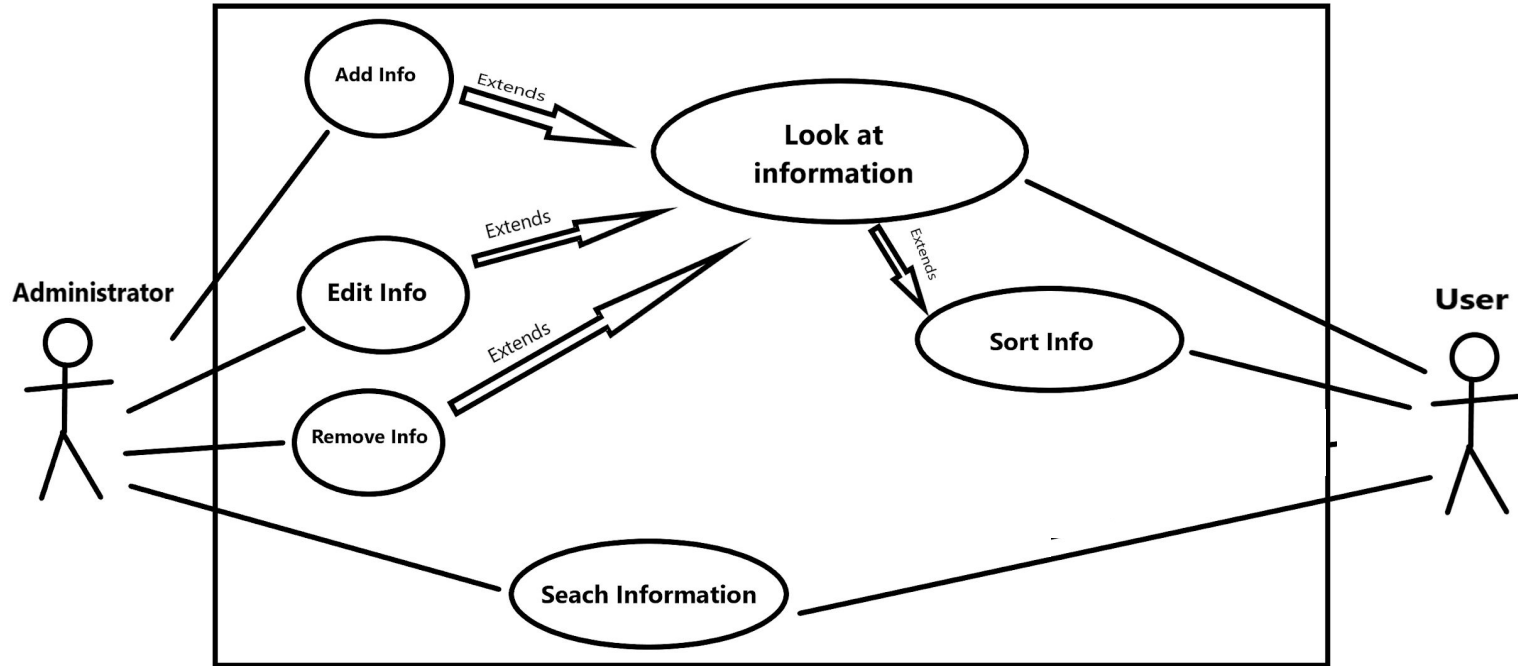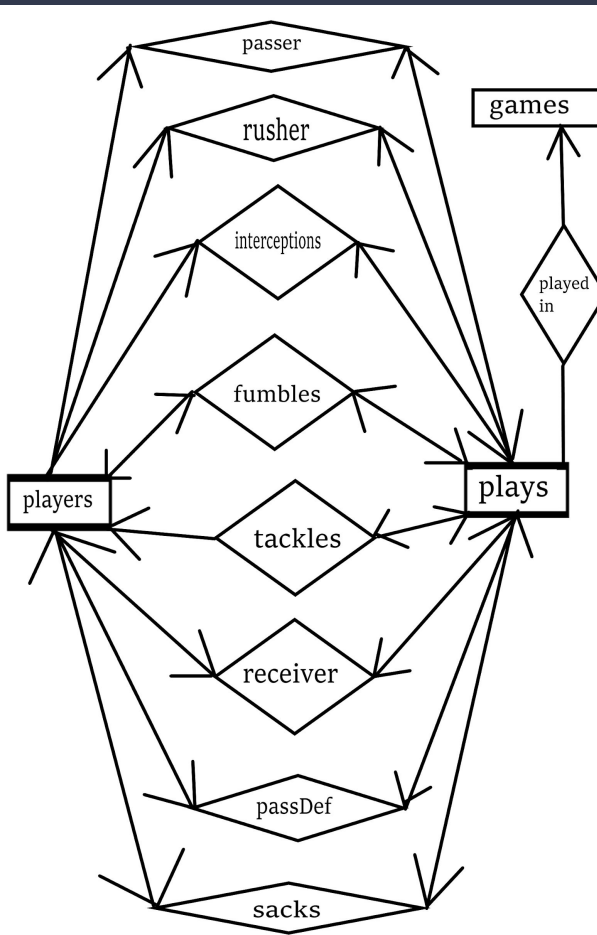# NFL Statistics

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System Description

- Created a user experience for searching for NFL players statistics

- Able to sort and search by player, team, year, and season information

- Allows administrators to add, edit, or remove information to create some reliability

UML Use-Case Diagram

E/R Diagram

Schema

fumbles(fubId, playId, teamId, playerId, fumPosition, fumType, fumOOB, fumTurnover, famNull)

games(gameId, season, week, homeTeamId, visitorTeamId, seasonType, weekNameAbbr, homeTeamFinalScore, visitingTeamFinalScore, winningTeam)

interceptions(interceptionId, playId, teamId, playerId, intPosition, int, intYards, intTd, intNull)

passDef(passDefId, playId, teamId, playerId, passDefPosition, passDefNull)

passer(passId, playId, teamId, playerId, passPosition, passOutcome, passDirection, passDepth, passLength, passComp, passNull)

players(playerId, nameFull, position, heightInches, weight, dob)

plays(playId, gameId, playSequence, quarter, possessionTeamId, nonpossessionTeamId, playType, playType2, playTypeDetailed, playNumberByTeam, gameClockSecondsExpired, gameClockStoppedAfterPlay, down, distance, distanceToGoalPre, changePossession, turnover, safety, offensiveYards, netYards, firstDown, efficientPlay, scorePossession, scoreNonpossession, homeScorePre, visitingScorePre, homeScorePost, visitingScorePost, distanceToGoalPost)

receiver(receiverId, playId, teamId, playerId, recPosition, recYards, rec, recYac, rec1down, recEnd, recNull)

rusher(rushId, playId, teamId, playerId, rushPosition, rushType, rushDirection, rushLandmark, rushYards, rushPrimary, rushTd, rushEnd, rushNull)

sacks(sackId, playId, teamId, playerId, sackPosition, sackYards, sackNull)

tackles(tackleId, playId, teamId, playerId, tacklePosition, tackleType, tackleYdsScrim, tackleNull)

Implementation Details

- Used modified version of "NFL Play Statistics" database from kaggle
  - https://www.kaggle.com/toddsteussie/nfl-play-statistics-dataset-2004-to-present?select=plays.csv
- Used python with sqlite

- Github
  - https://github.com/ian-lopez/Databases-Project