Software Design Fundamentals - Term Project

Project Designation: .magic (dot magic)

Project Variables:

Card() - Details regular cards and their interactions with the point system

CardSpecial() - Details the special cards and their unique interactions with both themselves, other special cards and normal cards/gameplay

CardGroups() - Each color represented in the game.

CardHand() - The “hand” distributed to each player at the start of the game

Player() - The player object (instantiated multiple times for 2-4 players)

\*\*\* I think the trickiest thing about this project is ensuring the stack properly vindicates priority.\*\*\*

Language Chosen: Java

Base Code: Some methods/functions utilized from START\_CODE, given via SLATE

Game Rules:

Be the first player to 20 points! Use the specialized cards to steal points and other special cards from other players to ensure your victory, or, utilize special cards to drown your opponent

Each card played is worth 1 points with special cards worth their face value. (game style can be a reflection of uno’s typical game play -> i.e. matching faces to colors)

Cards and card pile can be shuffled to and from the game field as per special card rules.

Some special cards are “fast” while others are “slow” this means that only fast cards gain priority on the “stack” while “slow” special cards can only be played on the player’s turn.

If a fast card is “negated” the effect does nothing, if a negated special is then negated the special effect takes places.

I.e. Your turn begins -> Draw card -> You play “Steal Special” -> Opponent plays “Refuse” targeting your “Steal Special” -> You play “Refuse” targeting the opponent’s “Refuse” -> Initial “Steal Special” triggers -> Steal a card -> End of Turn

Special Cards:

(fast) Steal Special - Similar to Thought Erasure from MTG, this card allows a player to select an opponent and steal any card they want from their hand, whether it is a special card or a normal card.

(fast) Draw (face value) Special - Similar to Uno’s draw system, this card when played, forces target player of choice to draw that many cards. Can be seriously over-powered if face value is 5+.

(fast) Redirect Special - Special card that “deflects” another special cards abilities to another opponent at random -> if you were targeted with a draw card, this card would redirect the same effect to the opponent to your left. If 2 players are playing, it redirects the ability back to the “caster” of the special ability.

I.e. Opponent turn begins -> Opponent uses “Draw (2) on you” -> You play Redirect card played -> Opponent draw 2 cards -> Your turn begins

(slow) Refuse Special - Special card works as a “negate” function to cancel the effects of any special card used against the player. Slow speed ONLY.

(slow)