NHL PLAYERS LOADOUT

JAMES TIETZ

DATABASE SYSTEMS PROJECT

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EXECUTIVE SUMMARY

Overview

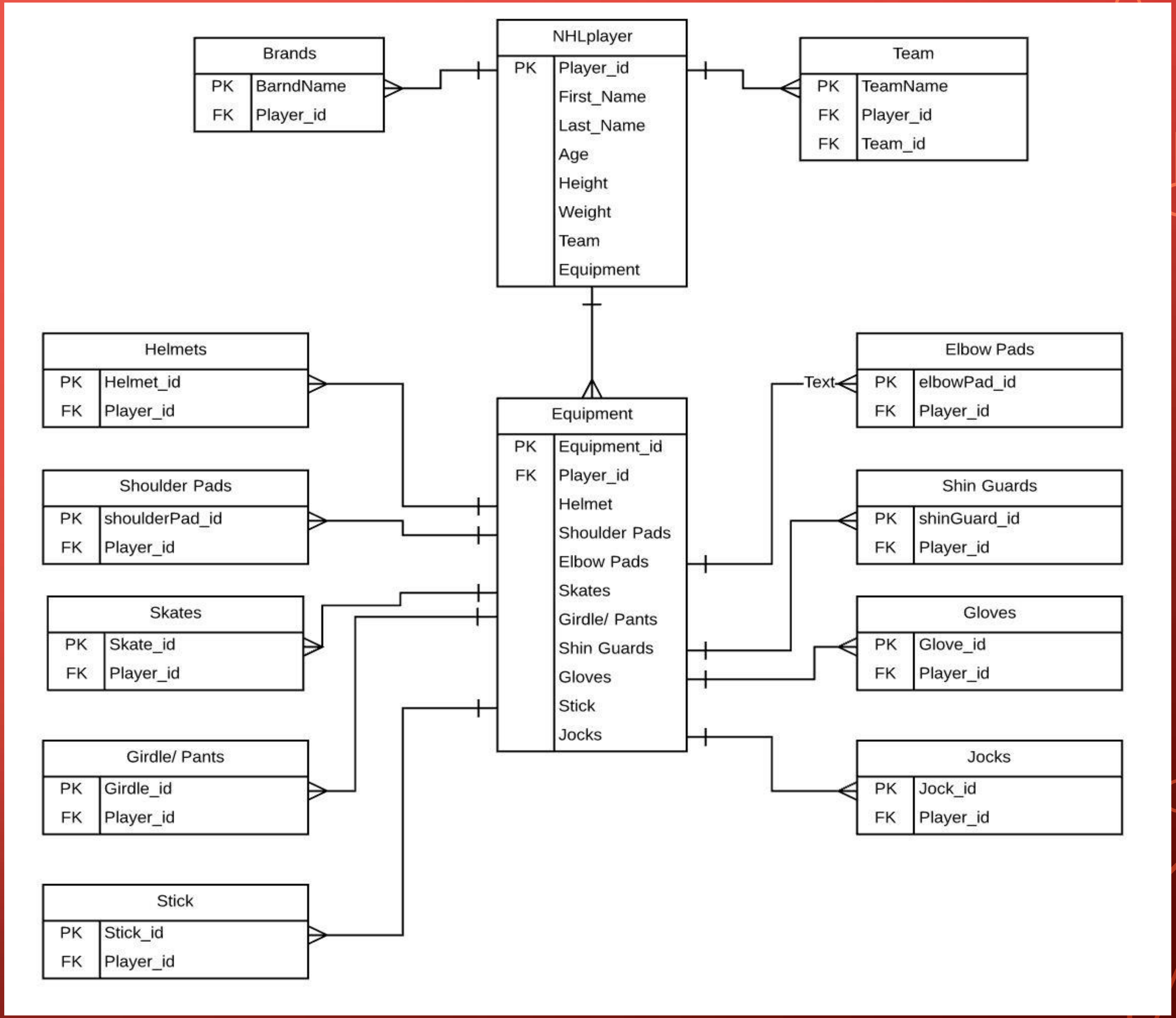
NHL Player Loadout is an overview of what an NHL hockey player, who is sponsored by top brands of equipment, uses on a day to day bases, in the present day. Based off of the current playoff standings each player belongs to a specific team, with specific sponsors. Each player has his own equipment loadout, in which he likes the most. Given top choices equipmet wise, each player can configure their loadout based on their preferences. Each brand brings something new tot the table. Each player favorites a brand over another and so on.

