Group 119
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Project Step 5 Draft Version:

URL: http://flip3.engr.oregonstate.edu:4567/

-Are the queries syntactically correct? Disregard the part where input will be substituted as shown in the sample_data_manipulation_queries.sql

Excellent syntax, looks like you are all setup.

-Are there queries providing all functionalities as required by the CS340 Project Guide ? What query is missing ? What needs to be fixed?

You have all of your INSERT SELECT DELETE and UPDATE queries.

-Do the queries cover the relationships as required by the CS340 Project Guide?

You have your many to many relationships covered with players and items and the requisite number of other relationships

DDQ:

-Is the SQL file syntactically correct? This can be easily verified by importing/copy-pasting it in phpmyadmin. (Do not forget to take backup of your own database before you do this!)

Syntax seems mostly correct if not 100%

I got an error when importing the database triggered near your Insert for Players

Cannot add or update a child row: a foreign key constraint fails (`mydatabase`.`Players`, CONSTRAINT `Players_ibfk_2` FOREIGN KEY (`currentLocationID`) REFERENCES `Locations` (`locationID`))

I looked at the database and it prevented the addition of your example values because it didn't like the syntax. If you haven't gotten the error when importing to a blank database I wouldn't worry about it, I'm not great with PHP and it could just be me.

-Are the data types appropriate considering the description of the attribute in the database outline?

All the data types make sense. I didn't know you could DEFAULT to a certain number that seems very useful.

-Are the foreign keys correctly defined when compared to the Schema?

All your references seem to be in order, nice work.

-Are relationship tables present when compared to the ERD/Schema?

You have your PlayerItems table added so it looks like they are all present.

- Data Manipulation Queries:
    - Are the queries syntactically correct? Disregard the part where input will be substituted as shown in the sample_data_manipulation_queries.sql
        - Syntax looks good on inspection.
    - Are there queries providing all functionalities as required by the CS340 Project Guide ? What query is missing ? What needs to be fixed?
        - I believe so, there are a bunch of Select queries, 4 updates, two Deletes and Inserts for each table.
    - Do the queries cover the relationships as required by the CS340 Project Guide?
        - Yes, the relationships between items their respective players seems to be covered.
- DDQ file:

    - Is the SQL file syntactically correct? This can be easily verified by importing/copy-pasting it in phpmyadmin. (Do not forget to take backup of your own database before you do this!)
        - phpmyadmin is being weird for me cause my VPN stopped working for some reason .. But everything looks okay from visual inspection.
    - Are the data types appropriate considering the description of the attribute in the database outline?
        - I think that they are appropriate for this implementation .
    - Are the foreign keys correctly defined when compared to the Schema?
        - Yes I believe so, PlayersItems has the two Foreign keys it needs, playerID and itemID, and the other relationships seem like they have the keys set up properly.
    - Are relationship tables present when compared to the ERD/Schema?
        - Yes the tables are present, PlayersItems connects Players and Items.

- Are the queries syntactically correct? Disregard the part where input will be substituted as shown in the sample_data_manipulation_queries.sql
    - Yes
- Are there queries providing all functionalities as required by the CS340 Project Guide ? What query is missing? What needs to be fixed?
    - Yes, all of the CRUD queries are present in the file.
- Do the queries cover the relationships as required by the CS340 Project Guide?
    - Yes, the different relationships (such as the M:M) can be seen in the SQL file.

DDQ:

- Is the SQL file syntactically correct? This can be easily verified by importing/copy-pasting it in phpmyadmin. (Do not forget to take backup of your own database before you do this!)
    - Yes, looks good and was able to be imported into phpmyadmin.
- Are the data types appropriate considering the description of the attribute in the database outline?
    - Yes, everything looks appropriate.
- Are the foreign keys correctly defined when compared to the Schema?
    - Yes
- Are relationship tables present when compared to the ERD/Schema?
    - Yes, due to the presence of the PlayersItems relationship table.

Are the queries syntactically correct?

Yes

Are there queries providing all functionalities as required by the CS340 Project Guide? What query is missing ? What needs to be fixed?

Yes - It all seems to be correct

Do the queries cover the relationships as required by the CS340 Project Guide?

Yes, relationships are defined

DDQ:

Is the SQL file syntactically correct?

Yes, imported fine for me

Are the data types appropriate considering the description of the attribute in the database outline?

Look okay

Are the foreign keys correctly defined when compared to the Schema?

Yes

Are relationship tables present when compared to the ERD/Schema?

