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3	7
4	9
5	11
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8 WIKI	17
9 Guided Tour	19
10 Help Desk	21
11 API	23
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13 (Human Factors)	33
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i

21 HTML, CSS, Javascript	55
22 XML	57
23 DITA	61
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27 Oxygen XML	73
28 Madcap Flare	75
29 Adobe Robohelp	77
30 Adobe FrameMaker	79
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36 OmegaT	91
37	93
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40 E-learning	101
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43	107

Doc like Code

- 1. reStructuredText
- 2. Sphinx
- 3. github
- 4. Read the Docs
- 5. MS Visual Studio Code

:

CHAPTER 1

d	late 2018-03-10 10:20	
•	Creative Writing	
•	Commercial copy writing)	
•	Business writing)	
•	Scientific writing)	
•	(Technical writing)	
		(Accessbility)
1.1		
1.		
2.		
3.		
1.2		
oad)		(information over-
oau)	(empathy)	""

: 1. 2. 3. 4. 5. 6.

1.3

" "

1.

2.

3.

4 Chapter 1.

	CHAPTER 2
munication)	(Technical Com-

6 Chapter 2.



${f date}\ 2010 \hbox{--} 10 \hbox{--} 03\ 10 \hbox{:-} 20$

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8 Chapter 3.



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10 Chapter 4.

CHAPTI	ER ,	_ ว

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12 Chapter 5.



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14 Chapter 6.

CHAPTER 7

CHM

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16 Chapter 7. CHM

CHAPTER 8

WIKI

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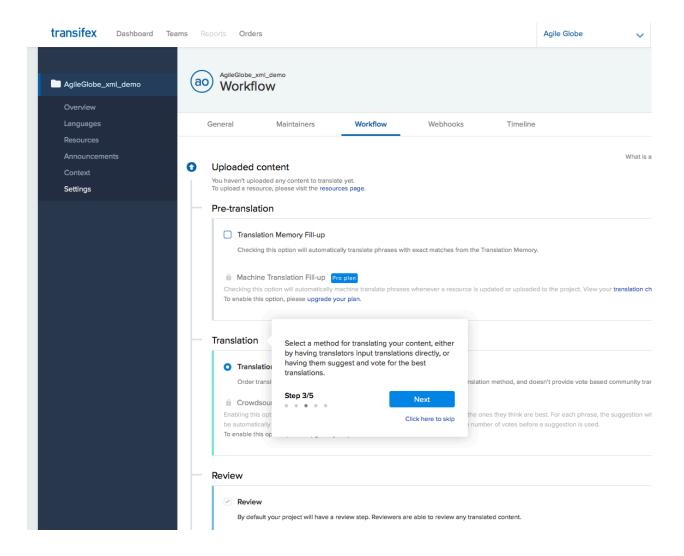
18 Chapter 8. WIKI

CHAPTER 9

Guided Tour

 ${f date}\ 2018\text{-}04\text{-}10$

Guided Tour



9.1

- Crumble
- Bootstrap Tour bootsrap Tour
- Joyride JS+CSS
- HopScotch JSON API

9.2

• Walkme .

CHAPTER 10

Help Desk

Skype qq

10.1

- \bullet zendesk
- freshdesk

CHAPTER 11

API

${f date}\ 2010 \hbox{--} 10 \hbox{--} 03\ 10 \hbox{:-} 20$

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24 Chapter 11. API

date 2018-06-30 **author**

12.1

12.2 1.

12.2.1 1.1

1.1.1 Information Information can be any difference you perceive, in your environment or within yourself. It is any aspect that you notice in the pattern of reality.

** **

1.1.2 Information Need An information need is a recognition that your knowledge is inadequate to satisfy a goal that you have.

** **

1.1.3 Information Seeking Information seeking is a conscious effort to acquire information in response to a need or gap in your knowledge.

1.1.4 Information Behavior, IB

Information behavior (hereafter, "IB") encompasses information seeking as well as the totality of other unintentional or passive behaviors (such as glimpsing or encountering information), as well as purposive behaviors that do not involve seeking, such as actively avoiding information.

