Texas Hold'em

(and Five Card Draw)
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Overview

- Main program - Texas Hold'em
- Second program - Five Card Draw
- Language - Python (3.6.7)
- Easily expandable to include more games

Poker Hands (High to Low)

- Royal Flush - 10,J,Q,K,A same suit
- Straight Flush - Straight that is also a Flush
- Four of a Kind - Four cards of same value
- Full House - Three of a Kind and a pair
- Flush - 5 cards of same suit
- Straight - 5 cards of 1 step increments - 2,3,4,5,6
- Three of a Kind - 3 cards of same value
- Two Pair - 2 One Pairs
- One Pair - two cards of same value
- High Card - No paired cards, straight, or flush

Texas Hold'em phases

- Deal phase:
  - Player and dealer get two cards
- Flop phase:
  - One card is burned
  - Three cards placed on table (community), known as the flop
- Turn phase:
  - One card is burned
  - One card placed on table (community), known as the turnr
- River phase:
  - One card is burned
  - One card is placed on table (community), known as the river
- Winner phase:
  - Player and dealer reveal hand
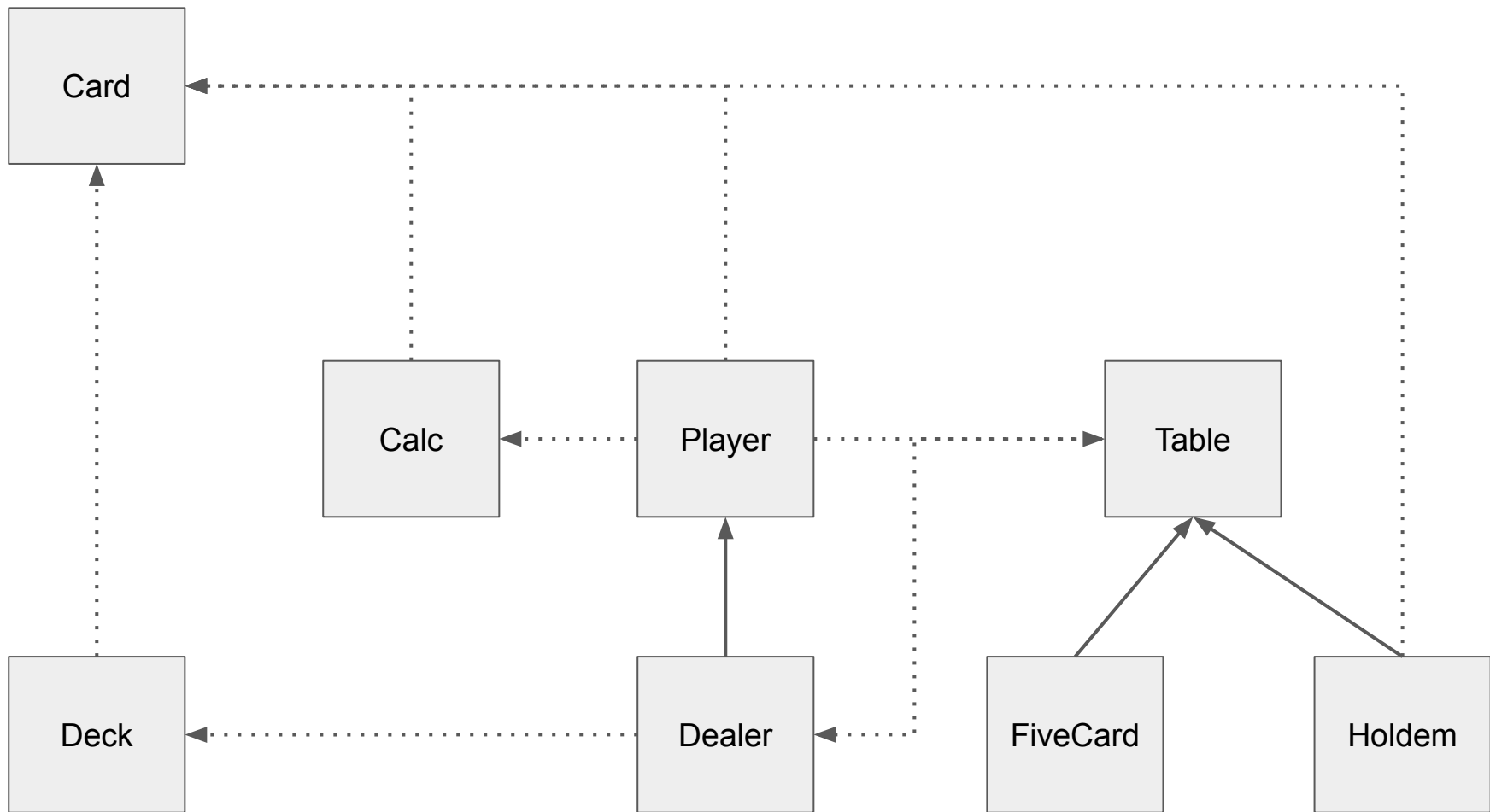 - Better hand wins

5-Card Draw

- Essentially, we converted Hold'em to have 2 phases instead.
- This game-type's unique phase is the draw phase.
  - Draw phase: takes a the user's discard choice from main, and swaps them with new cards being dealt by the dealer.

Objects

- Card
- Deck
  - Has cards
- Calc
- Player
  - Has cards, Calc
- Dealer
  - Is player
  - Has Deck
- Table
  - Has player, Dealer

Objects (cont.)

- Holdem
  - Is Table
- FiveCard
  - Is Table

Things learned

- Python
  - How to use some of its features
  - How to write the syntax
- How to code a basic poker game in Python
- How to utilize OOP design in Python
  - Inheritance
  - Data encapsulation?
  - Abstraction
  - Some polymorphism

Git repository

https://github.com/rhorrace/CS420Project