|  |
| --- |
| C:\Users\Liiban\Desktop\web exercise\logo_small.jpg |
| ***Coursework Header Sheet*** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Course** | Computer Science | **Course** **Level** | Semester 3 |
| **Coursework** | Advanced to programming | **Assessment** **Weight** | 30% |
| **Tutor** | Mahamud Moalin Hassan (Haji) | **Deadline** | 21/11/2020 |
|  |  | **Deadline** | 12/12/2020 |

|  |
| --- |
| Coursework is receipted on the understanding that it is the student's own work and that it has not, in whole or part, been presented elsewhere for assessment. Where material has been used from other sources it has been properly acknowledged in accordance with the University's Regulations regarding Cheating and Plagiarism. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Student ID** | 1 | 0 | 0 |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Tutor's comments*** | | | | |
| ***Grade Awarded\_\_\_\_\_\_\_\_\_\_\_*** | | ***Final Grade\_\_\_\_\_\_\_\_\_*** |
| ***Tutor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** |  | ***Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** |
|  |  |

Car sales Management System

## **Coursework Outline**

This coursework gives the students the opportunity to demonstrate their knowledge and skills gained so far from this subject. It assesses students’ ability to utilize programming concepts taken in this course and combine those skills into one small program.   
This is an **individual** assessment. Therefore, it should be your work and your work only. Plagiarism will not be tolerated at UCT as it is outlined in the universities cheating and plagiarism policy.

## **Task**

Business Model

* Sell Cars
* Test Booking

Functions List

* Login Requirement
* Register new car
* Register test booking
* Register Owners
* Register Sales
* Register of customer
* List of cars
* Types of cars
* List of test bookings
* List of Customers
* List of owners
* List of sales
* Recently added cars
* Sign out

Design & Coding

* Design Login screen
* Keep Title and slogan into class
  + - Car Sales Management System
      * + Your slogan here
* Read from File and Compare with the user entry.
* Make sure the file is available else show message what happened?
* If access successful show next page with menu.
* Else show message not successful screen

* Menu page
  + How many classes do I need?
    - Cars
    - Customers
    - Bookings
    - Owners
    - Sales
    - Staff
  + What kind of functions should I implement?
    - Booking
      * Make a Booking
      * Return Car
      * Record customer experience
    - Cars
      * Cars List
      * Add new car
      * Update car
      * Remove car
    - Customers
      * New Customer
      * Customer List
      * Update customer
    - Staff
      * New Staff
      * Staff List
    - Owners
      * New Owner
      * Owners List
      * Update Owner
    - Sales
      * New Sales
      * Sales List
  + Any feature we can use?
    - * Polymorphism
        + New Customer
        + New Staff
        + Staff List
        + Customer List
        + Cars List
        + Booking List
      * Interface
        + Customer Experience
      * Exception Handling
        + Try … Catch
      * File I/O
        + Record new customer to Customers.txt
        + Record new staff to Staff.txt
        + Read from files for staff and Customers
      * Inheritance
        + Inheritance Person: Staff: Customers
      * Properties
        + Car Name
        + Car Model
        + Car Year

## **Coursework Marking Scheme**

This is a guideline of how your coursework is going to be marked. Please read it carefully.

|  |  |  |
| --- | --- | --- |
| **No** | **Task** | **Marks** |
| 1 | Ability to design | 10 |
| 2 | Ability to use classes where applicable | 10 |
| 3 | Ability to use exception handling where applicable | 10 |
| 4 | Ability to use File I/O | 10 |
| 5 | Ability to use properties where applicable | 10 |
| 6 | Ability to use polymorphism where applicable | 10 |
| 7 | Ability to use inheritance where applicable | 10 |
| 8 | Demonstrate the ability to use methods effectively | 10 |
| 9 | The structure of your code, indentation and using appropriate naming | 5 |
| 10 | Demonstrate the ability to use comments where appropriate | 5 |
| 11 | Explain how I would use your program – clear guidance | 5 |
| 12 | Your ability to cope and trying your best to work on your own | 5 |