Yes, only with the PlayerItems

Project Step 4 Draft Version: DML and DDL Queries

URL: http://web.engr.oregonstate.edu/~andemar3/index.html

Changes made:

- Fixed index.html links
- Created datamanpulation.sql and datadefinition.sql

Project Step 3: Design HTML Interface

URL: http://web.engr.oregonstate.edu/~andemar3/index.html

Changes made based on the following feedback:

- Added buttons for Search and Play Game to the Player Manager and Content Creator pages
- Added header and navigation bar to Search and Play Game pages
- Added text indicating that new players start with default stats
- Removed numberOfQuests from Locations as it was not needed and would have to be regularly updated
- Removed itemRewarded from Quests as Items already have questRewardedFrom as a foreign key to link them to Quests
- Added menu and tooltips to Edit button to make its use clearer.

(1) Does the UI utilize a SELECT for every table in the schema? In other words, data from each table in the schema should be displayed on the UI. Note: it is generally not acceptable for just a single query to join all tables and displays them.

- Yes, there is a page to filter (utilizing SELECT) by quest, item, player and location. The remaining tables are intersection tables.

(2) Does at least one SELECT utilize a search/filter with a dynamically populated list of properties?

- Yes, the page mentioned above not only utilizes SELECT but also WHERE and the results could be dynamically populated based on the condition provided.

(3) Does the UI implement an INSERT for every table in the schema? In other words, there should be UI input fields that correspond to each table and attribute in that table.

- There is a Create Player page and a page to Create a Location, Quest and Item. However, the Create Player page only offers an input field for playerName, there are not input fields for each attribute in the player table. Likewise, the Location INSERT provides an input field for locationName but not numberOfQuests.

(4) Does each INSERT also add the corresponding FK attributes, including at least one M:M relationship? In other words if there is a M:M relationship between Orders and Products, INSERTing a new Order (e.g. orderID, customerID, date, total), should also INSERT row(s) in the intersection table, e.g. OrderDetails (orderID, productID, qty, price and line_total).

- Create an Item inserts FK questRewardedFrom but aside from that I do not see INSERTS adding corresponding FK attributes. For example, Create a Quest offers an

input field for Location of Quest but I am uncertain whether that updates the FK questLocationID attribute or the questLocation attribute. In the same table the FK itemRewarded appears to be missing. The M:M FK INSERTS should exist given proper implementation on the backend with the intersection tables.

(5) Is there at least one DELETE and does at least one DELETE remove things from a M:M relationship? In other words, if an order is deleted from the Orders table, it should also delete the corresponding rows from the OrderDetails table, BUT it should not delete any Products or Customers.

- Yes, there is a DELETE for a Player entity and that should remove things from the corresponding M:M relationship with Items.

(6) Is there at least one UPDATE for any one entity? In other words, in the case of Products, can productName, listPrice, qtyOnHand, e.g. be updated for a single ProductID record?

- There is an Edit button on the EDIT.html, however, this page does not appear to be implemented properly. The columns are Player, Location and Items. The instructions indicate the user should be able to update at least one entity and its attributes. This page could be changed to update Items and have fields for changing ItemName, statBoosted, statBoostAmount and questRewardedFrom for a single record.

(7) Is at least one relationship NULLable? In other words, there should be at least one optional relationship, e.g. having an Employee might be optional for any Order. Thus it should be feasible to edit an Order and change the value of Employee to be empty.

- As the edit page currently exists a relationship between two entities should be NULLable, however, as stated above I believe the edit page needs to be rewritten. If the page was changed to update Items, the questRewardedFrom could have an option to be set to NULL (perhaps an Item is created but the Item won't be released until a quest in an upcoming dlc is released).

(8) Do you have any other suggestions for the team to help with their HTML UI?

- The links at the top of the Edit page do not navigate anywhere. The search page *may need to implement a visible button for submitting search criteria. I'm a bit confused by the layout to be honest. The index page for instance takes you to Player Manager and from there you can toggle between Player Manager and Content Creator but you cannot return to index without using the browswer's back button thus you are cut off from Search and Play Game. The same issue exists when navigating to Search and to Play Game.

- Does the UI utilize a SELECT for every table in the schema? In other words, data from each table in the schema should be displayed on the UI. Note: it is generally not acceptable for just a single query to join all tables and displays them.

Yes. There is a search page with tables to filter (search) Quest/Items and Player/Location in each table.

- Does at least one SELECT utilize a search/filter with a dynamically populated list of properties?

Yes. Both tables in the search page have a text input to filter through the table, which is assumed to be dynamically populated according to values in each table.

