Lec 8

Cognitive Aspects

Cognitive Processes

Omar Hammad

Experiential cognition vs Reflective cognition

Cognitive Processes

Attention Perception Memory Learning Reading Problem-solving Decision-making ... and many

Why study cognition in a design course?

• • • •

Why study cognition in a design course?

- Give us insights on digital behaviours
- Understand the impacts of design on people human behaviours
- Inform the design of interactions maximize human capabilities and compensate weaknesses

Attention

South Carolina

		Area		Rates	
City	Motel/Hotel	code	Phone	Single	Double
Charleston	Best Western	843	747-0961	\$126	\$130
Charleston	Days Inn	843	881-1000	\$118	\$124
Charleston	Holiday Inn N	843	744-1621	\$136	\$146
Charleston	Holiday Inn SW	843	556-7100	\$133	\$147
Charleston	Howard Johnsons	843	524-4148	\$131	\$136
Charleston	Ramada Inn	843	774-8281	\$133	\$140
Charleston	Sheraton Inn	843	744-2401	\$134	\$142
Columbia	Best Western	803	796-9400	\$129	\$134
Columbia	Carolina Inn	803	799-8200	\$142	\$148
Columbia	Days Inn	803	736-0000	\$123	\$127
Columbia	Holiday Inn NW	803	794-9440	\$132	\$139
Columbia	Howard Johnsons	803	772-7200	\$125	\$127
Columbia	Quality Inn	803	772-0270	\$134	\$141
Columbia	Ramada Inn	803	796-2700	\$136	\$144
Columbia	Vagabond Inn	803	796-6240	\$127	\$130

Find the price for a double room at the Quality Inn in Columbia, South Carolina

Pennsylvania Bedford Motel/Hotel: Crinaline Courts (814) 623-9511 S: \$118 D: \$120 Bedford Motel/Hotel: Holiday Inn (814) 623-9006 S: \$129 D: \$136 Bedford Motel/Hotel: Midway (814) 623-8107 S: \$121 D: \$126 Bedford Motel/Hotel: Penn Manor (814) 623-8177 S: \$119 D: \$125 Bedford Motel/Hotel: Quality Inn (814) 623-5189 S: \$123 D: \$128 Bedford Motel/Hotel: Terrace (814) 623-5111 S: \$122 D: \$124 Bradley Motel/Hotel: De Soto (814) 362-3567 S: \$120 D: \$124 Bradley Motel/Hotel: Holiday House (814) 362-4511 S: \$122 D: \$125 Bradley Motel/Hotel: Holiday Inn (814) 362-4501 S: \$132 D: \$140 Breezewood Motel/Hotel: Best Western Plaza (814) 735-4352 S: \$120 D: \$127 Breezewood Motel/Hotel: Motel 70 (814) 735-4385 S: \$116 D: \$118

Find the price of a double room at the Holiday Inn in Bradley, Pennsylvania

which took more time?

		Area	Rates		
City	Motel/Hotel	code	Phone	Single	Double
Charleston	Best Western	843	747-0961	\$126	\$130
Charleston	Days Inn	843	881-1000	\$118	\$124
Charleston	Holiday Inn N	843	744-1621	\$136	\$146
Charleston	Holiday Inn SW	843	556-7100	\$133	\$147
Charleston	Howard Johnsons	843	524-4148	\$131	\$136
Charleston	Ramada Inn	843	774-8281	\$133	\$140
Charleston	Sheraton Inn	843	744-2401	\$134	\$142
Columbia	Best Western	803	796-9400	\$129	\$134
Columbia	Carolina Inn	803	799-8200	\$142	\$148
Columbia	Days Inn	803	736-0000	\$123	\$127
Columbia	Holiday Inn NW	803	794-9440	\$132	\$139
Columbia	Howard Johnsons	803	772-7200	\$125	\$127
Columbia	Quality Inn	803	772-0270	\$134	\$141
Columbia	Ramada Inn	803	796-2700	\$136	\$144
Columbia	Vagabond Inn	803	796-6240	\$127	\$130

Pennsylvania Bedford Motel/Hotel: Crinaline Courts (814) 623-9511 S: \$118 D: \$120 Bedford Motel/Hotel: Holiday Inn (814) 623-9006 S: \$129 D: \$136 Bedford Motel/Hotel: Midway (814) 623-8107 S: \$121 D: \$126 Bedford Motel/Hotel: Penn Manor (814) 623-8177 S: \$119 D: \$125 Bedford Motel/Hotel: Quality Inn (814) 623-5189 S: \$123 D: \$128 Bedford Motel/Hotel: Terrace (814) 623-5111 S: \$122 D: \$124 Bradley Motel/Hotel: De Soto (814) 362-3567 S: \$120 D: \$124 Bradley Motel/Hotel: Holiday House (814) 362-4511 S: \$122 D: \$125 Bradley Motel/Hotel: Holiday Inn (814) 362-4501 S: \$132 D: \$140 Breezewood Motel/Hotel: Best Western Plaza (814) 735-4352 S: \$120 D: \$127 Breezewood Motel/Hotel: Motel 70 (814) 735-4385 S: \$116 D: \$118



- How effective is it to multitask while having many screens around you?
- multi tasking will increase/reduce peopl's effecincy based on:
 - the tools
 - the methods
 - the complexity of the task
 - lising to music/podcast .. while doing something else.
 - type of person
 - prefer .. not prefer
 - can or can not.
- in general it will reduce
- what is mutl-tasking.

Ability to pay attention while Mult-itasking depends on

Nature of the tasks (Burgess, 2015)

How much attention do each need

Level of multi-tasking (Ophir et al., 2009)

Number of tasks and frequency of switching

We know about Attention. So what?

We know about Attention. So what?

- Context
- Avoid Clutter
- Support effective switching