Some style guidelines

o Name identifiers properly

e Variables > lowercase

e Constants > UPPERCASE

o Indent blocks of code

int main()

{

indent here

Chapter 5 - Matters of Style

Commenting your code

For all programs in this class

o Before int Main

e Use comments to describe your program

o Data Table

e The declaration section must contain a data table

e The data table

a states the use of the variable or named constant &

a how its value is obtained/used.

o Other comments should be used throughout your code to

e Describe what each section is doing

o (think in terms of input, processing, & output)

e Complicated parts of the code > be descriptive!

Data Tables

Should state: use of the identifier & how it is used

Comments should be lined up

All identifiers should have their own line and datatype

Which of these are correct?

int firstNum; // \NPUT - first value to average

int secondNum; // INPUT - second value to average

float average; // CALC & OUT - average of two values

CORRECT

int firstNum; // INPUT - first value to average - INPUT

int secondNum; // INPUT - second value to average - INPUT

float average; // CALC & OUT - average of two

INCORRECT

int firstNum; // input value

int secondNum; // input value

float average; // calculated average

INCORRECT

Chapter 5 - Matters of Style

Create a Template

Create a project

Put all this in

there

Call it 0-template

Cut & paste the

project

Mil - 6p-7:30\n";

Eclipse Tutorial\n";

Class heading information

First lines in your source file

[RRR RR IAA ROKR ACARI OR AAAI IAA

AUTHOR : Michele Rousseau

Lab #1 : Template

CLASS : CS1B

SECTION : MW: 10:30a - 12p

Due Date : 1/5/12

FCRIII IIIA ICICI IO III ICI IO II I IO II IE /

lote the alignment

Replace the data in purple with the

appropriate data.

Chapter 5 - Matters of Style

Next...

o Preprocessor Directives then doc for the main program

> Including a list of inputs and outputs

#include <iostream>

#include<iomanip>

using namespace std;

DOI III CII III III ICICI IOI IO IOI IOI I I

ADD & MULTIPLY TWO INTS

This program does whatever this program does

save this template and fill in the info appr

for your program

INPUT:

intl: First integer to be summed received as input

int2: Second integer to be summed received as input

OUTPUT:

Notice sum: the sum of the two integers (int

+he product: The product of the two integer

indentation

\ er 5 - Matters of Style

q Next > int main

int main ()

Declare your constants here

document constants above the declarations

Declare variables here - include your data table

Initialize variables

OUTPUT your header and class information here

(see next slide)

INPUT: A description of what is being input.

PROCESSING: Detail what is being processed.

OUTPUT: Details of what is being output.

return 0;

Chapter 5 - Matters of Style

Header & Class Information

COU << NOI ICICI ICICI I i ae ak ed ts

cout << " Programmed by: Michele Rousseau\n";

cout <<" Student ID : 750125\n";

cout << " CS1B : MW - 6p-7:30\n";

// put lab # or Assignment # as appropriate

cout <<" Lab # 7 : Lab Name\n";

COU << OIG IOC IS TOUT IO i ao

Change everything in purple to the appropriate

information for the project.

Chapter 5 - Matters of Style

© Prefe (Filtered)

It is easier if you show print margins

JE Preferences (Fitered) eee

Text Editors

Right click sso sen

on the scroll bar t & Displayed tb with:

Accessibilty T7 Snsert spaces for tabs

Annotations 7 ‘

the left of the Linked Mode 1 ihlight current line

Quick Diff

Editor window to sail

get this menu iaecifesta erent Change this to

ct . \_— I” Show whitespace characters

1. Check Show Print Margin FEL auvnn yates onapeonenien cee

show line numbers When mouse moved into hover: [Enrich after delay >

. IM Enable drag and drop of text

. Check TRS CRAM | i war before ecting a derived fe

Show print margins SUT SEY | 17 smart caret postioning at Ine start and end

Change Appearance color aptions:

oor: a

. . (Current tne highight |

Print margin column pit margin

Find scope

Selection Foreground color

to 75 Selection background color

Background color

Foreground color

Hyperlink.

More colors can be configured on the Colors and Fonts preference page.

Chapter 5 - Matters of Style

int main()

O) Documenting executable code

iy i

// Declare your constants here

// document constants above the declarations \_ a

ll programs have a data table.

int num1; // INPUT - first value to average

int num‘; // INPUT - second value to average

float average; // CALC & OUT - integer

Space Document

Between KIPUT -- get numbers to average from user above each

cout << “Enter first value to double: “; code segment

cin >> .num1; \_

t < Double space between code segments >

// PROCESSING -- calcula’ r .

average = float(num1 + num2) / 2;

// OUTPUT -- output the average

cout << “\n\nThis average is: “ << average;

return 0;

CORRECT

Initializing Variables

DO NOT INITIALIZE VARIABLES IN THE

DECLARATION SECTION.

o Initialize variables just before their use in

the program.

int count;

count = 0;

CORRECT

int count = 0;

INCORRECT

Chapter 5 - Matters of Style

Flowcharting - REVIEW

If- Then Statement