- Does the UI implement an INSERT for every table in the schema? In other words, there should be UI input fields that correspond to each table and attribute in that table.

Yes. There is a Player Manager page to add players, and a Content Creator page to add Locations, Quests, and Items.

- Does each INSERT also add the corresponding FK attributes, including at least one M:M relationship? In other words if there is a M:M relationship between Orders and Products, INSERTing a new Order (e.g. orderID, customerID, date, total), should also INSERT row(s) in the intersection table, e.g. OrderDetails (orderID, productID, qty, price and line_total).

Yes. The "Create a Player" does not need to immediately implement the "currentQuest" foreign key, as that appears to be intended to be inserted/deleted as the player starts and finishes quests. The "Create a Quest" has fields for "questLocation" foreign key to the Location table. The "Create an Item" has a field for the "questRewarded" foreign key to the Quests table.

This key also appears to correspond to the Quests table's "itemRewarded" key. However this appears redundant as they are both unique only one FK/PK pair should be needed to relate two tables. If I'm understanding it correctly, Items and Quests are uniquely paired with a 1:1 relationship. So I should only need one of these foreign keys.

- Is there at least one DELETE and does at least one DELETE remove things from a M:M relationship? In other words, if an order is deleted from the Orders table, it should also delete the corresponding rows from the OrderDetails table, BUT it should not delete any Products or Customers.

Yes. There is a "Delete a Player" form, which would assumedly DELETE a row from the Players table, which has an M:M relationship with Items.

- Is there at least one UPDATE for any one entity? In other words, in the case of Products, can productName, listPrice, qtyOnHand, e.g. be updated for a single ProductID record?

There appears to be no explicit UPDATE function. However, I would assume that the "Play Game" page, which has some clickable text, is where the RPG game would be played, which would use UPDATE to allow players to move, start/complete quests, and receive items, which would require updating the Players table.

- Is at least one relationship NULLable? In other words, there should be at least one optional relationship, e.g. having an Employee might be optional for any Order. Thus it should be feasible to edit an Order and change the value of Employee to be empty.

Yes. Players have optional relationships with Items and Quests. A player can have no (i.e. NULL) quest.

- Do you have any other suggestions for the team to help with their HTML UI?

Nothing critical. But for the "Play Game" page, be careful with how to display the Players table with regards to Items. Each player can have any combination of items from zero to all, and it would be difficult to look through if each item took its own column. Such as if, assuming items are displayed one per column, a player has the first column item, last column item and an item somewhere in the middle, you would have to scroll through everything to see them all and you might miss the middle item.

- *Does the UI utilize a SELECT for every table in the schema?*In other words, data from each table in the schema should be displayed on the UI. Note: it is generally not acceptable for just a single query to join all tables and displays them.

Yes this is available through the search page.

- *Does at least one SELECT utilize a search/filter with a dynamically populated list of properties?*

Yes the search page is dynamic and allows the user to search for players, items, quests or locations.

- *Does the UI implement an INSERT for every table in the schema?*In other words, there should be UI input fields that correspond to each table and attribute in that table.

Yes in the player manager and content manager pages it is possible to insert into each of the four entity tables.

- *Does each INSERT also add the corresponding FK attributes, including at least one M:M relationship?*In other words if there is a M:M relationship between Orders and Products, INSERTing a new Order (e.g. orderID, customerID, date, total), should also INSERT row(s) in the intersection table, e.g. OrderDetails (orderID, productID, qty, price and line_total).

It depends on how the game page is intended to work. If the game page allows for inserts into the join tables player_location and player_quests etc. this is accomplished. Without the play page the inserts to location,quest player etc. would not be updating foreign keys.

- *Is there at least one DELETE and does at least one DELETE remove things from a M:M relationship?*In other words, if an order is deleted from the Orders table, it should also delete the corresponding rows from the OrderDetails table, BUT it should not delete any Products or Customers.

Yes. You are able to delete a player. If this is done then it would also delete rows in the corresponding intersection tables of player items and player quests. These intersection tables are what is being used to implement the M:M relationship between Players and Items and Quests respectively.

- *Is there at least one UPDATE for any one entity?*In other words, in the case of Products, can productName, listPrice, qtyOnHand, e.g. be updated for a single ProductID record?

I don't see an update option clearly on the html. It is possible that this available on the Play Game page but without more information I cant what the "Edit" button is used to update.

- *Is at least one relationship NULLable?*In other words, there should be at least one optional relationship, e.g. having an Employee might be optional for any Order. Thus it should be feasible to edit an Order and change the value of Employee to be empty.

