

PROGRAMMING MODULE – NAVIGATING THROUGH THE MAZE



AN INTRODUCTION TO CS10A – SUJAN SARKAR, SRJC CS INSTRUCTOR

“WELCOME TO THE WORLD OF PROGRAMMING”

WHAT COURSE RELATED RESOURCES ARE PROVIDED?

RESOURCES FOR FUNDAMENTAL PROGRAMMING TOPICS INCLUDE TEXTBOOK CHAPTER SUMMARIES & OBJECTIVES, SLIDES, ONLINE CHAPTER QUIZZES TO BE USED AS A STUDY GUIDE AND LOTS OF SAMPLE SOURCE CODE. ADDITIONAL RESOURCES INCLUDE LESSON NOTES, WEBCASTS CONSISTING OF A MIXTURE OF PREVIOUS “LIVE” CLASS LECTURE/LABS AND PROGRAMMING “LEARNING” MODULES ON VARIOUS TOPICS

HOW TO USE THE CANVAS NAVIGATIONAL STRUCTURE TO GET TO THESE RESOURCES?

SEE MODULES - GETTING STARTED | WEEKLY TOPIC RELATED MODULES | CALENDAR | RESOURCE PAGES LINKS

HOW TO USE CLASS RESOURCES TO GET STARTED AND COMPLETE PROGRAMMING ASSIGNMENT/PROJECTS IN A TIMELY MANNER.

USE THE CANVAS WEEKLY MODULE TO CONSTRUCTIVELY PLAN YOUR TIME FOR READING BOTH CHAPTER AND LESSONS, WORKING WITH SAMPLE SOURCE CODE BEFORE YOU ATTEMPT TO WORK ON THE PROGRAMMING SEGMENTS OF THE ASSIGNMENTS AND PROJECTS. SET-UP FOLDERS BY WEEK TO STORE SOURCE CODE AND OTHER TOPIC RELATED RESOURCES. USE NOTEPAD TO SET-UP A TEMPORARY WORKSPACE TO STORE ASSIGNMENT RELATED SOURCE CODE AND TYPED ANSWERS TO REVIEW QUESTIONS ETC. ALWAYS KEEP A BACKUP COPY OF ALL YOUR HOMEWORK AND OTHER COURSE RELATED MATERIALS.

WHAT COURSE RELATED STANDARDS AND PROCEDURES NEED TO BE FOLLOWED?

SOURCE CODE MUST BE YOUR WORK. COMPLETE AND SUBMIT ASSIGNMENT AND PROJECTS BY DUE DATES USING THE ASSIGNMENT OR PROJECT SUBMISSION FORMS PROVIDED IN CANVAS. PAY CAREFULL ATTENTION TO PROGRAM STYLE, FORMATTING AND DOCUMENTATION (SEE THE DALE & WEEMS TEXT – APPENDIX F REFERENCE LINK ON THE SYLLABUS)

WHAT TO EXPECT TO LEARN FROM CS10A?

HOW TO WRITE PROGRAMS IN A HIGH LEVEL PROGRAMMING LANGUAGE.

HOW TO USE DESIGN TOOLS SUCH AS PSEUDOCODE, FLOWCHARTING OR UML DIAGRAMMING PRIOR TO WRITING CODE IN A COMPILER

BECOME PROFICIENT IN USING C++ SYNTAX AND SEMANTICS AND LEARN HOW TO USE APPROPRIATE CONTROL STRUCTURES TO DEVELOP ALGORITHMS THAT IMPLEMENTS “LOGIC” IN YOUR PROGRAMS

DEVELOP PROPER PROGRAMMING STYLE, FORMATTING AND DOCUMENTATION

LEARN HOW TO USE APPROPRIATE STRUCTURED DATA TYPES IN YOUR PROGRAMS

STUDY FUNDAMENTAL PROGRAMMING TOPICS THAT ARE AN ESSENTIAL PRE-REQUISITE TO THE NEXT TIER OF COMPUTER SCIENCE RELATED COURSES

REMEMBER TO TAKE SOME TIME OFF BETWEEN A LONG SESSION OF CODING AND LET YOUR INSTRUCTOR KNOW IF YOUR GET STUCK AND COULD USE SOME POINTERS.

“ENJOY THE PROCESS AND STUDY OF ALGORITHMS” ...Sujan Sarkar