Assig6
```
+Assig6()
+main(String[]):void
```

GUICard
```
-iconCards: Icon[][]
-iconBack: Icon
-iconsLoaded: boolean

~GUICard()
~loadCardIcons():void
+getIcon(Card):Icon
+getBackCardIcon():Icon
-turnIntIntoCardValue(int):String
-turnIntIntoCardSuit(int):String
-valueAsInt(Card):int
-suitAsInt(Card):int
```

Controller
```
~HUMAN_PLAYER: int
~COMPUTER_PLAYER: int

+Controller(Model,View)
+init():void
-computerTurn():void
-checkGameState():void
+actionPerformed(ActionEvent):void
+mousePressed(MouseEvent):void
+mouseEntered(MouseEvent):void
+mouseExited(MouseEvent):void
+mouseClicked(MouseEvent):void
+mouseReleased(MouseEvent):void
```

Timer
```
~Timer()
+run():void
+doNothing(int):void
```

View
```
-MAX_IMAGES_IN_DECK: int
-HUMAN_PLAYER: int
-COMPUTER_PLAYER: int
-NUM_CARD_STACKS: int
-NUM_CARDS_PER_HAND: int
-NUM_PLAYERS: int
-addToStackLabel: JLabel[]
-cantPlayButton: JButton
-startTimerButton: JButton
-computerHandLabels: JLabel[]
-playerHandButtons: JButton[]
-playerScoreLabels: JLabel[]
-deckLabel: JLabel[]
-deckCountLabel: JLabel
-t: Thread
-clockRun: boolean
-date: SimpleDateFormat
-clockCounter: long
-clock: JLabel

+View()
+addController(Controller):void
+loadEndGamePrompt(int[]):int
+setVisible(boolean):void
+setDeckImage(Icon):void
+updateDeckCount(int):void
+updateHand(Icon[],int):boolean
+updateStack(Icon[]):boolean
+updateScore(int,int):boolean
+updateSelectedButton(int):boolean
-update():void
+getPlayerButtonIndex(JButton):int
+getStackIndex(JLabel):int
+startTimer():void
+resetTimer():void
```

Model
```
~NUM_CARDS_PER_HAND: int
~NUM_PLAYERS: int
~NUM_CARD_STACKS: int
~HUMAN_PLAYER: int
~COMPUTER_PLAYER: int
-playerScores: int[]
-selectedIndex: int
-playerTurn: int
-turnsSkipped: int
-gameOver: boolean

+Model()
+startGame():void
+endTurn(boolean):void
+addCardToStack(int):boolean
-updateScore(int):void
-isValidMove(int):boolean
+startComputerTurn():void
+getHandIcons(int):Icon[]
+getStackIcons():Icon[]
+getBackCardIcon():Icon
+getCardsInDeckCount():int
+getPlayerTurn():int
+getPlayerScore(int):int
+getPlayerScores():int[]
+getSelectedCardIndex():int
+isGameOver():boolean
+setSelectedCard(int):boolean
+setPlayerTurn(int):boolean
```

CardTable
```
-serialVersionUID: long
~MAX_CARDS_PER_HAND: int
~MAX_PLAYERS: int
-numCardsPerHand: int
-numPlayers: int
+pnlComputerHand: JPanel
+pnlHumanHand: JPanel
+pnlPlayArea: JPanel

~CardTable(String,int,int)
+getCardsPerHand():int
+getNumberOfPlayers():int
```

CardGameFramework
`<<Java Class>>`
`(default package)`
```
-MAX_PLAYERS: int
-numPlayers: int
-numPacks: int
-numJokersPerPack: int
-numUnusedCardsPerPack: int
-numCardsPerHand: int

+CardGameFramework(int,int,int,Card[],int,int)
+CardGameFramework()
+getHand(int):Hand
+getCardFromDeck():Card
+getNumCardsRemainingInDeck():int
+newGame():void
+deal():boolean
~sortHands():void
~playCard(int,int):Card
~takeCard(int):boolean
```

Suit
```
+clubs: Suit
+diamonds: Suit
+hearts: Suit
+spades: Suit

+Suit()
```

Card
```
-value: char
-errorFlag: boolean
-valuRanks: char[]

+Card(char,Suit)
+Card()
+set(char,Suit):boolean
+getSuit():Suit
+getValue():char
+getErrorFlag():boolean
+equals(Card):boolean
-isValid(char,Suit):boolean
+arraySort(Card[],int):void
+getCardValueRank(Card):int
+toString():String
```

Hand
```
+MAX_CARDS: int
-numCards: int

+Hand()
+resetHand():void
+takeCard(Card):boolean
+playCard(int):Card
+sort():void
+toString():String
+getNumCards():int
+inspectCard(int):Card
```

Deck
```
+CARDS_IN_PACK: int
+MAX_CARDS: int
+MAX_PACKS: int
-topCard: int
-numPacks: int
-isMasterPackAllocated: boolean

+Deck(int)
+Deck()
+init(int):void
+shuffle():void
+dealCard():Card
+getTopCard():int
+inspectCard(int):Card
+addCard(Card):boolean
+removeCard(Card):boolean
+sort():void
+getNumCards():int
-allocateMasterPack():void
```