Card detection

To allow the game to read the cards we are going to use RFID (Radio Frequency Identification) chips as these are already used in a lot of televised poker tournaments and therefore have been proven to be able to identify cards in practice.

RFID chips use an integrated circuit and antenna to transmit information to a RFID reader. High frequency RFID chips have a reading distance of 100mm and can pass through almost all materials apart from metal. This allows us to embed them into the cards. RFID chips are flexible allowing the cards to bend like normal and reducing the chances of damage.

RFID chips are relatively cheap with each chip costing 28p so a full pack of cards would cost £14.56 to fit with RFID chips.

Unfortunately, due to COVID-19 we had to simulate making our game and the simulations did not include RFID chips or readers, so we had to use buttons and input the card numbers manually (figure 1).

A picture containing text, electronics, screenshot

Description automatically generated

Figure : RFID simulation input