Objectives

The purpose of this document is to provide an outline of a database system in which an NHL Player can see different combinations or customize his loadout for the current/ upcoming season. The database provides the best of the best equipment, that can be chosen.

This document will demonstrate a basic overview of the database, providing tables of certain aspects of the table, views, reports, stord procedures, triggers and securities. This design was created and tested on PostgreSQL 9.4

Entity Relationship Diagram



Brands	
PK	BarndName
FK	Player_id

NHLplayer	
PK	Player_id
	First_Name
	Last_Name
	Age
	Height
	Weight
	Team
	Equipment

Team	
PK	TeamName
FK	Player_id
FK	Team_id

Equipment	
PK	Equipment_id
FK	Player_id
	Helmet
	Shoulder Pads
	Elbow Pads
	Skates
	Girdle/ Pants
	Shin Guards
	Gloves
	Stick
	Jocks

Helmets	
PK	Helmet_id
FK	Player_id

Shoulder Pads	
PK	shoulderPad_id
FK	Player_id

Skates	
PK	Skate_id
FK	Player_id

Girdle/ Pants	
PK	Girdle_id
FK	Player_id

Stick	
PK	Stick_id
FK	Player_id

Elbow Pads	
PK	elbowPad_id
FK	Player_id

Shin Guards	
PK	shinGuard_id
FK	Player_id

Gloves	
PK	Glove_id
FK	Player_id

Jocks	
PK	Jock_id
FK	Player_id

TABLES

NHLplayers

Purpose: The purpose of the players are to identify at least one player from every team in the playoffs, then be able to give ideas on different equipment types.

Statement

```
CREATE TABLE NHLplayer (
  Player_id text Not null,
  First_Name text,
  Last_Name text,
  Height numeric,
  Weight numeric,
  Team text,
  Equipment text,
  PRIMARY KEY (Player_id)
  );
```

Functional Dependencies

Player_id–→ First_Name, Last_Name, Height, Weight, Team, Equipment

Brands

Purpose: Each Player has a specific brand that they either favor or are sponsored by. Given the Brand types, Equipment lists can be created.

Statement

```
CREATE TABLE Brands (
  BrandName text not null,
  Bauer text,
  Easton text,
  CCM text,
  Player_id text not null references NHLplayer(Player_id),
  PRIMARY KEY (BrandName)
);
```

Functional Dependencies
BrandName→ Bauer, Easton, CCM

Teams

Purpose: Each NHLplayer has to belong to one of the eight teams currently in the playoffs.

Statement

```
Create Table Teams (
  TeamName text not null,
  Player_id text not null references NHLplayer(Player_id),
  primary key (TeamName)
);
```

Functional Dependencies
Teams→ TeamName

Helmet

Purpose: Provide top of the line helmets from different brands that players may chose from.

Functional Dependencies
Helmet→ Helmet_id

Statement

```
Create table Helmet (
  Helmet_id text not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(Helmet_id)
);
```

ShoulderPads

Purpose: Top of the line Shoulder Pads from different players so that Players may chose what they favor.

Statement

```
Create table ShoulderPads (
  shoulderPad_id text not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(shoulderPad_id)
);
```

Functional Dependencies
ShoulderPads→shoulderPad_id

ElbowPads

Purpose: Provide top of the line Elbow Pads from different brands that players may chose from.

Functional Dependencncies
ElbowPads→ elbowPad_id

Statement

```
Create table ElbowPads (
   elbowPad_id text not null,
   BrandName text not null references Brands(BrandName),
   Player_id text not null references NHLplayer(Player_id),
  primary key(elbowPad_id)
);
```

Skates

Purpose: Provide top of the line skates from different brands that players may chose from.