"IB"

12.2.2 1.2

12.2.3 1.3

1.3.1 ""

Only "objective" information is valuable.

1.3.2 More information is always better.

" " " "

1.3.3

Objective information can be transmitted out of context.

1.3.4 Information can only be acquired through formal sources.

1.3.5

There is relevant information for every need.

;

1.3.6

Every need situation has a solution.

1.3.7

It is always possible to make information available or accessible.

1.3.8

Functional units of information, such as books or TV programs, always fit the needs of individuals.

; ;

1.3.9

Time and space—individual situations—can be ignored in addressing information seeking and use.

" "

1.3.10 People make easy, conflict-free connections between external information and their internal reality.

"""""

26 Chapter 12.

12.3 2.

2.1

2.2

2.3

2.4

2.5 " "

12.4 3. " "

information "1 2; "

Dervin

1.

2.

3. ""

12.5 4.

1 need

Grunig " " " inner motivational state

Andrew Green "" 4

a need is always instrumental: it involves reaching a desired goal

needs are usually contestable

 $\,$ need is related to the concept of necessity in such a way as to carry, at times, more moral weight

 $\mbox{need is not necessarily a state of mind, and it is possible to be unaware of one's true needs.}$

2 vs (needs vs demands)

Connor

3

12.3. 2. 27

```
, alpha
```

```
1
     2
     3
     4
4
     information behavior
12.5.1 4.1
1. Decision Making
    Making Decisions
Donohew and Tipton
     (د )
2
     Solving Problems
Simon
Sperber Wilson 1995
2 .
         Browsing, Scanning, and Serendipity
                                                        " " " "
Boyce, Meadow, and Kraft (1994)
            A
                    В
3.
     Avoiding Information
1
2
        ""[1]
                              ; [2]
                                                               ; [3]
3
```

28 Chapter 12.

```
Miller 1960
     1.
     2.
     3.
     4.
     5.
     6.
         7. :
12.6 5.
         Wilson
                    Dervin
                                Ellis
                                           Kuhlthau
                                                                      wang
                                                                                 Bates
                                                                                          Saracevic
       Markey Atherton
                                                  Krikelas (1983) Bystrom Jarvelin (1995) Leckie
                                    5
(1996) Johnson (1997) Savolainen (2005)
                 Donohew Tipton (1973) "
12.6.1 5.1
  1. Krikelas
  JamesKrikelas
                               1983)
                                                                                           Krikelas
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                                 Krikelas
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                                  " " "
                      , ,
1 James Krikelas
   Krikelas
                                                   Henefer Fulton(2005) ""
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Krikelas
                       Bystrom Jarvelin (1995)
2. Bystrom Jarvelin
                                      Bystrom Jarvelin
2 Bystrom Jarveliin
                       Jarvelin
                                                              Jarvelin
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   Bystrom
                                               Ingwersen
                                                                                                  Bystrom Jarvelin
  3. Leckie
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12.6. 5.

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Leckie Petigrew Sylvain(1996)
 14 6 (3)
3 Leckie
  4. Johnson
                1997)
                                     CMIS Comprehensive
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  Johnson(
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 CIMS
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4 Johnson
               (CMIS)
  5. Savolainen
  Savolainen(2005)
                           ( ELIS Everyday Life Information Seeking) 5
                                                                            3
                                                                                   ( way of life)
  ( mastery of life)
                                         - 4
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5 Savolainen
  Savolainen
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12.6.2 5.2
                                                   Savolainen
 Krikelas
            Bystrom Jarvelin
                               Leckie
                                        Johnson
                                                                    Krikelas
                                                                              Leckie
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 Bystrm
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                                  Johnson
                                                                                          1
                                                                                                5
   Johnson
12.7 6.
12.7.1 6.1
```

4

30 Chapter 12.

(Agreeableness)	5 (Extraversion) (Conscientiousness)	1	(Openness)	(Neuroticism)
2.	2			
12.7.2 6.2				
	Heinstrom :			3
1.			Joanna	;
 3. 	Gorman Joanna			
Bawden	" " Tidwell Si	as		Heinstrom
12.7.3 6.3				
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2. Faceb	ook	4		
Facebook	; ; Amichai-Hamburger	Facebook	; yan	; Facebook - Correa
3. SNS Facebook	Muscanell		oss y	an -

12.7. 6. 31

12.8

[1] Case, D. O.Looking for Information—A Survey of Research on Information Seeking, Needs, and Behavior [M]. England: London, 2007.

