

SUMMARY

The aim of this thesis was to develop a smart poker table that would enhance the experience of a regular home poker game by incorporating elements from online play. Adding features such as the possibility for spectators to see players' cards and stacks on a screen makes the game more exciting for those who have been eliminated. Giving each player a screen that shows them useful stats and their winning chance during an all-in situation adds another level of excitement to the game, typically only available in online play.

During the thesis, different technologies and options were considered in the creation of such a poker table. Mainly, machine vision options and RFID were considered. In the end, RFID won, since it allows for a sleeker and hidden design of the table, eliminating the need for obstructive cameras. Based on the chosen technology, proper RFID readers were selected along with other necessary devices for the development of the poker table.

Then, the demo of the project was discussed, detailing the parts used for the demo project and how they worked with each other. The code was briefly explained, outlining the functions implemented in it.

In the end, most of the initially set requirements were met. The screen had a working GUI that would show the players' hands, their win chances, and stack. The game also showed the win chance to the player node when every player was all in. The two problems that arose were reliably reading in the poker chips and having the player screen with a working touchscreen. Since the tags that were used had a large antenna area, the antennas blocked each other, meaning that only the poker chips that were closer to the reader were registered. This problem would be difficult to overcome. For unknown reasons, when the touchscreen was enabled, it would disable the screen itself, which meant that it would no longer update; the author could not figure out why.

Should the smart poker table be developed further, then these issues would need to be overcome or they can be removed as requirements. For a home poker game, having the spectators see the players' stack would not add that much more to the game, since they can see live roughly what the players' stacks are. Removing this requirement would allow for the use of other technologies that could be cheaper to use. The touchscreen not working might also be an issue of the screen, which would just mean using another LCD screen.

As a final note, the author would add that overall, the project was a success, and now the only thing to do is to decide how to develop the product further, considering using other technologies to make it even better.