



## Relational Schema:

GameSpecificInfo(gameName:varChar(100) [PK], releaseDate:date, supportEmail:varChar(100), supportURL:varChar(100), aboutText:varChar(2000), background:varChar(100), shortDescription:varChar(500), detailedDescription:varChar(2000), DRMNotice:varChar(100), extUserAcctNotice:varChar(100), headerImage:varChar(100), legalNotice:varChar(1000), reviews:varChar(1000), supportedLanguages:varChar(100), website:varChar(100))

PlayerData(gameName:varChar(100) [PK], metaCritic:int, recommendations:int, ownersTotal:int, ownersVariance:int, playersTotal:int, playersVariance:int)

GameCategories(gameName:varChar(100) [PK], requiredAge:int, singlePlayer:bool, multiPlayer:bool, CoOp:bool, MMO:bool, inAppPurchases:bool, includeSrcSDK:bool, includeLevelEditor:bool, VRSupport:bool, nonGame:bool, indie:bool, action:bool, adventure:bool, casual:bool, strategy:bool, RPG:bool, simulation:bool, earlyAccess:bool, freeToPlay:bool, sports:bool, racing:bool, massivelyMultiplayer:bool)

UserLimitations(gameName:varChar(100) [PK], isFree:bool, freeVersionAvailable:bool, purchaseAvailable:bool, subscriptionAvailable:bool, priceInitial:float, priceFinal:float, controllerSupport:bool, platformWindows:bool, platformLinux:bool, platformMac:bool, hasMinPCReqs:bool, hasRecommendedPCReqs:bool, hasMinLinuxReqs:bool, hasRecommendedLinuxReqs:bool, hasMinMacReqs:bool, hasRecommendedMacReqs:bool, PCMinReqsText:varChar(1000), PCRecReqsText:varChar(1000), LinuxMinReqsText:varChar(1000), LinuxRecReqsText:varChar(1000), MacMinReqsText:varChar(1000), MacRecReqsText:varChar(1000))

GamesOwned(index:int [PK], gameName:varChar(100) [FK to GameSpecificInfo.gameName], played:bool, hoursPlayed:int, playerID:int [FK to UserData.playerID])

UserData(playerID:int [PK], password:varChar(100), userName:varChar(100))

## Assumptions:

- Query Name is unique for the entity and hence it is our foreign key
- Primary keys are assumed to be NOT NULL
- Game categories, player data, user limitations cannot stand on their own that's why they are connected using gameName making them a weak entity
- One user owns multiple games
- Whatever game the player owns is already in our database
- UserLimitations could have multiple records of the same game or no records at all making the relationship between games owned and game specific info one mandatory to many optional
- Games owned could be related to multiple players or no players at all making this relationship one mandatory to many optional
- Similarly, relationships between GamesOwned and GamesCategories is one mandatory to many optional.
- Back up data was not included in ER as it was similar to the current ER and we did not want to duplicate it; however, it will be included database