**Component 1: Getting to Grips with Git (10 marks)**

Successful completion of all sub-components will be given 10 marks of the overall module marks.

**NB: This is a pass/fail component. Failure to complete any and/or all of the sub-components will result in a zero for this component.**

Please complete the following table with proofs (screenshots must show a form of identification to you or your project) and a short description of how you’ve accomplished the task.

The proofs MUST BE clear and readable without forcing a marker to zoom in to verify them. If you do not have space for a screenshot in a cell of the table simply reference it (ex: “see figure X”) and put it below the table.

Make sure to push your code to your PRIVATE repository at <https://gitlab.uwe.ac.uk/> and put myself (ty-win) and the OS delivery team as “Reporter” of your project.

The completed worksheet must be submitted under your repository.

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| **Operating Systems**  **Component 1** | **Student ID: 22020245**  **Name: Qais Alhindi**  **GITLAB REPOSITORY:** | |
|  | **Proofs and notes** | **Date** |
| **Create a project on your Gitlab account** | **On gitlab I pressed the “+” icon and then created blank project which I named my awesome project.** | **17/10/2023** |
| **Clone your project to your local VM** | **I** typed git clone followed by the URL which I copied from the clone button on gitlab in my project | **17/10/2023** |
| **Create a file in your repository and modify it** | typed the command touch to create a file and then typed nano to modify it | **17/10/2023** |
| **Use Git command to add the modified file to your commit** | Used the git add command followed by the name of the file I created then git commit | **20/10** |
| **Push changes to your remote repository** | Used the git push command and then entered my personal details to prove its me | **20/10** |
| **Fork a classmate project (make sure to indicate your classmate repository URL)** | **I added her as a reporter and got her url and clicked the fork button** | **31/10** |

**Component 2: C programming refresher (10 marks)**

Please complete the following table with proofs (screenshots must show a form of identification to you or your project) and a short description of how you’ve accomplished the task.

The proofs MUST BE clear and readable without forcing a marker to zoom in to verify them. If you do not have space for a screenshot in a cell of the table simply reference it (ex: “see figure X”) and put it below the table.

Make sure to push your code to your PRIVATE repository at <https://gitlab.uwe.ac.uk/> and put myself (ty-win) and the OS delivery team as “Reporter” of your project.

The completed worksheet along with the source code for each sub-component must be submitted under your repository.

**NB: This is a pass/fail component. Failure to complete any and/or all of the sub-components will result in a zero for this component.**

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| **Operating Systems**  **Component 2** | **Student ID: 22020245**  **Name: Qais alhindi**  **C Programming Refresher GitLab repo:** | |
|  | **Proofs and notes** | **Date** |
| **Using only loops write a C program which produces the following pattern:**  **\***  **\* \***  **\* \* \***  **\* \***  **\***  **The user should be able to specify the number of rows he/she wants** | **My code works for all odd numbers as well as even numbers.**  **for odd number it completes the whole diamond pattern but for even number it doesn’t complete it all as its not possible for a diamond pattern to be full for an even number of rows so it doesn’t print the last line.**  **I made it using nested loops and if statements which have different conditions for even and odd numbers.** | **27/10** |
| **Write a small C program which does the following:**   1. **Create a text file;** 2. **Write some text into it;**   **Opens the file and outputs its content on the console.** | Created a C program which creates a file called “test.txt” using this code > fptr = fopen("test.txt","w"); and written in to it “hi im qais” using fprintf then stored it inside a variable i created and used printf to print the contents of this text file. | **27/10** |
| **Write a small number guessing game (between 1 and 5000) using C. It needs to have the following features:**   1. **Console-based;** 2. **Needs to have a “scoreboard”**   **The user should be able to determine when he/she wants to end the game** | My game can work for a number of 3 players, I used a do-while loop with 2 while(1) which makes the loop work indefinetly. It exits the first ‘while‘ when the player enters 0 or guesses the random number correctly and then goes through an if statement. If the number of players still didn’t reach 4 it goes through the while loop again allowing the second player to guess and this continues until 3 players have played and then goes through the second ‘while’ which prints the scoreboard(scores of the 3 players). | **3/11** |