- [2] . [J]. $,2014\ 5$.
- [3] . [J]. 2011 11.

32 Chapter 12.

CHAPTER 13

(Human Factors)

date 2010-10-03 10:20

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36 Chapter 14.

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38 Chapter 15.

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date 2018-03-14

author

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40 Chapter 16.

CHAPTER 17

date 2018-03-08 **author**

17.1

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17.1.1

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17.3

17.4

17.5

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42 Chapter 17.

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17.5.1 2

3 " " 4 " "

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#. #. #. #.

17.5.2 3

17.6

17.7

17.8 CPU

17.9

17.10

GIF JPEG

17.6. 43

17.11

17.12

17.13

17.14

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17.16

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17.18 :)

17.19

Chapter 17.

alpha

17.26			"AUTOEXEC.	BAT"	"database"
Language" Inc."	"UMB"	"IBM" "upper	"HTML" "International memory block"	"HyperText Business	Markup Machines,
17.25					
17.24.1 4	u n				
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17.23					
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17.21					
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17.20. 45

"About this guide"

Preview"

17.27

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17.32.1 5

 ${
m CMS}$

17.33

17.34

 ${\bf Frame Maker}$

Adobe

46 Chapter 17.

17.35

SGML XML Adobe
Quadralay WebWorks

Epic Editor Documentum

 ${\bf Frame Maker}$

Publisher

CMS Arbortext

17.36

17.37

17.38

17.39

17.40

17.41 Information Mapping

http://www.informationmapping.com/fspro2013-tutorial/infotypes/infotype2.html#tab2

17.35.

48 Chapter 17.

CHAPTER 18

 ${\bf date}\ 2010\text{-}10\text{-}03\ 10\text{:}20$

HOW DO I INSTALL THE OFF-CAMPUS ACCESS BUTTON?	+
HOW DOES IT WORK?	+
USING THE OFF-CAMPUS ACCESS BUTTON, AN EXAMPLE	+
MORE INFORMATION?	+

50 Chapter 18.

	1 1
CHAPTE	R 19

${f date}\ 2010\mbox{-}10\mbox{-}03\ 10\mbox{:}20$

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52 Chapter 19.

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54 Chapter 20.

CHAPTER 21

HTML, CSS, Javascript

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alpha

CHAPTER 22

XML

date 2018-05-08 **author**

XML

XML

- XML
- CSS/XSLT
- DTD/Schema

22.1 XML

22.2 CSS

```
BusinessCard {
   font-family: Arial, Helvetica, sans-serif;
   background-color: #DACFE5;
   width: 300px;
```

```
display: block;
    padding: 10pt;
    border: 1px solid #0D3427;
    margin: 5px;
    text-align: left;
Name {
    color: #0D3427;
    font-weight: bold;
    font-size: 140%;
    display: block;
    margin-bottom: 3%;
}
phone {
    font-size: 90%;
    color: #523819;
    font-size: 90%;
    display: block;
email {
    color: #0D3427;
    font-size: 90%;
    font-weight: bold;
    display: block;
    margin-top: 3%;
}
```

CSS XML

```
<?xml-stylesheet type="text/css" href="businesscard.css"?>
```

22.3 DTD

```
<!DOCTYPE BusinessCard [
     <!ELEMENT BusinessCard (Name, phone+, email?)>
     <!ELEMENT Name (#PCDATA)>
     <!ELEMENT phone (#PCDATA)>
     <!ATTLIST phone type (mobile | fax | Work | home) #REQUIRED>

     <!ELEMENT emai (#PCDATA)>
]>
```

DTD https://www.w3cschool.cn/dtd/dtd-intro.html

• #PCDATA (Parsed Character Data)

