Machine Translation WiSe 2015/2016



IT Systems Engineering | Universität Potsdam



Direct translation – Exercise 2

Dr. Mariana Neves

October 26th, 2015



Goal

Develop a simple direct translation system



Exercise

- Direct translation system
 - A bilingual dictionary will be provided
 - BeoLingus (includes gender), UWN/MENTA
 - Write two morphological rules/algorithm
 - e.g., definite articles, adjectives, verb tenses
 - Please report me regarding your choice (first come, first serve)
 - You can choose between German/English or English/German
 - Let me know if you have interest in other languages*



Exercise

- Evaluation (test set)
 - On a set of 50 random sentences



Exercise

- Deadline
 - Sunday, Nov 22rd, 23:59
- Hand-in
 - SQL file with queries
 - Stored procedures in the team's schema
- Presentation
 - Monday, Nov 23rd (together with exercise 3)
- Not graded, but all teams need to present at some point



Stored procedures in SAP Hana

- Please check the page
 - https://help.sap.com/saphelp_hanaplatform/helpdata/en/2 0/d467407519101484f190f545d54b24/content.htm



Dictionary – UWN/MENTA

SQL Result							
<pre>select * from "CORPORA"."UWN_MENTA" ORDER BY "SENSE_NUM", "LANGUAGE" limit 30</pre>							
	SENSE_NUM	LANGUAGE	WORD				
1	a1000093	deu	Gratulations				
2	a1000442	deu	gut gewählt				
3	a1000442	deu	wohlgesetzt				
4	a1000442	deu	treffend ausgesucht				
5	a1000592	deu	wohlgesetzt				
6	a1001180	eng	all thumbs				
7	a1001180	eng	awkward				
8	a1001180	eng	hipshot				
9	a1001180	eng	maladroit				
10	a1001689	deu	fertil				
11	a1001689	deu	fruchtbar				
12	a1001689	deu	fortpflanzungsfähig				
13	a1001689	eng	fertile				
14	a1002055	deu	fertil				
15	a1002055	deu	fortpflanzungsfähig				
	0.002033	303	To representative significant				



Dictionary – BeoLingus

SQL Result select * from "CORPORA"."BEOLINGUS" ORDER BY "ID", "LANGUAGE" limit 50							
	ID	LANGUAGE	WORD	ATTRIBUTE			
27	6	eng	anguilla	null			
28	7	deu	Aalbestand	m			
29	7	eng	eel stock	null			
30	8	deu	Aalbestände	pl			
31	8	eng	eel stocks	null			
32	9	deu	Aalbutt	m			
33	9	eng	plaice	null			
34	10	deu	Aalspieß	m			
35	10	eng	eel spear	null			
36	11	deu	Aalspieße	pl			
37	11	eng	eel spears	null			
38	12	deu	Aalfang	m			
39	12	eng	eel fishing	null			
40	13	deu	Aalfischerei	f			