Yes there are some NULLable relationships such as that between Items and Quests. There may be items involved in a quest but not necessarily and a item may be linked to a quest or it might not be.

- *Do you have any other suggestions for the team to help with their HTML UI?*

Overall good job. In particular I liked the dynamic search page that you implemented. I think one thing that could improve this design would be to make it more clear what the play game page in going to do and how the edit button is going to impact it. Is it going to edit the entire page or just part of it?

- *Does the UI utilize a SELECT for every table in the schema?* In other words, data from each table in the schema should be displayed on the UI. Note: it is generally not acceptable for just a single query to join all tables and displays them.
    - Yes the UI utilizes a Select for every table in the schema
- *Does at least one SELECT utilize a search/filter with a dynamically populated list of properties?*
    - *Yes the search page utilizes a search/filter*
- *Does the UI implement an INSERT for every table in the schema?* In other words, there should be UI input fields that correspond to each table and attribute in that table.
    - Yes the Content Creator and Player Manager implements an insert
- *Does each INSERT also add the corresponding FK attributes, including at least one M:M relationship?* In other words if there is a M:M relationship between Orders and Products, INSERTing a new Order (e.g. orderID, customerID, date, total), should also INSERT row(s) in the intersection table, e.g. OrderDetails (orderID, productID, qty, price and line_total).
    - The Create a Quest has the location of the quest setup as an FK
- *Is there at least one DELETE and does at least one DELETE remove things from a M:M relationship?* In other words, if an order is deleted from the Orders table, it should also delete the corresponding rows from the OrderDetails table, BUT it should not delete any Products or Customers.
    - Yes the Player Manager page has a Delete player functionality but it is stated to delete M:M relationships
- *Is there at least one UPDATE for any one entity?* In other words, in the case of Products, can productName, listPrice, qtyOnHand, e.g. be updated for a single ProductID record?
    - The Play Game page has a edit button but has no functionality so there doesnt seem to be any update for an entitty
- *Is at least one relationship NULLable?* In other words, there should be at least one optional relationship, e.g. having an Employee might be optional for any Order. Thus it should be feasible to edit an Order and change the value of Employee to be empty.
    - Yes when searching for a charater the quest and items seem to be NULLable
- *Do you have any other suggestions for the team to help with their HTML UI?*
    - *Have your edit button be more cler in its functionality but overall looks like a good project*

Project Step 2: ERD & Schema

a) Fixes

Based on grader feedback:

- Labeled foreign key attributes as such.
- Corrected “one to many” and “one to one” labeling
- Removed numberOfCurrentPlayers from Locations as it would need to be updated frequently
- Updated outline to reflect that we are implementing the M:M relationship between Players and Items and that the relationship between Players and Quests is now 1:M. Diagrams still show the originally planned two M:M relationships.

Does the overview describe what problem is to be solved by a website with DB back end?

Yes, keeping track of various aspects of a multiplayer RPG.

Does the overview list specific facts?

Yes, that the game server will allow for 100 players, who can each finish one quest, which will reward the player with a unique item, at a time. There are also various statistics that will have to be tracked for each player.

Are at least four entities described and does each one represent a single idea to be stored as a list?

Yes - players, items, quests, and locations.

Does the outline of entity details describe the purpose of each, list attribute datatypes and constraints and describe relationships between entities? Yes, each entity has those details but not all player stats seem to be required which might be something to change or explain.

Does the outline clearly indicate which entities (tables) will be implemented and which team member is primarily assigned to the associated page(s)?

Each member is assigned entities

Are 1:M relationships correctly formulated? Is there at least one M:M relationship?

Yes and yes.

Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?

Yes

Does the overview describe what problem is to be solved by a website with DB back end?

Yes, the draft clearly the game out line, structure entities and their relationships. The website is a RPG game in which player can have one quest with specific location, and the quest will reward the player with a unique item.

Does the overview list specific facts?

Yes, it does list specific facts about the projects clearly and state the limitations and an high level overview of relations.

Are at least four entities described and does each one represent a single idea to be stored as a list?

Yes, there are more than 4 entities with single ideas.

Does the outline of entity details describe the purpose of each, list attribute datatypes and constraints and describe relationships between entities? Does the outline clearly indicate which entities (tables) will be implemented and which team member is primarily assigned to the associated page(s)?

Yes, the entity outline, description and datatype are clearly stated and the team member in charge of each is identified.

Are 1:M relationships correctly formulated? Is there at least one M:M relationship?

