Santa's Workshop

Overview

Santa's Workshop is a console-based application for viewing facets of Christmas toy production in the North Pole. You are able to view the naughty or nice list and change whether a child has been naughty or nice, or add a new child to the list. You can view the history of toys created in Santa's Workshop and who they were made for. You can view the toys scheduled to be produced in the workshop, and add or remove toys from this list. You can also manage the elves working in the shop, and keep track of the toys they have produced. A possible addition is tracking child behavior and having it influence the naughty status in the NaughtyNice table.

Tables

1. **NaughtyNice** table: This table keeps track of all the children data
   contains a childID, childName, childAge, and naughty status

   childID = primary key identifying a child as an auto incremented integer
   childName = the child's name as a varchar
   childAge = the child's age as an integer
   naughty = boolean of whether the child is naughty or not

2. **CurrentToys** table: This table keeps track of the current toys being produced in the workshop
   contains a toyID, toyName, toyColor, workTime, and childID

   toyID = primary key identifying a toy as an auto incremented integer
   toyName = the name of the toy as a varchar
   toyColor = the color of the toy as a varchar
   workTime = how long the toy will take to be produced in hours, double/float
   childID = foreign key relating to the NaughtyNice table that shows what child the toy is being made for
   elvenID = foreign key relating to the ElvenWorkers table that shows what elf is scheduled to make the toy

3. **ToyHistory** table: This table keeps track of every toy produced in the workshop
   contains historyID, toyName, toyColor, workTime, childID, yearProduced, delivered

   historyID = primary key identifying a toy that has been created in the past, stored as autoincremented integer
   toyName = the name of the toy as a varchar
   toyColor = the color of the toy as a varchar
   workTime = how long the toy took to be produced in hours, double/float
   childID = foreign key relating to the NaughtyNice table that shows what child the toy was made for
   elvenID = foreign key relating to the ElvenWorkers table that shows what elf created the toy
   yearProduced = integer showing what year the toy was made
   delivered = bool showing whether the toy was delivered successfully or not

4. **ElvenWorkers** table: This table stores information about the elves working in the workshop
   contains elvenID, elvenName, elvenAge, positionName, shiftNumber, numProducedToys

   elvenID = primary key identifying an elf, autoincremented integer
   elvenName = name of the elf, varchar
   elvenAge = age of the elf, integer
   positionName = the name of the position the elf holds in the workshop, varchar
   shiftNumber = shows what shift the elf works in the workshop, 3 shifts of 8 hours each. integer of the following numbers (1, 2, 3)
   numProducedToys = number of toys produced by this elf, integer
   (possible addition of keeping track of the name of each toy produced by the elf as a sort of skillset)

User Stories
(managers in this case would be a head elf, Santa, or Mrs. Clause)

1. As a user, I should be able to view the naughty or nice list.
2. As a manager, I should be able to add a child to the naughty or nice list.
3. As a manager, I should be able to change the status of naughty or nice of a child.
4. As a user, I should be able to view the current toys being made in the workshop.
5. As a manager, I should be able to add or remove a toy from current production.
6. As a user, I should be able to view the history of all toys made in the workshop.
7. As a user, I should be able to view all the toys made for a child.
8. As a user, I should be able to view all the toys made by an elven worker.
9. As a user, I should be able to complete production of a toy and move it to the history.

10. As a manager, I should be able to change the delivery status of a toy in the history.
11. As a user, I should be able to look at information about an elven worker.
12. As a manager, I should be able to add or remove an elven worker from the list of workers.
13. As a manager, I should be able to have a comprehensive view of the current state of the workshop that shows pertinent information from the naughty or nice list, the current toys being produced, and the elven workers assigned.