

#### Entity 1: **Member**

- **PK** - MemberID (member's ID)
- Fname (member's first name)
- Lname (member's last name)
- TelephoneNum (member's telephone number)
- Address (member's address)
- GameTokens (game tokens available to the member)
  - Used to check to see if a member has enough game tokens to play a specific game
- TotalSpending (member's total spending)
- MembershipTier (member's membership tier)
- VisitCount (how many times the member has visited the arcade)
  - Used in conjunction with LastVisitDate to check to see if member qualifies for a food coupon
- LastVisitDate (the last date the member visited the arcade)
  - Used in conjunction with VisitCount to check to see if member qualifies for a food coupon
- TotalTickets (the total amount of tickets a member has)
  - Used to check to see if a member has enough tickets to buy a specific prize

#### Entity 2: **Game**

- **PK** - GameID (game's ID)
- Name (game's name)
- TokenCost (game's token cost to play)
  - Used to check to see if a member has enough game tokens to play this game
- Tickets (how many tickets earned when playing the game based on the score)

#### Entity 3: **Gameplay**

- **PK** - GameplayID (gameplay's ID)
- **FK** - MemberID (member's ID)
- **FK** - GameID (game's ID)
- Score (gameplay's score)
- TicketsEarned (how many tickets earned based on the gameplay's score)
  - Used for TotalTickets in Member entity
- Date (gameplay's date)

#### Entity 4: **Prize**

- **PK** - PrizeID (prize's ID)
- Name (prize's name)
- TicketCost (how many tickets the prize cost)
  - Used to check to see if a member has enough tickets to buy this prize

#### Entity 5: **FoodCoupon**

- **PK** - CouponID (coupon's ID)
- **FK** - MemberID (member's ID)
- RedeemedFood (the food the coupon redeems)
- Used (whether or not the food coupon has been used or not)

#### Entity 6: **MembershipTier**

- **PK** - MembershipID (membership tier's ID)
- Name (membership tier's name)
- TotalSpendingReq (total spending required to achieve this tier)
- DiscountPercentage (discount percentage associated with the membership tier)
- FreeTickets (number of free tickets awarded for achieving this tier)

#### Entity 7: **Transaction**

- **PK** - TransactionID (transaction's ID)
- Type (type of transaction e.g. token purchase)
- Amount (amount of tokens or tickets involved in purchase)
- Data (data of transaction)

#### Relationships:

- **Member and Game:** A member can play multiple games, a game can be played by multiple members
- **Member and Gameplay:** A member can have multiple gameplays, each gameplay is associated with one member
- **Member and FoodCoupon:** A member can have multiple food coupons, each food coupon is associated with one member
- **Member and Prize:** A member can get multiple prizes, each prize can be bought by multiple members
- **Game and Gameplay:** A game can have multiple gameplays, each gameplay is associated with one game