58 Chapter 22. XML

22.4 DTD xml

<!DOCTYPE BusinessCard SYSTEM "businesscard.dtd">

22.4. DTD xml 59

60 Chapter 22. XML

CHAPTER 23

DITA

23.1 1.DITA

DITA IT , DITA , , , , , , , , , , , , , , , , , DITA "Darwin Information Typing Architecture" IBM OASIS "Organization for the Advancement of Structured Information Standards" DITA XML DITA

23.2 2.DITA

DITA

DITA DTDDITA DTD HTML DTDDITA DTD" "Procedure" DITA Procedure DITA Step Step Procedure Step DITA XMLXMLXMLXMLDTD

23.3 3.DITA

23.4 4. DITA

-TUeP DITA XMLDITA (Mapping) (Topic) XMLMarkLogicServer ΤВ XMLLanguage) DDL(DataDefinitionLanguage) XQuery DI-Manipulation DITA DITA DITA (Extensible Stylesheet Language XSL) (Extensible Stylesheet LanguageTransformations XSLT) PDF RTF HTML XML

23.5 5.DITA

23.5.1 1 DITA

DITA

DITA

DITA XMLDITA DITA DITA DITA DITA XMLDTDXMLDITA DITA D1TA XML DITA DITA DITA XML D1TA DITA dit <topicref>, <topicref> **DITA DITA** DITA DITA DITA **DITA DITA** 3 DITA DITA DITA

62 Chapter 23. DITA

<topicref>

DTD

DITA

<conceptref>

<topicref>

DITA

DITA

DTD

DITA

DITA

23.6 6. DITA

DITA	IT	, ,	()			, PTC	Arborte	$\operatorname{ext}[6]$ A	Adobe 1	FrameMal	er[7] Jus	stSystem	ms X
Toolkit	JAVA	, DITA	[9]	DITA		,		,			,		, Ι	OITA
TA		, DITA			,	DITA		,	:a.	XML]	DITA X	KML .	,
b.	,	, ,		,	DITA	DITA		(Reuse	e),		, DIT	A		
c.	,	DITA		,DITA		,		,	,	DITA	_	,		
d.		,DITA	,		,	,			XSLT	,				
e.	,]	DITA ""		,										
,, ()	,			,	,	,	1	,		PDF	HTML	,	1
	DITA	,	:a.	:	,	,		;b.	:		,	;c.	:	;d.
oXygen/	/> XML A	Author ,	,	,										
DITA		,		, D	ITA	,		" "	DITA	,	()	
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DIT	'A	XML	ı	, I	OITA	,			DIT	ľΑ	, DI	ГА	-	DITA

23.7 7.DITA DOCBOOK

DITA DocBook	DITA DocBook					
DITA		DITA	L	DITA	DITA	
DocBook	DocBook	Section	DITA	Topic	Docbook	DI-
TA DocBook	DITA DocB	ook	DITA			DITA
PDF CHM HTML	DocBook	PDF	HTML			

23.6. 6. DITA 63

alpha

64 Chapter 23. DITA

CHAPTER 24

DITA

https://docs.oasis-open.org/dita/v1.0/archspec/topicover.html

24.1 Topic

General Topic

Concept Topic

```
</conbody>
</concept>
```

Task Topic

Reference Topic

```
<reference id = "boldproperty">
<title>Bold property</title>
<shortdesc>(Read-write) Whether to use a bold font for the specified
text string.</shortdesc>
<refbody>
<refsyn>
   <var>object</var><delim>.</delim><kwd>Font</kwd><delim>.</delim>
   <kwd>Bold</kwd><delim> = </delim><var>trueorfalse</var>
   </synph>
</refsyn>
cproperties>
   property>
   cproptype>Data type
   cpropvalue>Boolean
   property>
   cproptype>Legal values/proptype>
   cpropvalue>True (1) or False (0)
   </property>
</properties>
</refbody>
</reference>
```

DITA MAP

```
<topicref href="A.dita" collection-type="sequence">
<topicref href="A1.dita"/>
<topicref href="A2.dita"/>
</topicref>
<reltable>
<relrow>
```