Yes the ERD identifies Player-locations Quests-locations as 1:M , items-player and quests player as M:M.

Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?

Yes. The entities are plural and attributes are singular (ERD shows Player as singular which can be fixed easily) also the attributes are using camelCase practice which is consistent

It looks a well-thought , and organized plan with clear objectives and structure. I am excited to see it implemented as a webapp.Good luck!

Player changed to Players in ERD

- Does the overview describe what problem is to be solved by a website with DB back end?
    - Yes, the database records the details of an online multiplayer RPG game.
- Does the overview list specific facts?

    - Yes, the overview includes detailed info for the various stats the database will track.
- Are at least four entities described and does each one represent a single idea to be stored as a list?
    - Yes, there are more than 4 entities described.
- Does the outline of entity details describe the purpose of each, list attribute datatypes and constraints and describe relationships between entities? Does the outline clearly indicate which entities (tables) will be implemented and which team member is primarily assigned to the associated page(s)?
    - Yes, the entity outlines and their attributes' descriptions and datatypes are all clear.
- Are 1:M relationships correctly formulated? Is there at least one M:M relationship?
    - Yes, the 1:M relationships are correctly formulated and there is at least one M:M relationship.
- Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?
    - Yes, the names entities and attributes are consistent and follow the same capitalization.

No changes needed based on this feedback

- Does the overview describe what problem is to be solved by a website with DB back end?
    - Yep - the database back end will record and track the status of the game server and its players, in addition to their quests and items.
- Does the overview list specific facts?
    - Yes, the overview lists what the database is intended to do and how.
- Are at least four entities described and does each one represent a single idea to be stored a s a list?
    - Yes. there are more than four.
- Does the outline of entity details describe the purpose of each, list attribute datatypes and constraints and describe relationships between entities? Does the outline clearly indicate which entities (tables) will be implemented and which team member is primarily assigned to the associated page(s)?
    - Yes, the outline of entities describes each entity and their data types.
- Are 1:M relationships correctly formulated? Is there at least one M:M relationship?
    - Yes
    - Yes
- Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?

    - Yes

No changes needed based on this feedback

- Does the overview describe what problem is to be solved by a website with DB back end?
    - The current Overview states what the database will do but not what problem it is solving for the customer.
- Does the overview list specific facts?
    - Yes, it specifically mentions that it can account for no more than 100 players, that a player can only be in one location at a time, and that a Quest can only have one Location.
- Are at least four entities described and does each one represent a single idea to be stored as a list?
    - There are 5 entities listed in the sheet. Can the current quest be null? Player health and Player magic can be null? Are they auto set to a certain number? The Relationships is difficult to read. It would be easier to ingest Player 1:M Quest than the paragraph. Which of the player stats is the statRequiredToCompete referring too? Should PlayersItems be listed as an entity or as a part of your schema to deal with the M:M relationship?
- Does the outline of entity details describe the purpose of each, list attribute datatypes and constraints and describe relationships between entities? Does the outline clearly indicate which entities (tables) will be implemented and which team member is primarily assigned to the associated page(s)?
    - It lists who will be coding which tables. The purpose is listed and the restraints are some what listed; see above note.
    - It does not go into all of the relationships between all of the entities. What about Location to Items? PlayersItems is listed as an Entity where is it's relationship to everything else? (PlayersItems a player can never have zero items "not null"?)
- Are 1:M relationships correctly formulated? Is there at least one M:M relationship?
    - How are you going to implement tracking a player quests when the quest relationship to player is deleted upon completion?
    - You say in the overview that each Quest has a specific Location. Then, later, that a location will have multiple Quests (it should be one or the other).
    - in part C you list the relationship from Items to Player (should be players) as "an Item must have 1 or more Players", should this not be zero to many? When the game first releases will players be auto given items?
    - Players to Quests is currently that a Player can have zero or many Quests. In the Overview you state that a Player has a Boolean relationship to Quests. They are either in a Quests; uncompleted. Or, in no quests because once they finish the Quests is deleted.
    - Players to Locations. Due to a Player not having to always be in a Quest a Player would not always have a location.

    - All Quests must have a location per your previous statements but in part C you show a zero to many relationship to quests. What locations exist without a Quest? It should be one many not zero many.
    - Players M:M Items
    - Players M:1 Quests
    - Quests M:1 Locations..? or Quests 1:M Locations
    - Quests 1:1 Items
    - Players M:1 Locations
- Is there consistency in a) naming between overview and entity/attributes b) entities plural, attributes singular c) use of capitalization for naming?
    - My understanding is that all entities should be plural; which has not been implemented. i.e.- Quest instead of Quests. Player instead of Players.

