IPack

+ gameDecks: Deck[]
+ getPlayerCount: int
+ toString: String

Pack

- cards: Card[]
- playerCount: int

+ getCards(): Card[]
+ getPlayerCount(): int
+ toString(): String

Card

- denomination: int

+ getDenomination(): int
+ toString(): String

Deck

- deckId: int
- deck: CopyOnWriteArrayList<Card>

+ getDeckId(): int
+ addCard(): void
+ dealCard(): void
+ removeCard(): Card
+ canGiveCard(): boolean
+ canDrawCard(): boolean
+ logDeck(): void
+ toString(): String

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┌─────────────────────────────────┐
│           CardGame              │
├─────────────────────────────────┤
│      - gameDecks: Deck[]        │
│     - gamePlayers: Player[]     │
│       - gameCards: Card[]       │
│  - winnerNumber: AtomicInteger  │
├─────────────────────────────────┤
│       - dealCards(): void       │
│        - playGame(): int        │
│    - validateInputSize(): int   │
│          + main(): void         │
└─────────────────────────────────┘


┌─────────────────────────────────┐
│            Player               │
├─────────────────────────────────┤
│       - playerNumber: int       │
│  hand: CopyOnWriteArrayList<Card>│
│        - pickupDeck: Deck       │
│        - discarDeck: deck       │
│  - winnerNumber: AtomicInteger  │
├─────────────────────────────────┤
│    + getPlayerNumber(): int     │
│        + addCard(): void        │
│      + checkWin(): boolean      │
│          + run(): void          │
│        + writeLog(): void       │
│        - takeTurn(): void       │
│       + toString(): String      │
└─────────────────────────────────┘
```