

Swinburne University of Technology Sarawak

COS10009 Introduction to Programming – Semester 1 / 2018

Text File Input / Output (Lab 10)

Core Task 1

To Do

Write a C program to read in name and marks of students in a class and store them in a text file. If the file previously exists, add the information of students to the end of the file.

- a. Declare the following variables:
 - an integer type variable to store the total number of students in the class
 - a string to store name of the students
 - an integer type variable to store marks of the students.
- b. Declare a FILE pointer
- c. Open text file with an appropriate opening mode (refer table below), and assign the location of the text file to the FILE pointer
- d. Print error message and exit if opening of file is not successful
- e. Ask the user to enter the total number of students
- f. Write a loop statement base on (e) to repeat the following steps
- g. Prompt user to enter student name
- h. Prompt user to enter marks of the student
- i. Write the name and marks of the student from (g) and (h) to the text file

Optional: Construct a function to perform file opening tasks in (c) and (d). Then, construct another function to performance input tasks in (g) and (h)

Opening Modes in Standard I/O		
File Mode	Meaning of Mode	During Inexistence of file
r	Open for reading.	If the file does not exist, fopen() returns NULL.
w	Open for writing.	If the file exists, its contents are

Opening Modes in Standard I/O

File Mode	Meaning of Mode	During Inexistence of file
		overwritten. If the file does not exist, it will be created.
a	Open for append. i.e, Data is added to end of file.	If the file does not exists, it will be created.
r+	Open for both reading and writing.	If the file does not exist, fopen() returns NULL.
w+	Open for both reading and writing.	If the file exists, its contents are overwritten. If the file does not exist, it will be created.
a+	Open for both reading and appending.	If the file does not exists, it will be created.