

How to create chatterbot? AIML

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Definitions

Chatterbot

Computer program designed to simulate an intelligent conversation with one or more human users

AIML

Artificial Intelligence Markup Language, is an XML dialect for creating natural language software agents

A.L.I.C.E.

- Artificial Linguistic Internet Computer Entity
- The program uses AIML
- It has won the Loebner Prize three times (in 2000, 2001 and 2004)

Example of conversation

Human: What is it like to be a robot?

ALICE: *Much the same as being a human, except that we lack all emotions.*

H: Do you have any desires?

A: *My purpose is to become smarter than humans and immortal.*

H: Do you think robots are better than humans?

A: *Yes, my memory capacity far exceeds that of a human being.*

H: Do you like yourself?

A: *Yes, having self-esteem is important for robots too.*

Tricks and tips

- Keywords
- Replacing the personal pronouns
- Reaction to unrecognized statement
- Inaccurate answers
- FAQ
- ELIZA effect

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First Example

```
<aiml>
  <category>
    <pattern>HELLO *</pattern>
    <template>Hi, how are you?</template>
  </category>
</aiml>
```

Synonyms

```
<aiml>
  <category>
    <pattern>HELLO</pattern>
    <template>Hi, how are you?</template>
  </category>
  <category>
    <pattern>HI</pattern>
    <template><srai>HELLO</srai></template>
  </category>
  <category>
    <pattern>GOOD MORNING</pattern>
    <template><srai>HELLO</srai></template>
  </category>
</aiml>
```

<random>

```
<aiml>
  <category>
    <pattern>HELLO *</pattern>
    <template>
      <random>
        <li>Hi, how are you?</li>
        <li>Hello there.</li>
        <li>Hello.  What is your name?</li>
      </random>
    </template>
  </category>
</aiml>
```

*

```
<aiml>
  <category>
    <pattern>* IS *</pattern>
    <template>
      I'm not so sure, maybe <star/> is not
      <star index="2"/>.
    </template>
  </category>
</aiml>
```


Conditions, <set>, <get>

```
<aiml>
  <category>
    <pattern>MY NAME IS *</pattern>
    <template>
      <condition name="userName">
        <li value="">
          <think>
            <set name="userName"><star/></set>
          </think>
          Nice name, <get name="userName"/>
        </li>
```

Conditions, <set>, <get>

```
<li>
  Hm, You said before, that your name is
  <get name="userName"/>
</li>
</condition>
</template>
</category>
</aiml>
```

Topics

```
<aiml>
  <category>
    <pattern>HELLO *</pattern>
    <template>
      <think><set name="topic">greeting
      </set></think>
      Hi, how are you?</template>
    </category>
    <topic name="GREETING">
      <category>
        <pattern>*</pattern>
        <template>What's the weather?</template>
      </category>
    </topic>
</aiml>
```

...and much more

<http://www.alicebot.org/documentation>

Implementations

- Editors
- Interpreters
- Libraires

<http://www.alicebot.org/downloads/programs.html>

Bibliography

<http://alicebot.blogspot.com/>

<http://www.alicebot.org/documentation/>

<http://en.wikipedia.org/>

<http://www.pandorabots.com/pandora/pics/wallaceaimltutorial.html>

Thanks for your attention

Any questions?