Statement

```
Create table Skates (
  Skate_id text not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(Skate_id)
);
```

Functional Dependencies
Skates→ Skate_id

Girdles

Purpose: Provide top of the line Girdles/ Protective Pants from different brands that players may chose from.

Statement

```
Create table Girdle (
  Girdle_id text not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(Girdle_id)
);
```

Functional Dependencies
Girdle→Girdle_id

Shin Guards

Purpose: Provide top of the line Shin Guards from different brands that players may chose from.

Functional Dependencies
ShinGuards→ shinGuard_id

Statement

```
Create table ShinGuards (
  shinGuard_id text not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(shinGuard_id)
);
```

Gloves

Purpose: Provide top of the line Gloves from different brands that players may chose from.

Statement

```
Create table Gloves (
  Glove_id text not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(Glove_id)
);
```

Functional Dependencies
Gloves→ Glove_id

Sticks

Purpose: Provide top of the line Hockey Sticks from different brands that players may chose from.

Statement

```
Create table Stick (
  Stick_id char not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(Stick_id)
);
```

Functional Dependencies
Stick→ Stick_id

Jocks

Purpose: Provide top of the line Jocks from different brands that players may chose from.

Statement

```
Create table Jocks (
  Jock_id text not null,
  BrandName text not null references Brands(BrandName),
  Player_id text not null references NHLplayer(Player_id),
  primary key(Jock_id)
);
```

Functional Dependencies
Jocks→ Jock_id

Equipment

Purpose: To bring everything together into one.

Statement

```
create table Equipment (
  Equipment_id text not null,
  Player_id text not null references NHLplayer(Player_id),
  Helmet_id text not null references Helmet(Helmet_id),
  shoulderPad_id text not null references ShoulderPads(shoulderPad_id),
  elbowPad_id text not null references ElbowPads(elbowPad_id),
  Skate_id text not null references Skates(Skate_id),
  Girdle_id text not null references Girdle(Girdle_id),
  shinGuard_id text not null references ShinGuards(shinGuard_id),
  Glove_id text not null references Gloves(Glove_id),
  Stick_id text not null references Stick(Stick_id),
  Jock_id text not null references Jocks(Jock_id),
  primary key (Equipment_id)
);
```

Functional Dependencies
Equipment→ Equipment_id

SECURITY

There are 8 different players in this database that have the option to chose their desired equipment. One player from each team.

Players

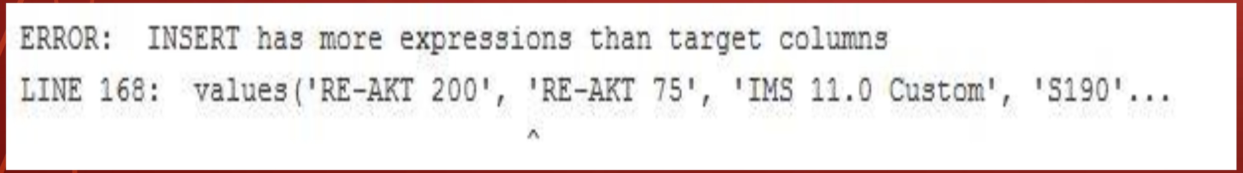
Players will be able to go intot he database and access what brand they would prefer, then depending on the brand, the equipment pertaining to that brand will appear. Each Player from each team can customize to their liking.

Implementations

- Implementations that can be allowed for later on in the database are more players, teams, brands, equipment etc. There should be a system when every Player in the NHL is able to see every type of equipment that is possibly out there for them.

Known Problems

– In the NHL Player Loadout database, referencing multiple types of equipment pertaining to different brands and compiling them into one table was hard. Could not get the tables to post the way that I wanted to, and the more I tried, the farther away I got from success.



```
ERROR:  INSERT has more expressions than target columns
LINE 168:  values('RE-AKT 200', 'RE-AKT 75', 'IMS 11.0 Custom', 'S190'...
                                ^
```

I knew what the problem was, but didn't know how to fix it

Future Enhancements

- In the future after all the implementations are made, ratings could be added for the equipment. The testing that was done, and also descriptions of what puts it above the rest.