main() Player {abstract} 0...13 playersDeck\_: list<Card\*> playersDiscards\_: list<Card\*> Card oldScore\_: int - suit\_: Suit + Player() 0...13 rank\_: Rank + ~Player() {destructor} <del>-</del>4 + Players(copyPlayer: Player) + Card(suit: Suit, rank: Rank) 0...52 + getDeck(): list<Card\*> {query} + getSuit(): Suit {query} + getDiscards(): list<Card\*> {query} + getRank(): Rank {query} + getOldScore(): int + getRankInString(): string {query} + setNewScore(): void + operator==(card1: Card&, card2: Card&): bool + isDeckEmpty(): bool + operator «(stream: ostream&, card: Card&): ostream& + scoreGained(): int + operator»(stream: istream&, card: Card&): istream& + roundEndsMessage(int i): void + eraseCardFromHand(card: Card): void 52 + addCardToDiscards(card: Card): void + playCard(card: Card, table: Table&): void + discardCard(card: Card, table: Table&): void Deck HumanPlayer - init(): void ComputerPlayer - myDeck\_: vector<Card\*> + HumanPlayer() + ComputerPlayer() + ~HumanPlayer() {destructor} + Deck() + ~ComputerPlayer() {destructor} + getMyDeck(): array<Card\*, 52> {query} + ComputerPlayer(player: Player&) + shuffle(): void + firstLegalCardInDeck(table: Table&, isFirstTurn: bool): Card\* + print(): void + makeMove(table: Table&, isFirstTurn: bool): void Game - PLAYER\_COUNT: int {readOnly} allPlayers\_: vector<Players\*> deck\_: Deck table\_: Table theChosenOne\_: int allPlayerScores\_: int[4] firstTurn\_: bool Table isLegalPlayInCommand(card: Card): bool isLegalPlay(rank: int, rank2: int, suit: int, suit2: int): bool setsCollection\_: vector<vector<Card\*>\*>\* printLegalPlays(currentPlayerDeck: list<Card\*>): void + Table() printOptions(currentPlayerDeck: list<Card\*>): void + ~Table() legalPlayInDecksExists(currentPlayerDeck: list<Card\*>, table: Table&): bool + printTable(): void playTurn(player: Player\*, shouldDisplayOptions: bool): void + placeCard(card: Card\*): void + Game() + clearTable(): void + ~GameLogic() {destructor} + setsCollection(): vector<vector<Card\*>\*>\* + invitePlayers(playerType: char, index: int): void + deck(): Deck {query} + table(): Table {query} + theChosenOne(): int {query} + dealCards(): void + gameOver(): void + beginGame(): void + winners(): vector<int> {query}