➢ Updated overview to clarify relationships between entities and better explain edge cases
➢ Changed capitalization to make it clearer what was referring to the entities and what is referring to entries.
➢ Reworked relationships to be clearer and easier to read.

b) Project Outline and Database Outline - Updated Version:

We are implementing the M:M relationship between Players and Items. Players and Quests will be a 1:M relationship where each player can only have one quest at a time and the quest is deleted from the player upon completion.

Martha: Players, Items, PlayersItems
Manju: Locations, Quests

World of Databases

a) Overview

The website will be based on a simple multiplayer RPG game. The website database will keep track of the game server which allows for 100 Players at a time. The database will keep track of all stats of Players and which quest a Player is doing. players will have stats, current location, current quest and items. Player stats and location will be set to a default upon creation and will be updated based on gameplay.

Players will have one quest at a time to finish and each quest can reward the player with a unique item. Each quest will have a specific location and reward item. Quests are completed by comparing the quest's required stat to the player's stat. If the player's stat is equal to or greater than the quest's stat, the quest is completed and if there is a reward item, it is given to the player. Otherwise the quest is failed and

removed from the player to prevent players from getting stuck with uncompletable quests. Players can repeat quests and when a quest is completed, it is removed from the player.

There will be various items in the game that can modify the values of player stats. Multiple players can do the same quest as well as owning the same items. Players can only be in one location at a time but a location can have multiple players. Each location can have multiple quests but each quest can only have one location.

b) Database Outline, in Words

Entities

Players: represents the user's player character

- playerID: int, auto_increment, unique, not NULL, primary key
- playerName: varchar, unique, not NULL
- numberOfQuestsCompleted: int
- currentQuest: int, foreign key
- currentLocationID: int, not NULL, foreign key
- numberOfItemsInInventory: int
- playerHealth: int
- playerMagic: int
- strengthStat: int
- intelligenceStat: int
- defenceStat: int
- Relationships:
  Players and Items: M:M, Players can have zero or many items and items can be owned by zero or many players
  Players and Quests: 1:M, Players can have zero or one quest at a time and quests can be taken by zero or many players
  Players and Locations: 1:M, A player must be in one and only one location but a location can have multiple players

Items: stat boosting rewards given from Quests

- itemID: int, auto_increment, unique, not NULL, primary key
- itemName: varchar, unique, not NULL
- statBoosted: varchar
- statBoostAmount: int

- questRewardedFrom: int, unique, not NULL, foreign key
- Relationships:
  Items and Players: M:M, Players can have zero or many items and items can be owned by zero or many players
  Items and Quests: 1:1, Items must be rewarded by a quest, but a quest can have zero or one item rewards

Quests: events which the Player can complete

- questID: int, auto_increment, unique, not NULL, primary key
- questName: varchar, unique, not NULL
- questLocation: int, not NULL, foreign key
- statRequired: varchar, not NULL
- statMinimumToComplete: int, not NULL
- Relationships:
  Quests and Players: 1:M, Players can have zero or one quest at a time and quests can be taken by zero or many players
  Quests and Items: 1:1, Items must be rewarded by a quest, but a quest can have zero or one item rewards
  Quests and Locations: 1:M, A quest must have a location and locations can have zero or many quests

