Team Gwuacamohli
Clara Mohri, Wenting Li, Jessica Wu

APCS1 pd08
2018-01-02

Final Project Proposal
Gwuacamohli's Mathematical Utility

1. Graphing functionality:
    a. User is able to graph a function that is inputted
        i. Input will hopefully be a string
        If this is unattainable, the user will be asked for a, b, c, d, etc. values in the function (as in ax^n + bx^n-1…)
            1. **Big part:** parsing string to turn into mathematical equation
    b. User can also determine domain and range of viewing window for graph
    c. The graph will be made using the concept of a matrix as a graph. • symbols will indicate a point on the graph. The graph will be made using a for-loop that goes through a mathematical expression for all the x values contained in the domain
    d. User can ask for zeroes, y-intercepts, average slope on viewing window, and other mathematical interests
    e. User can ask for table of vals for x and y
    f. Graphing more than one equation
        i. Maybe the user can ask for intersection of graphs
2. Simple math:
    a. If user inputs for example "3+3", then 6 will be returned
    b. + , - , * , / , ^
    c. Potentially, we would like to find a way to implement PEMDAS for more complicated math
3. Spreadsheet / Table
    a. User determines amount of cols and rows
    b. User can have statistics for rows and cols