COMP609

1. Fill the table below and add the necessary details.

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| --- | --- | --- | --- |
| **Student name:** Ray Smith **Student Id:** 18464097 | | | |
| **Overall mark – comp609** | | | |
| Task | Weight | Self-mark and comments | Tutor’s mark and comments |
| GUI task | 3% | 3 | Application calculates prime numbers from given integers |  |
| Inheritance and polymorphism | 6% | 6 | Application calculates profits and creates classes to demonstrate inheritance and polymorphism. |  |
| Retrieving data from DB | 6% | 6 | Application displays data taken from the database and displays It to the user. |  |
| Multithreading | 10% | 10 | Application calculates a max using two threads. |  |
| Hash table | 5% | 5 | Application stores data from a database into a Dictionary and displays information from user requested ID. |  |
| Overall 30% tasks | 30% | 30 | All tasks completed and run as expected |  |
| Final project | 70% | See the table below | See the table below |
| 12 reports | 60% | 60 | See comments below | Write the total from the table below. |
| Demonstration of inheritance | 2% | 2 | Cow, Dog, Sheep, Goat inherit from Animal class. |  |
| Demonstration of polymorphism | 2% | 2 | Jersey inherit from Cow class. |  |
| Error handling | 5% | 5 | Try, Catch statements used for every report method. ErrorHandling() method used in try, catch statement (expect search id report). |  |
| Comments and indentation | 3% | 3 | Program comments report purposes and methods. |  |
| Short methods | 2% | 2 | Short methods used for report methods (like removing dogs from some report lists) |  |
| Good OOP practice | 5% | 5 | OOP programming structure applied |  |
| Efficient algorithms (Sorting and hash table) | 10% | 10 | Multiple short methods used for cutting down runtime and nested loops do not overlap for the same values. |  |
| Appropriate no of classes | 5% | 5 | 7 classes present. Animal, cow, sheep, dog, goat, jersey cow, commodityprices. |  |
| Evidence of testing. Include screen shorts and/or screen videos (use power point) | 3% | 3 | See other document |  |
| Self-marking | 2% | 2 | Self Marked |  |

1. The 12 reports:

|  |  |  |  |
| --- | --- | --- | --- |
| Report number | Possible  Marks | Self-marking and comments | Tutor’s marking and comments |
| 1 | 7 | Report runs as expected and produces expected output. Report uses 6 classes (depending on the corresponding ID). Also outputs a silhouette of animal. |  |
| 2 | 5 | Report runs as expected and produces expected report. Coverts double currency to decimal with 2 decimal placing. |  |
| 3 | 5 | Report runs as expected and produces expected report. Coverts double currency to decimal with 2 decimal placing. |  |
| 4 | 5 | Report runs as expected and produces expected report. Coverts double to decimal with 2 decimal placing. |  |
| 5 | 4 | Report runs as expected and produces expected report. Coverts double to decimal with 1 decimal placing. |  |
| 6 | 5 | Report runs as expected and produces expected report. Converts double to decimal with 2 decimal placing. Compares goats and cows vs sheep profits per day, per month (28 days) and per year (365 days). |  |
| 7 | 5 | Report runs as expected and produces expected report. Converts double to decimal with 2 decimal placing. Displays ratio of dogs compared to all animal costs per day, per month (28 days) and per year (365 days). |  |
| 8 | 7 | Report runs as expected and produces expected report. Sorts all IDs in ascending order of profitability per day. Converts profit double to decimal with 2 decimal placing. Displays strings of animal types, IDs and profitability. Also exports strings to .txt file. |  |
| 9 | 4 marks | Report runs as expected and produces expected report. Displays ratio of red animals compared to all animals and how many non-red animals there are. |  |
| 10 | 5 marks | Report runs as expected and produces expected report. Displays tax paid for Jersey Cows per day, per month (28 days) and yearly (365 days). |  |
| 11 | 4 marks | Report runs as expected and produces expected report. Displays how many animals there are, how many animals are older than the specified age, how many animals are younger than the specified age, how many animals that are the specified age and comparison. |  |
| 12 | 4 marks | Report runs as expected and produces expected report. Displays the daily profits for Jersey Cows per day, per month (28 days) and yearly (365 days). |  |

1. Add Screen shots (At least 15) or a five minutes screen video demonstrating the application. This part is only relevant to the final project. You can zip the power point file and this one and upload them to the relevant link in moodle.

See other document

1. Reflection (optional). Feel free to add comments for the tutor to improve this course. Notice that these comments will not affect your mark.

Comments: