Situational Design: Making the Shift to Ambient Computing

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“Conversational platforms will drive the next big paradigm shift in how humans interact with the digital world.”
Communal
Voice Design Patterns

1

Be Adaptable
Be adaptable

Let users speak in their own words
User Experience Affordances
Volume up or increase

Turn \{levelDirection\} the volume
Volume \{levelDirection\}
\{levelDirection\}
Make it \{levelDirection\}
Turn it \{levelDirection\}
Set the volume to \{level\}
\{levelDirection\} volume

<table>
<thead>
<tr>
<th>{levelDirection}</th>
<th>Synonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>up</td>
<td>Louder, higher, increase, more, crank,</td>
</tr>
<tr>
<td>down</td>
<td>Quieter, lower, decrease, less</td>
</tr>
</tbody>
</table>

Amazon Alexa situational design
Voice Design Patterns

2

Be Personal
Be personal
Interactions in context
Tailored over time
Consistency
Consistency

Greetings!
Variability

Howdy!
Voice Design Patterns

3

Be Relatable
Be relatable
Talk with them not at them
Alexa, ask college finder to help me find a college in California, that offers an Animal Sciences degree, with a large student body, a Division 1 athletics program, relatively low tuition, that’s pretty hard to get into....
Multi-turn Dialogs
Voice Design Patterns

4

Be Available
Be available
Example: Ticket ordering skill
a turn

• **Utterance:** What the user said

• **Situation:** Context

• **Response:** What Alexa says

• **Prompt:** Question Alexa Asks

[alexa.design/situational-design-templates]
Mixed Initiative Storyboard

**Welcome**
- **A-2**
  - **Example Utterance:** Alexa, open College Coach
  - **Situation:** Launch
  - **Changes:** Update streak counter
  - **Response:** Welcome back! Last time, you were researching the classes and student life at Western Colorado University.
  - **Prompt:** Out of 5 stars, how would you rate Western Colorado University?

**Rating**
- **B-2**
  - **Example Utterance:** It was terrible
  - **Situation:** Has an assignment
  - **Changes:** Sort into favorites list
  - **Response:** Ok, it sounds like it wasn’t a good fit.
  - **Prompt:** Let’s keep looking. What size school do you prefer?

**Profile**
- **D-0**
  - **Example Utterance:** What’s my favorite school?
  - **Situation:** There is a favorites list
  - **Changes:** Pull top 3 choices from favorites list
  - **Response:** Your favorite schools are: University of Denver, MSU Denver, and Regis University.
  - **Prompt:** Do you want me to learn more?

**Homework**
- **C-2**
  - **Example Utterance:** I want to go to a school with a great archery program
  - **Situation:** Refine school choice by athletic program
  - **Changes:** Find schools with archery programs - provide assignment, End session
  - **Response:** OK. Here’s your assignment. Go research Arizona State University’s athletic program. Come back tomorrow and let me know what you think.
  - **Prompt:**
Mixed Initiative

Storyboards

System Initiative

Flowcharts
Voice Design Patterns

1. Be Adaptable
2. Be Personal
3. Be Relatable
4. Be Available

@JoeMoCode
Thank You

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