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Project 2 Proposal: Investment Help

**Introduction**

I would like to write a program that helps people invest. I am very interested in the stock market and ideally I would like to work with financial data collection. I would first ask for their income, followed by a few other questions (marital status, head of the household, and whether they are filing together) to determine which tax bracket they fit into. Their approximate after tax income will be calculated for the 2016 fiscal year. After their disposable income is determined, they will be shown the percentages of blue chip stocks, risky stocks, and bonds to purchase. Originally, I wanted to import a file with all of the stocks and projections on it, but it cost a fair amount of money (so I may add that capability if I decide to buy the file).

**Description**

The program will act at first like a tax program, but it will then allow the user to see their various investment options. All exceptions should be handled.

1. Ask for the users income
   1. Any bad input will be garbage collected and the user will be notified
2. Ask for the users marital status
   1. Capitalization will not matter for any of the inputs
3. If the user is married, it will ask if they are filing separately
   1. This will be done using if else statements
4. If the user said that they are filing together, then the use will be asked for their spouse’s income
   1. This will be done using nested if else statements
5. If they are married, it will ask if the user is the head of the household
   1. This will be done using nested if else statements
6. Depending on the results above, their income will be multiplied by the 2016 tax rates
   1. This will be done using if else if statements
   2. I may change rates into constants that change with each year
7. Once the approximate after tax income is determined, a deduction class will be used to figure out possible deductions
   1. I am not an accountant, so I will try my best to find all of the possible deductions
8. Based off of their disposable income, the various percentages that should be spent on each option: blue chip, risky, and bonds will be displayed.
   1. I will try to create a chart class that will use JOptionPane to display a bar chart of the expenses that should be spent

**Extra Credit**

As of right now, I do not know of any ways in which I can earn extra credit, but I am open to suggestions.

**Topics and Libraries Used**

1. Methods- I will use a value returning method to get the after tax income as well as in the deductions class and possibly chart class
2. Classes- I will have a deductions class, and a chart class if I able to create a bar chart
3. Files- I will use files if I decide to purchase the subscription or if I am able to find a better (free) file.