

RFID Tags

768 bytes free \rightarrow 6144 bits

We need 4 bits for rank: A, 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K
(11) (12) (13) (14)

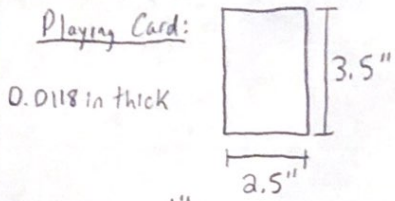
We need 2 bits for Suit: Spades, Clubs, Hearts, Diamonds

00, 0000, at the end
 Suit rank

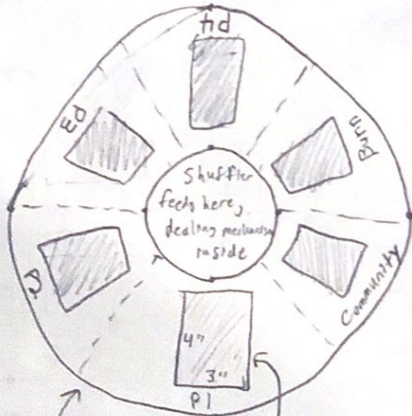
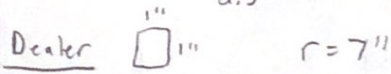
Key	Rank	Encoding	Suit	Encoding
	A	0 0 0 1	Heart	0 0
	2	0 0 1 0	Diamond	0 1
	3	0 0 1 1	Club	1 0
	4	0 1 0 0	Spade	1 1
	5	0 1 0 1		
	6	0 1 1 0		
	7	0 1 1 1		
	8	1 0 0 0		
	9	1 0 0 1		
	10	1 0 1 0		
	J	1 0 1 1		
	Q	1 1 0 0		
	K	1 1 0 1		

example: 6 of Clubs \Rightarrow $\overbrace{1\ 0\ 0}^{\text{suit}}\ \overbrace{1\ 1\ 0}^{\text{rank}}$
 (last 6 bits)

Card Shuffler/Dealer



• Split into 6 identical sections with card slots



Outer circle rotates, inner stays still attached to shuffler

Indented slots for cards to be dealt into