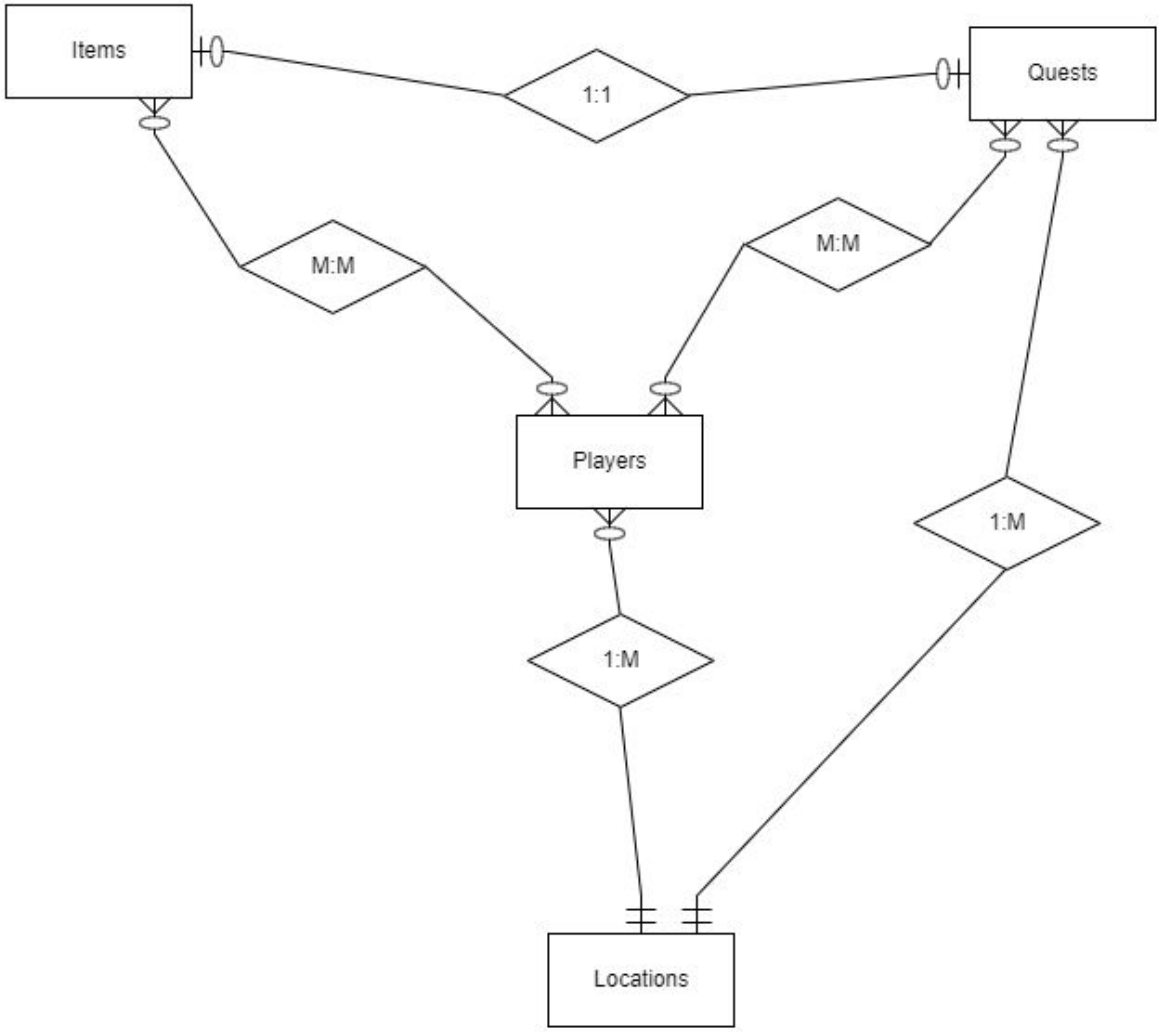
Locations: places the Player can go to

- locationID: int, auto_increment, unique, not NULL, primary key
- locationName: varchar, unique, not NULL
- Relationships:
  Locations and Players: 1:M, A player must be in one and only one location but a location can have multiple players
  Locations and Quests: 1:M, A quest must have a location and locations can have zero or many quests

