Action Confusion matrix														_																							
action_book_hotel -	41	0	0	0 (0 0	0	0	0	0 () () 2	0	0	0 () 0	0	0	0 0	0 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0	0	0	0	0	0		- 10 ³
action_book_restaurant -	0	53	0	0 (0 0	0	0	0	0 (0 0) 0	7	0	0 () 0	0	0	0 (0 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		-
action_book_taxi -	0	0 4	11	0 (0 0	0	0	0	0 () C) 0	0	0	0 () 0	0	0	0 (0 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
action_book_train -	0	0	0 4	14 (0 0	<i>i</i> O	0	0	0 () () 0	0	0	0 () 1	0	0	0 (O C	0	1	0 (0 0	0	1	0	0 0	0	0	0 0) 0	0	0	0	0		
action_listen -	0	0	0	0 11	34 0	0	<i>i</i> O	14	7 1	T C) 0	0	3	4 0	0 0	0	0	0 (o 0	0	0	2	3 0	4	L27	6	3 1	12	9	1 2	3 0	0	0	0	4		
book_booking_hotel -	0	0	0	0 1	1 40	0 0	1	0	0 () C	0 0	0	2	0 (0 0	0	0	0 (O C	0	0	0 (0 0	0	1	0	0 0	0	0	0 0) 0	0	0	0	0		
book_booking_restaurant -	0	0	0	0 (0 0	59	9 0	0	0 1	1 0	0 0	0	0	1 () 0	0	0	0 (0 0	0	0	0 (0 0	0	1	0	0 0	0	0	0 0) 0	0	0	0	0		-
book_booking_train -	0	0	0	0 (0 0	0	<i>i</i> 0	0	0 () C) 0	0	0	0 () 0	0	0	0 (0 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
bye_general -	0	0	0	0 {	8 0	0	, O	132	1 1	L C) 0	0	1	0 () 1	0	0	0 (0 0	0	0	0 (0 0	0	3	0	0 0	0	1	1 0) 0	0	0	0	18		
greet_general -		0	0	0 1	14 0	, 0	, O	15	1 1	T C) 0	0	1	0 2	2 0	0	0	0 (0 0	0	0	0 (0 0	0	8	1	0 0	0	0	0 1	. 0	0	0	0	4		
inform_attraction -	0	0	0	0 1	1 0	0	<i>i</i> O	1	0 12	2 1 C) 0	0	0	0 0) 1	0	0	0 (O C	0	0	0 9	9 0	0	6	1	0 0	0	0	4 0) 2	0	0	0	0		-
inform_booking_attraction -	0	0	0	0 (0 0	0	, O	0	0 () C) 0	0	0	0 () 0	0	0	1 (0 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
inform_booking_hotel -	4	0	0	0 [1 0	0	/ O	0	0 () C) 47	0	0	0 () 0	0	0	0 (O C	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
inform_booking_restaurant -	0	2	0	0 (0 0	0	<i>i</i> O	0	0 () 1	0	42	0	0 () 0	0	0	0 (o 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
inform_hotel -	0	0	0	0 8	8 4	0	, O	0	1 0) C	2	0	82	1 () 0	0	0	0 (0 0	0	0	0 (0 4	0	8	2	3 0	15	0	0 0) 0	7	0	0	1		- 10 ²
inform_restaurant -	0	0	0	0 5	5 0	3	0	0	0 3	3 C) 0	1	0 8	36 () 0	0	0	0 (O C	0	0	0	1 0	12	8	3	0 3	0	7	0 0) 0	0	28	0	1		-
inform_taxi -	0	0	0	0 0	0 0	0	0	0	0 (0 0) 0	0	0	0 4	5 0	0	0	0 0	0 0	0	0	0 (0 0	0	1	0	0 0	0	0	0 0) 0	0	0	0	0		-
inform_train -	_	0 (0 7	2 0	0	<i>i</i> O	0	0 1	T C) 0	0	0	1 () 111	0	0	0 0	O C	0	0	5 (0 0	0	6	1	0 0	0	0	0 43	3 0	0	0	0	0		-
nobook_booking_hotel -	0	0	0	0	1 0	0	, O	0	0 () C) 0	0	0	0 0	0	12	0	0 (0 0	0	0	0 (0 0	0	1	0	1 0	0	0	0 0	0	0	0	0	0		-
nobook_booking_restaurant -	0	0 (0	0 (0 0	0	, O	0	0 () C) 0	0	0	0 (0 0	0	13	0 0	0 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
 ១ ០ ២ nooffer_attraction -	0	0	0	0 (0 0	0	<i>i</i> O	0	0 () C) 0	0	0	0 () 0	0	0	8 (0 0	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		-
ਹੁੰ ਗੁ nooffer_hotel -	0	0 (0	0	1 0	0	, O	0	0 () C) 0	0	0	0 () 0	0	0	0 1	2 1	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
nooffer_restaurant -	0	0	0	0 (0 0	0	i O	0	0 () C) 0	0	0	0 () 0	0	0	1 (0 23	0	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
nooffer_train -	0	0	0	0 (0 0	0	/ O	0	0 () C) 0	0	0	0 () 0	0	0	0 (0 0	3	0	0 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
