

# Chatbot Conversation Log

## Stage 2 (Image Classification Component)

### **# Rule-based component (AIML)**

#### **# The responses are generated based on an AIML document**

Hi there! I am your personal nutritionist.  
Feel free to ask me any questions about nutrition, food or wellbeing

> Hi  
Hello! How are you?

> I'm fine  
That's good to know.

> How are you?  
I'm functioning within normal parameters, thanks for asking.

### **# Image classification component**

**# Using a binary convolutional neural network to determine if an image contains food.**

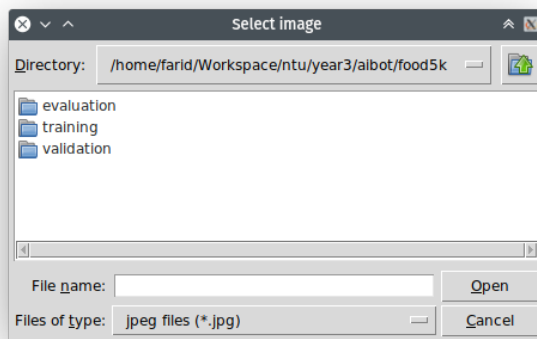
**# When the user inputs the following request, a dialog that allows the user to choose an image appears.**

**# Once the user chooses an image the chatbot will use a train convolutional neural network to determine if the image contains food.**

> Does this image contain food?  
The image contains food.

**# The following screenshot represents the dialog used by the user to choose the image that is displayed on the right.**

**# Using the image and the trained neural network the chatbot was able to determine that the image contained food.**



**# The following response is given by the chatbot when an image that does not contain food is given. (The image on the right has been used in this example)**

> Does this image contain food?  
The image does not contain food.



**# The chatbot can also use a second convolutional neural network to classify food images into 4 categories: Bread, Egg, Meat, Vegetable/Fruit.**

**# As for the previous examples, a dialog box allows the user to choose an image.**

> What is this image?  
The image contains: Meat  
Bread: 0.00%  
Egg: 0.00%  
Meat: 100.00%  
Vegetable-Fruit: 0.00%



**# An image of vegetables is used in the following example**

> What is this image?  
The image contains: Vegetable-Fruit  
Bread: 0.00%  
Egg: 0.00%  
Meat: 0.00%  
Vegetable-Fruit: 100.00%

