**OUTCOME**

**Responsibilities:**

* A name for the bet and the payout odds. Isolates the calculation of the payout amount. Example, “Red”, “1:1”.

**Collaborators:**

* Collected by **Wheel** into the bins that reflect the bets that win.
* Collected by **Table** into the available bets for the **Player**.
* Used by **Game** to compute the amount won from the amount bet.
* Is paired with a **Bet**.

**WHEEL**

**Responsibilities:**

* Selects the **Outcomes** that win. This isolates the use of a random number generator to select **Outcome**s
* Encapsulates the set of winning **Outcome**s that are associated with each individual number on the wheel.   
  Example, the “1” bin has the following winning **Outcome**s:
  + “1”, “Red”, “Odd”, “Low”, “Column 1”, “Dozen 1-12”, “Split 1-2”, “Split 1-4”, “Street 1-2-3”, “Five Bet”, “Line 1-2-3-4-5-6”, “00-0-1-2-3”, and “Dozen 1”.

**Collaborators:**

* Collects the **Outcome**s into **Bin**s.
* Used by the overall **Game** to get a next set of winning **Outcome**s.

**TABLE**

**Responsibilities:**

* A collection of **Bet**s placed on **Outcome**s by a **Player**. This isolates the set of possible **Bet**s and the management of the amounts currently at risk on each **Bet**.
* Serves as an interface between the **Player** and the other elements of the game.

**Collaborators:**

* Collects the **Outcome**s and **Bet**s.
* Used by **Player** to place a **Bet** amount on a specific **Outcome.**
* Used by **Game** to compute the amount won from the amount of the **Bet**.

**PLAYER**

**Responsibilities:**

* Places **Bet**s on **Outcome**s via **Table**.
* Updates the stake with amounts won and lost.

**Collaborators:**

* Uses **Table** to place **Bet**s on **Outcome**s.
* Used by **Game** to record wins and losses.
* Used by **Game** to get bets placed.

**GAME**

**Responsibilities:**

* Runs the game.
  + Gets bets from **Player**,
  + spins **Wheel**,
  + collects losing bets,
  + pays winning bets.
* This encapsulates the basic sequence of play into a single class.

**Collaborators:**

* Uses **Wheel, Table, Outcome, Player**. The overall statistical analysis will play a finite number of games and collect the final value of the **Player**’s stake.

**BET**

**Responsibilities:**

* Hold the amount bet on a particular **Outcome**.

**Collaborators:**

* Amount is paired with an **Outcome**
* Collected by **Table**
* Created by **Player**

**BIN**

**Responsibilities:**

* Holds **Outcome**s for a particular wheel spin.

**Collaborators:**

* Used by **Wheel** to collect outcomes.