offerbook_train -	0	0	0	8 :	3 0	0	<i>i</i> O	0	0 () C) 0	0	0	0 () 0	0	0	0 0	0 0	0	49	0 (0 0	0	1	0	0 0	0	0	0 0) 0	0	0	0	0		-
offerbooked_train -	0	0	0	0 7	2 0	0	<i>i</i> O	0	0 () C) 0	0	0	0 0	0 3	0	0	0 (0 0	0	0	40 (0 0	0	0	0	0 0	0	0	0 0) 0	0	0	0	0		
recommend_attraction -				0 7	2 0	0	<i>i</i> O	0	0 13	1 C) 0	0	0	0 (0	0	0	0 (O C	0	0	0 :	1 0	0	6	1	0 0	0	0	0 0) 0	0	0	0	0		
recommend_hotel -				0 (0 0	0	/ O	0	0 0) C	0 0	0	11	0 (0 0	0	0	0 (O C	0	0	0 (0 3	0	0	0	0 0	3	0	0 0) 0	1	0	0	0		
recommend_restaurant -			0	0	7 0	0	<i>i</i> O	0	0 () C) 0	0	0 :	12 (0 0	0	0	0 0	O C	0	0	0 (0 0	7	2	0	0 0	0	3	0 0) 0	0	2	0	0		- 10 ¹
reqmore_general -	0	0	0	0 9	93 0	0	0	11	0 5	5 C) 0	0	1	4 3	3 4	0	0	0 (0 0	0	0	1 :	1 0	1 1	130	6	1 0	4	4	2 4	0	0	0	0	4		-
request_attraction -				0 {	8 0	0	/ O	0	0 2	2 C) 0	0	0	0 (0 0	0	0	0 (O C	0	0	0 (0 0	0	3 1	10	0 0	0	0	0 0) 1	0	0	0	0		-
request_booking_hotel -				0 2	2 0	, O	0	0	1 0) C) 0	0	6	0 () 0	0	0	0 (O C	0	0	0 (0 1	0	3	0 1	L6 0	2	0	0 0) 0	0	0	0	1		-
request_booking_restaurant -				0 :	3 0	0	<i>i</i> O	0	1 0) C) 0	1	0	5 (0 1	0	0	0 (O C	0	0	0 (0 0	0	3	0	0 15	5 0	3	0 0) 0	0	5	0	0		-
request_hotel -								0	0 0) C) 0	0	4	0 (0 0	0	0	0 (0 0	0	0	0 (0 0	0	2	2	0 0	16	0	0 1	. 0	0	0	0	0		
request_restaurant -	0	0	0	0 1	12 0	0	<i>i</i> O	0	0 7	2 C) 0	0	0 1	11 (0 0	0	0	0 (O C	0	0	0 (0 0	1	3	2	0 1	0	30	0 0	0	0	4	0	0		
request_taxi -	0	0	0	0	1 0	<i>i</i> 0	į O	0	0 4	4 C) 0	0	0	0 () 0	0	0	0 (O C	0	0	0 (0 0	0	1	2	0 0	0	0	26 0) 1	0	0	0	0		-
request_train -	0	0	0	0 1	0 0	<i>i</i> 0	/ O	0	0 1	T C) 0	0	0	1 () 20	0	0	0 (O C	0	0	0 (0 0	0	1	2	0 0	0	0	1 83	2 0	0	0	1	0		
select_attraction -	0	0	0	0 (0 0	<i>i</i> 0	į O	0	0 8	3 C) 0	0	0	0 (0	0	0	0 (O C	0	0	0	1 0	0	0	0	0 0	О О	0	0 0) 0	0	0	0	0		
select_hotel -	0	0	0	0 (0 0	0	0	1	0 () C) 0	0	9	0 () 0	0	0	0 (о о	0	0	0 (0 1	0	1	0	1 0	1	0	0 0) 0	0	0	0	0		
select_restaurant -	0	0	0	0 (0 0	<i>i</i> 0	0	0	0 () C) 0	0	0 1	11 (0 0	0	0	0 (O C	0	0	0	1 0	0	0	0	0 0	0	0	0 0) 0	0	10	0	0		
select_train -	0	0	0	0 (0 0	0	0	0	0 () C) 0	0	0	0 () 6	0	0	0 (O C	0	0	0 (0 0	0	1	0	0 0	0	0	0 1	. 0	0	0	0	0		
welcome_general -	0	0	0	0 :	3 0	0	O	53	0 3	3 C) 0	0	0	2 3	3 0	0	0	0 (O C	0	0	0 (0 0	0	0	0	0 0	O	0	1 1	. 0	0	0	0	21		- 20
	— .	ook_restaurant -	action_book_taxi -	action_book_train -	action_listen - book_booking_hotel -	_booking_restaurant -	book_booking_train -	bye_general -	greet_general -	inform booking attraction	inform_booking_hotel -	inform_booking_restaurant -	inform_hotel -	inform_restaurant - inform_taxi -	inform_train -	nobook_booking_hotel -	booking_restaurant -	nooffer_attraction - nooffer hotel -	nooner_notel - nooffer_restaurant -	nooffer_train -	offerbook_train -	offerbooked_train -	recommend_attraction - recommend_hotel -	recommend_restaurant -	reqmore_general -	request_attraction -	request_booking_hotel - st_booking_restaurant -	request_hotel -	request_restaurant -	request_taxi -	select_attraction -	select_hotel -	select_restaurant -	select_train -	welcome_general -		<u> </u>
	act	action_book_	<u>a</u> c	פכו	book	book_book	book		jui	inform boo	inform	inform_book		INT		nobook	nobook_		O C			offi	recomm	recomm	ā	req	request request book	 	requ		Se		Se		we		

Predicted label