UMLs:

Game
-    name : String -   cost : int -   playerCount : int -   playTime : float -   rating : int
<<constructor>>Game(name : String, cost: int, playerCount: int, playTime : float, rating : int) +   setName(name : String) +   setCost(cost : int) +   setPlayerCount(playerCount : int) +   setPlayTime(playTime : float) +   setRating(rating : int) +   getName() : String +   getCost() : int +   getPlayerCount() : int +   getPlayTime() : float +   getRating() : int +   toString() : String

TableGame
- complexityLevel: int - numComponents: int
<<constructor>>TableGame(complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int) + getComplexityLevel() : int + getNumComponents() : int + setComplexityLevel(complexityLevel : int) : void + setNumComponents(numComponents : int) : void + toString() : String

VideoGame
- platform : String - genre: String
<<constructor>>VideoGame(platform : String, genre : String, name : String, cost : int, playerCount : int, playTime : float, rating : int) + getPlatform() : String + getGenre() : String + setPlatform(platform : String) : void + setGenre(genre : String) : void + toString() : String

BoardGame

- boardSize: int

+ BoardGame(boardSize: int, complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int)
+ getBoardSize() : int
+ setBoardSize(boardSize: int) : void
+ toString() : String

CardGame

- deckType: String
- numCards: int
- handSize: int

<<constructor>>CardGame(deckType : String, numCards : int, handSize : int, complexityLevel : int, numComponents : int, name : String, cos t: int, playerCount : int, playTime : float, rating : int)
+ getDeckType() : String
+ getNumCards() : int
+ getHandSize() : int
+ setDeckType(deckType: String) : void
+ setNumCards(numCards: int) : void
+ setHandSize(handSize: int) : void
+ toString() : String

TableGame

- complexityLevel : int
- numComponents : int

<<constructor>>TableGame(complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int)
+ getComplexityLevel() : int
+ getNumComponents() : int
+ setComplexityLevel(complexityLevel : int) : void
+ setNumComponents(numComponents : int) : void
+ toString() : String

BetrayalAtTheHouseOnTheHill
N/A
<<constructor>>BetrayalAtTheHouseOnTheHill(boardSize: int, numPieces : int, complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

Crokinole
N/A
<<constructor>>Crokinole(boardSize : int, numPieces : int, complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

Doom
N/A
<<constructor>>Doom(platform : String, genre : String, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

DungeonsAndDragons
N/A
<<constructor>>DungeonsAndDragons(boardSize: int, numPieces : int, complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

EscapeCurseOfTheTemple
N/A
<<constructor>>EscapeCurseOfTheTemple(boardSize : int, numPieces : int, complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

HollowKnight
N/A
<<constructor>>HollowKnight(platform : String, genre : String, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

Loonacy
N/A
<<constructor>>Loonacy(deckType : String, numCards : int, handSize : int, complexityLevel : int, numComponents : int, name : String, cos t: int, playerCount : int, playTime : float, rating : int) + toString() : String

MarioKart
N/A
<<constructor>>MarioKart(platform : String, genre : String, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

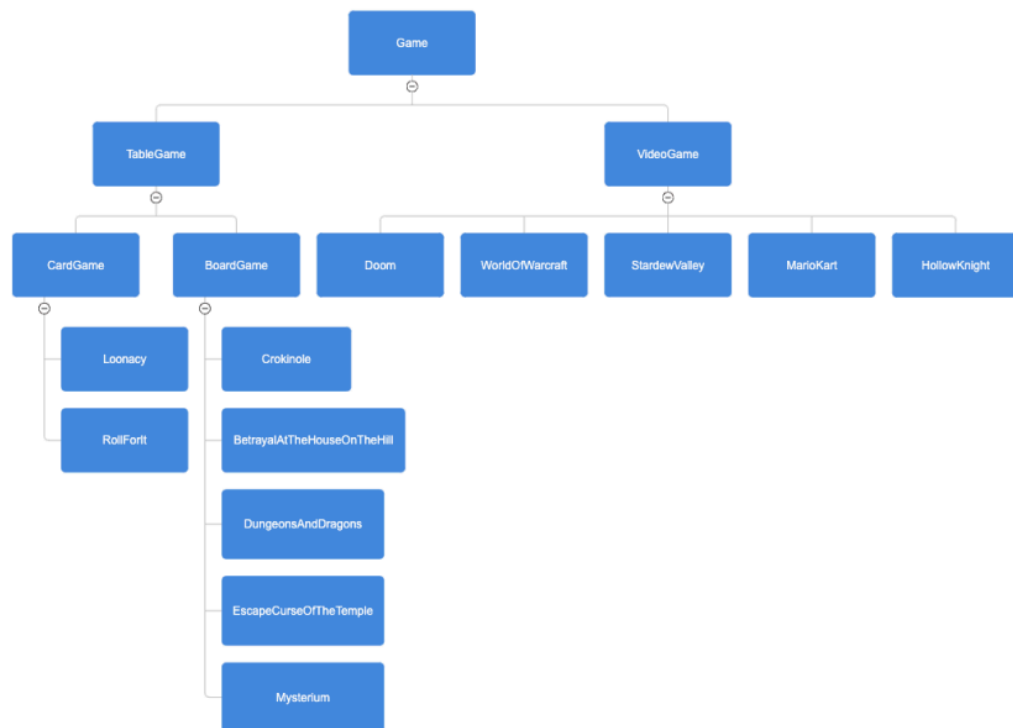| Mysterium |
| --- |
| N/A |
| <<constructor>>Mysterium(boardSize : int, numPieces : int, complexityLevel : int, numComponents : int, name : String, cost : int, playerCount : int, playTime : float, rating : int)
+ toString() : String |

RollForIt
N/A
<<constructor>>RollForIt(deckType : String, numCards : int, handSize : int, complexityLevel : int, numComponents : int, name : String, cos t: int, playerCount : int, playTime : float, rating : int) + toString() : String

StardewValley
N/A
<<constructor>>StardewValley(platform : String, genre : String, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

WorldOfWarcraft
N/A
<<constructor>>WorldOfWarcraft(platform : String, genre : String, name : String, cost : int, playerCount : int, playTime : float, rating : int) + toString() : String

Hierarchy Chart:

Random Game Selection Output:

```
Selected Games:
Escape: Curse of the Temple
Mysterium
World of Warcraft
Betrayal at House on the Hill
Stardew Valley
Dungeons & Dragons
Mario Kart
Crokinole
Hollow Knight
Roll for It
Loonacy
Doom
```