66 Chapter 24. DITA

24.2 task.dita

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE task PUBLIC "-//OASIS//DTD DITA Task//EN" "task.dtd">
<task id="replace" xml:lang="zh-cn">
   <title>
              </title>
    <shortdesc></shortdesc>
    <taskbody>
    cprereq>
                eq>
    <steps>
        <step>
           <cmd> </cmd>
       </step>
       <step>
           <cmd> </cmd>
        </step>
       <step>
                  </cmd>
            <cmd>
        </step>
        <step>
           <cmd>
                  </cmd>
        </step>
    </steps>
    </taskbody>
</task>
```

24.3 concept.dita

24.2. task.dita 67

24.4 map.ditamap

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE map PUBLIC "-//OASIS//DTD DITA Map//EN" "map.dtd">

<map xml-lang="zh-cn">
<title> </title>
<topicref href="concept.xml" type="concept"/>
<topicref href="task.xml" type="task"/>
</map>
```

24.5 DITA OT

bin/dita --input=sourfile --format=pdf

68 Chapter 24. DITA

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CH	۷D.	TED	25
	¬\ı	$I \sqcup I \setminus$	

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70 Chapter 25.

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72 Chapter 26.

Oxygen XML

date 2010-10-03 10:20

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Madcap Flare

date 2010-10-03 10:20

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Adobe Robohelp

date 2010-10-03 10:20

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Adobe FrameMaker

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82 Chapter 31.

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84 Chapter 32.

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86 Chapter 33.

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88 Chapter 34.

AntConc

 ${f date}\ 2018-05-16$

35.1

AntConc PDF

http://www.laurenceanthony.net/software/antconc/

5 4

35.1.1

AntConc DITA

- 1. DITA
- 2. DITA topic DITA Topic DITA Topic
- 3. dita PDF PDF HTML

35.1.2

- 1. AntConc PDF
- 2. dita topics
- 3. 2018 5 29 20 00
- 4. CATTP

35.1.3

 $\operatorname{AntConc}$ CCMS ${\bf easyDITA}$ 1. 2. 3. topic) ISO 9126-4 4. 1. 2. DITA M-DITA reST Markdown ccms github svn webdav 3. Greyfiti \bullet SeSAM • PI-Class (Wolfgang)

35.1.4

- 1.
- 2. PPT 6 5 22 00

• DITA Style Guide

3. 66

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94 Chapter 37.

date 2018-06-06 **author**

38.1

(1) (2) (3)

38.2 2

chatbotPCTuring 1950 Mind Computing Machinery Intelli-Alan M. and Turing Test ELIZA[1] 1966 MIT Joseph gence 1988 Robert UC UNIX Weizenbaum Wilensky Consul-Hugh G. UC UNIX Loebner 1990 Loebner tant • Richard S. Wallace 1995 ALICE CSIEC Prize YAP[5]Sofia

38.3 3

2016 "Chatbot" Facebook Google Chatbot Messenger 5 Google I/O 3 BUILD BotFarmework 4 Facebook F8 Google AssistantAlloMessenger Amazon Echo Alexa 6 WWDC iMessage SiriSDK $_{\rm IBM}$ Ya-"Lara" Chatbot KikMessenger 2017 4 Facebook hoo

38.3.1 3.1Siri

Siri iPhone4S iPad 3 Mac Siri Alexa Google Assistant 2 Google Assistant 30 Siri 21

38.3.2 3.2

2014 5 29 " " AI 1 " " 4.32 4.76

38.3.3 3.3Facebook M

2015—2018 M Facebook Messenger 1 Facebook M
 Facebook M Facebook Messenger 2017 7 Facebook " " "

38.3.4 3.4 Alexa

Alexa for business Alexa Alexa Alexa Alexa Alexa Fund 1

38.3.5 3.5Account Activity API

Twitter Account Activity API app Twitter API

38.3.6 3.6

Duer 2015 9 Robin DuerOS
" AI " 22 AI AI

38.3.7 3.7

" "

