Isayah Parent

Homework 3 - Pugh Matrices

Card Manipulator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Criteria | Baseline | Weight | Rubber “Finger” | Vice | Shelves + Wheel |
| Card Care | 0 | 10 | 1 | -1 | 1 |
| Speed | 0 | 7 | 1 | 0 | 1 |
| Implementation | 0 | 3 | 1 | -1 | 1 |
| Reliability | 0 | 8 | -1 | 0 | -1 |
|  |  | Total | 12 | -13 | 12 |

Card Care - Keeping collectible cards safe is the most important metric for this device. Users simply wouldn't use a device that could potentially damage their cards.

Speed- Speed is rated highly because players will want to be able to manipulate their decks quickly in a game setting. Otherwise, the Magicians Assistant is more of a hindrance than just using your hands.

Implementation Ease - This is weighed lowly because the point of this project is to learn how to use these technologies, so Implementation difficulty is to be expected for any choice.

Reliability - When trying to do singular Card actions like Drawing, we would want the device to be able to reliably move what it was intended to. Otherwise, players might accidentally reveal more than they should.

User Interface

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Criteria | Baseline | Weight | Mobile App | Touch Screen | Remote Control |
| Ease of Use | 0 | 8 | 1 | 0 | 1 |
| Multi-User Control | 0 | 5 | 1 | 0 | 0 |
| Implementation | 0 | 3 | -1 | 1 | 1 |
| Informative | 0 | 7 | 1 | 1 | 0 |
|  |  | Total | 17 | 10 | 11 |

Ease of Use – Can players use it from across the table if need be? How easy is it to connect to / use in a game setting? A user interface should be easy to use quickly so that we don’t slow down gameplay.

Multi-User Control – Can multiple players connect to the Assistant with this interface? Will it be able to help the table or just one player? Multi-User control would be a nice feature to have if I expand the assistant to support multiple decks in which case it becomes a tool for the table, not just one player. I set this weight to a 5 because it wouldn’t be the end of the world if the interface could not support that expansion, but it would be a nice bonus.

Implementation – How easy is it to develop this sort of interface? For the same reasons stated before, implementation ease is nice to have but ultimately, I will be working with these devices intimately no matter what.

Informative – Can this interface provide helpful information to the user and / or other players? Or will it need extra support for that? If the device is used for the table’s benefit, then certain game stats like player life totals, coin flipping, etc. could be displayed for all to see. If the device is used only for one player, then at the very least the device should show information about how many cards are left, personal life total and the like.