Code Review 12/2/2022

Cheese generatePosition():

- Poorly structured code in Cheese Class, generatePosition() method
- maxX and maxY were 25 * # of cells, and were later divided by 25 to set position to a cell, so we simplified it by replacing them with maxXCells and maxYCells which are just the # of cells
- Commit: "refactor cheese generatePos()"

Map Constructor:

- Poorly structured code in map class
- A lot of the current global are initalized when made, but if we move it to constructor then it would make more sense code reusability for if we wanted to used a different map.
- Moved most initializations to constructor & also created a generateWalls() method to initialize walls
- Commit: "refactor Map Constructor"

Map Arrays:

- Poorly structured code in Map
- Was getting a lot of issues with updating a 2D array and setting a position to a NULL, since java has a lot of rules about deleting memory or setting an object to NULL
- Changed two 2D arrays (items & characters) into ArrayLists where I can easily loop through the list to check for a position and can easily remove an item from the ArrayList
- Commits: "fixed multiple pickup issues" & "removed unnecessary data structures"
 - Nov 22nd

Map & other minor classes:

- Lack of documentation
- Wrote a lot of code without writing any documentation
- Added documentation so others could understand what the classes/methods did
- Commits: "added Java Docs"

Map DrawEntities:

- methods that are too long and that could benefit from being refactored
- Before drawEntites class was used to set the images
- Images are now set in their respective classes' constructors
- Commit: "added traps & edited item spawning"

Cheese Constructor

- Unused/Useless variables
- Remove unnecessary x and y parameters from the cheese constructor
- X and Y parameters were used to use the super method but then the x and y positions were immediately overridden by generateCheese, so it didn't serve any purpose besides being tmp values.

- Commit: "refactored cheese parameters to remove X and Y that would be immediately overridden"

Map Unused Vars:

- Unused/Useless variables in Map class
- Removed Position start, since it wasn't being used
- Adjusted code in other classes so that CELLWIDITH was being used
 - Used in Entity & Cheese Class
 - Draw method to use CELLWIDTH variable rather than 25 [done]
- Commit: "refactor unused vars in map"

Map Variable Naming:

- Bad/Confusing variables name in map class
- Had very generic variable names that didn't mean anything and could've easily been mixed up with another variable
- GameTimer tt -> GameTimer gameTime
- long tickTime1, tickTime2 -> long tickTime, catTickTime
- Commit: "refactored variable names to better explain their value/meaning"

Map endX and endY variable scope

- Temporary Field as the values were only needed in map's constructor
- Instead moved the variables into the scope of the constructor so that once the constructor was finished and the values were no longer needed, they would no longer linger in the class
- Commit: "refactor temporary fields endX and endY in map"