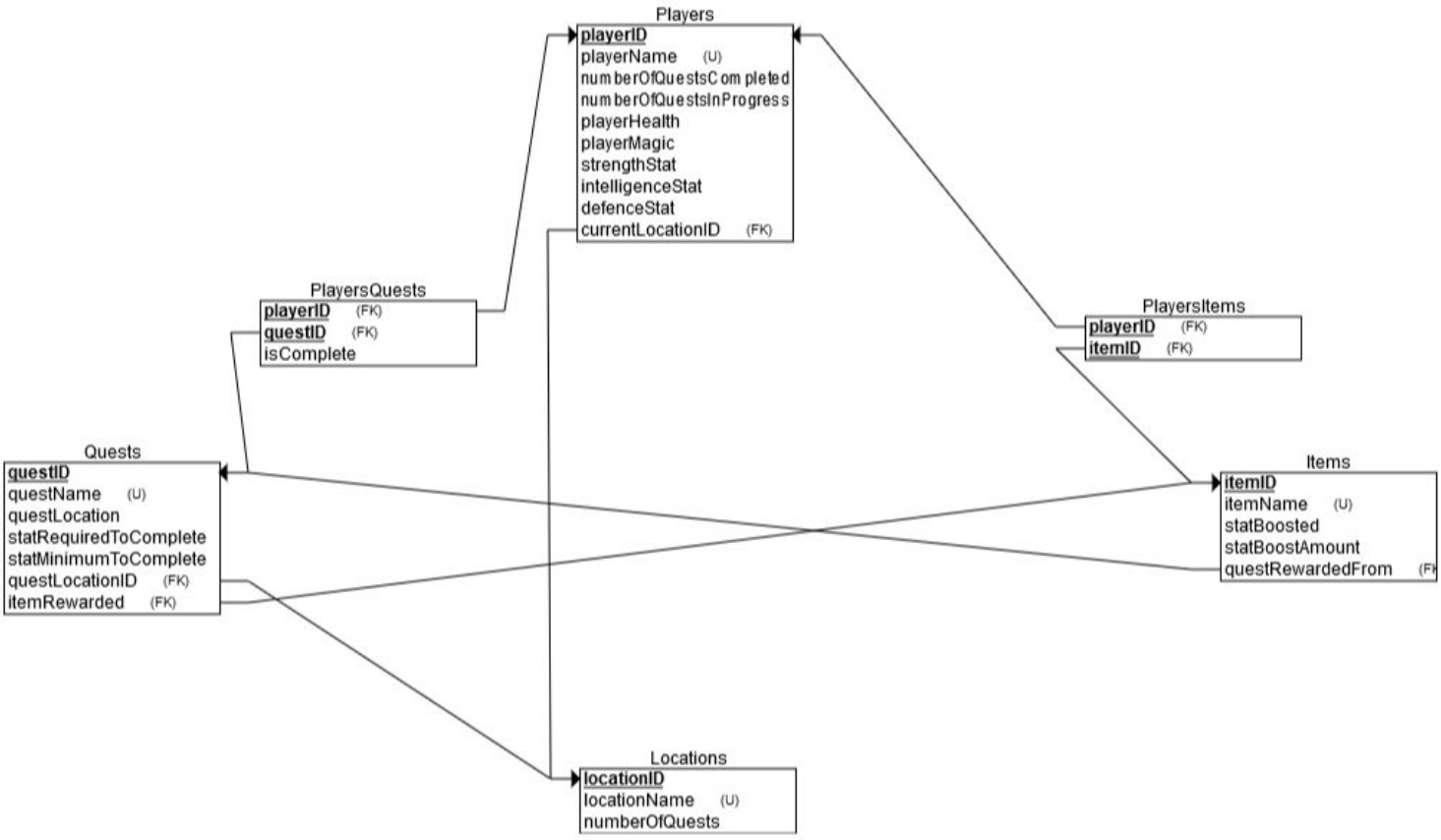
PlayersItems: tracks what Items each Player owns

- playerID: int, not NULL, foreign key
- itemID: int, not NULL, foreign key

c) Entity-Relationship Diagram:



d) Schema:


Players
playerID
playerName (U)
numberOfQuestsCompleted
numberOfQuestsInProgress
playerHealth
playerMagic
strengthStat
intelligenceStat
defenceStat
currentLocationID (FK)
PlayersQuests
playerID (FK)
questID (FK)
isComplete
PlayersItems
playerID (FK)
itemID (FK)
Quests
questID
questName (U)
questLocation
statRequiredToComplete
statMinimumToComplete
questLocationID (FK)
itemRewarded (FK)
Items
itemID
itemName (U)
statBoosted
statBoostAmount
questRewardedFrom
Locations
locationID
locationName (U)
numberOfQuests

CS 340 TEAM EVALUATION FORM

JANUARY 25, 2021

RATE YOUR TEAMS PERFORMANCE USING THE SCALE BELOW.

1 = Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree

GROUP NUMBER	119	
NAME OF GROUP TEAM MEMBERS:	Manju Kuah, Martha Anderson	
SCALE AND COMMENTS	RATING	ADDITIONAL COMMENTS
HOW PREPARED WAS YOUR TEAM? Research, reading, and assignment complete	4	
HOW RESPONSIVE & COMMUNICATIVE WERE YOU BOTH AS A TEAM? Responded to requests and assignment modifications needed. Initiated and responded appropriately via email, Slack etc.	4	
DID BOTH GROUP MEMBERS PARTICIPATE EQUALLY Contributed best academic ability	4	
DID YOU BOTH FOLLOW THE INITIAL TEAM CONTRACT? Were both team members both positive and productive?	4	

Are there any suggestions for improvement for your team and what are your goals moving forward?
(Better communication, follow the contract better, modify the initial team contract, more contribution, etc?)?

For coding and harder parts of the project we want to make sure we do not meet last minute before the due date. We should discuss our progress with the project at least a week prior.