

## 04.06 Module Four Project

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### Members Only

**Insert your pseudocode here:**

#### Input-

- Ask user for their age, their GPA, and if they know a programming language.

#### Output

- Make a table that shows the requirements for each category Age  $\geq 15$  GPA  $\geq 3.0$  Know a programming language
- Show if the user met each category's requirement and show what they entered for the category
- Final message to say sorry or welcome the user

#### Background

- Check if the user passed all the requirements and set pass to yes. Also preset pass to No
- Set each individual requirement to Yes, Then test if each individual requirement is not completed then set individual requirement to No.
- Check if the final message if it should be saying sorry or welcome based on a yes or no passing status.

## Step Three: Coding

**Example of expected output:** The output for your program should resemble the following screen shot. Your specific results will vary depending on the choices you make and the input provided.

**Insert a copy of your code from the IDLE here:**

```
#Jack Sweeney 8/17/18
```

```
#Program is meant to see if your eligible to join Programmers of America.
```

```
def main():
```

```
age = int(input("How old are you?"))

gpa = float(input("What is your current GPA? (in .0 format)"))

programKnow = input("Do u know a programing language? (y or n)")


passStatus = "No"

if( age >= 15 and gpa >= 3.0 and programKnow == "y" ):

    passStatus = "Yes"


agePass = "Yes"

if( age < 15 ):

    agePass = "No"


gpaPass = "Yes"

if( gpa < 3.0 ):

    gpaPass = "No"


programPass = "Yes"

if( programKnow == "n" ):

    programPass = "No"


requirements = ["Age >= 15", "GPA >= 3.0", "Know a programing language"]


print "_____"
```

```

print "Heres your Application Status"

print "Able to Join Programs of America?"

print passStatus

print "-----"

print "Requirement  Status Good?  Entry"

print "-----"

print " Age >= 15  " + agePass + "          " + str(age)

print " GPA >= 3.0  " + gpaPass + "          " + str(gpa)

print " Know a    " + programPass + "          " + programKnow

print " programing "

print " language "

print " _____ "

if ( passStatus == "Yes" ):

    print "Were glad you're able to join our club and help Programmers of America
expand!"

    elif ( passStatus == "No" ):

        print "Sorry you can't join us you don't meet the below requirements."

        print requirements

main()

```

## Step Four: Testing

Run your code and evaluate the output. Then, answer the following questions in the testing chart. Use two to three meaningful sentences to answer each question.

| Testing Question                         | Response   |
|--|--|
| What bugs did you identify in your code? | The if statements with the age and GPA were not working. When putting the users age and GPA into the input the if statement did not trigger to the users info. |
| How did you fix the bugs?                | I fixed the if statements by checking the correct usage of Boolean conditions with if. I found out   |

|  |  |
|--|--|
|  | that I put quotes around the requirement numbers when they should be without quotes. |
|--|--|

## Step Five: Maintenance

Passionate programmers strive to improve their code! In two to three meaningful sentences, answer the following questions in the maintenance chart to consider the next steps of your program.

| Maintenance Question   | Response   |
|--|--|
| What design and functionality improvements could you make to your program?   | I could improve my program by using more lists to make my program have less variables. I've got multiple pass variables that instead I could all put on a list and have less variables so it makes it less confusing.  |
| How can you get feedback on ways to improve your program?  | In the program, I could ask users on the program if they have any feedback. Once I get the feedback in the program I could probably figure out how to get it to upload to a website to get to me.  |
| How can you expand your program into a new, better program in the future?  | I could expand my program into a new/better program by adding more club options before starting with one club. When a user opens the program it would ask the user what club they want to test for and then it would open the part for that club with if statements. |
| What are potential bugs users may possibly encounter if your program is expanded into a new program in the future? | If my program expanded, it may become harder to manage with that possibly more issues. With multiple clubs I may forget that I've used a variable already and it may not change according to input or and if statement and may have the wrong output.                |