of the application and the limitation of the constrained environment of devices. To do that, Alexa team had to develop new techniques, both for inference and for training, to deliver cloud level accuracy along with improved latency while achieving a 100 times reduction in model size.

1. What are 2 things that surprised you about the keynote?

The first thing that impressed me is “Akinator”. People ask Alexa, activate "Akinator", and Akinator will guesses the character that you're thinking of in a few questions. Akinator always succeeds in a very short time with few questions. That’s amazing.

The second impressing idea is that AI could help people improve early children education in a more innovative and interactive way. This is different from books and videos and provides another flexible way to learn.

1. What is one new Alexa application idea that you now have?

The Alexa Learning Lab. People can accelerate their developer learning by using the Learning Lab.

1. Describe what Alexa hunches are and provide an example of how they could be used.

With Hunches, Alexa will notice people when a connected smart home device isn't in its usual state.

For example, if one of your smart lights is on when you say "Good night," Alexa alerts you and offers to turn it off.

1. How does Alexa self-learning work?

If an Alexa user is not happy with the answer to a question, they can stop the response and restate the interaction. With the self-learning system, Alexa uses this kind of implicit signal to determine how to properly react to the first request without any human involvement.

1. What is Alexa Conversations?

A deep learning approach to dialogue management that allows developers to build conversational skills on Alexa with far fewer lines of code. Alexa Conversations eliminates the need for developers to create and maintain complex dialogue management rules.

1. What is Matter?

Through existing IP-based wireless protocols Thread and Wi-Fi, Matter Standard is able to keep all the devices at home collaborated, no matter what brand or technique standard it applies.