38.4 4

38.4.1 4.1

AppleSiri GoogleNow Cortana IBMWatson WolframAlpha Magi

38.4.2 4.2

Chatbot QuestionAnsweringSystem

10 Uber Sephora CNN

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38.4.3 4.3

38.5 5

38.5.1 5.1

38.5.2 5.2

38.5.3 5.3

38.5.4 5.4

Facebook 1 19 M M Facebook Messenger AI M

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2021 32 2016 2021

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38.7 7

[1]Weizenbaum J. ELIZA—a computer program for the study of natural language communication between man and machine [J]. Communications of the ACM, 1966, 9(1): 36-45. [2] Wilensky R, Chin D N, Luria M, et al. The Berkeley UNIX consultant project [J]. Computational Linguistics, 1988, 14(4): 35-84. [3] Kruschwitz, U., De Roeck, A., Scott, P., Steel, S., Turner, R., and Webb, N. (1999). Natural language access to yellow pages. In Third International conference on knowledge-based intelligent information engineering systems, pages 34–37. [4] Jia J. CSIEC (Computer Simulator in Educational Communication): A virtual

38.5. 5 97

context-adaptive chatting partner for foreign language learners[C]//Advanced Learning Technologies, 2004. Proceedings. IEEE International Conference on. IEEE, 2004: 690-692. [5] Knill O, Carlsson J, Chi A, et al. An artificial intelligence experiment in college math education[J]. http://www.math. harvard. edu/~knill/preprints/sofia. pdf, 2004. [6] Ginzburg J, Fernandez R. Computational Models of Dialogue[M]// The Handbook of Computational Linguistics and Natural Language Processing. Wiley-Blackwell, 2010:429-481. [7] L. Shang, Z. Lu, and H. Li. Neural Responding Machine for Short-text Conversation. In Proceedings of ACL, 2015. [8] I.V. Serban., A. Sordoni, Y. Bengio et al. Building End-To-End Dialogue Systems Using Generative Hierarchical Neural Network Models. arXiv:1507.04808v2 [cs.CL] 25 Nov 2015. [9] , . AI ______ [J]. , 2018(2). [10] . [J]. , 2016(4):34-36. [11] . " " [J]. , 2018(7):10-11. [12] . [D]. , 2011. [13] , , , . [J]. , 2016(4).

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```
date 2018-06-06
```

- * https://www.luis.ai
- 1. ChatterBot
- 2. wxpy

```
#!/usr/bin/env python3.5
from wxpy import *
from chatterbot import ChatBot
from chatterbot.trainers import ChatterBotCorpusTrainer
chatbot = ChatBot("gzj")#
chatbot.set_trainer(ChatterBotCorpusTrainer)
chatbot.train("chatterbot.corpus.chinese")#
bot = Bot(cache_path=True)#
group_2 = bot.groups("
                        ")[0]#
#group_2.send("
hjy=bot.friends().search(' ')[0]
@bot.register(hjy)
def reply_my_friend(msg):
   return chatbot.get_response(msg.text).text
@bot.register(group_2)
def reply_my_friend(msg):
    if msg.is_at:
       return chatbot.get_response(msg.text).text#
       Python
embed()
```

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E-learning

date 2010-10-03 10:20

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$\mathsf{CHAPTER}\ 42$

42.1

```
1. Sphinx
2. Jekyll
3. DITA
4. oXygen
5. MadCap
6. easydita
7. Guided Tour
8. Help Desk
9.
1.
2.
3. API
                Human\ Factors\ for\ Technical\ Communicators\ )
4.
5.
        Doc as Code)
          ( \ \ Single \ Sourcing: \ Building \ Modular \ Documentation \ )
6.
7. iiRDS
```

- 8. Lightweight DITA
- 9.
- 10. Bootstrap for Technical Writers
- 11. Github for Technical Writers

42.2

- 1.
- 2.
- 3.
- 4. IEC82079
- 5. 100
- 6.
- 7.
- 8. Storytelling
- 9. AR/VR

42.3

- 1. rst
- 2. 20 PDF
- 3. 10 PDF
- $4. \qquad 6 \ 19 \ \ 22 \ 00$
- 5. 6 20
- 6. CATTP

42.4

- 1.
- 2.
- 3.

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- genindex
- \bullet modindex
- \bullet search