Virtual Board Game Engine – EMOJ
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The Problem
• Playing board games with family and friends
• Covid-19 & Social Distancing
• Online Games
• Accessibility and Flexibility
• Valuable for players and learning about Improving UX/UI

Goals
• Connect people remotely
• Accessible on any internet connected device
• Play any card game
• House rules
• Design your own game
• Intuitive + Scalable

Results and Discussion
Through the process of storyboarding and iterative design the use of context sensitive option displays are shown for the board manipulation.

Design
• Web Application
• Requirements Engineering
• Iterative Design Cycle
• HCI Focus

• Design Page
  • Grid for play area selection
  • Home Page
  • Option to join or host game
  • Play page
  • Round Table Layout
  • Context Based Options
  • Turn Indicator

Future Work
Other key design features discovered through the iterative design process but not included due to time constraints are:
• Use of Button Macros to reduce repetitive tasks such as dealing
• Create deck designer to support multiple custom decks.
• Hand Reordering to further increase quality of user experience.

Conclusions
• Platform for family and friends
• Useful tools for unique house rules
• Examined 4 possible approaches
• Improved the user experience and intuitiveness of card management
• Achieved a fully implemented prototype version of our engine that can be played locally.
• Consider the possibility of scaling this product into a more global solution through open source contributions.