SCALE FOR PROJECT PISCINE OCAML (/PROJECTS/PISCINE-OCAML) / DAY 03 (/PROJECTS/PISCINE-OCAML-DAY-03)

Introduction

For the good of this evaluation, we ask you to:

- Stay mannerly, polite, respectful and constructive dunring this evaluation. The trust between you and the 42 community depends on it.

- Bring out to the graded student (or team) any mistake she or he might did.

- Accept that there might be differences of interpretation of the subject or the rules between you and the graded student (or team). Stay open minded and grade as honnestly as possible.

Guidelines

- You must grade only what is present and the graded student's (or team) repository.

- You must stop grading at the first failed exercice, but you are encouraged to continue testing and discussing the following exercices.

Attachments

🗒 Subject (https://cdn.intra.42.fr/pdf/pdf/2726/d03.en.pdf)

Preview!!!

Preliminaries

This section is dedicated to setup the evaluation and to test the prerequisits. It doesn't rewards points, but if something is wrong at this step or at any point of the evaluation, the grade is 0, and an approriate flag might be checked if needed.

Respect of the rules

- The graded student (or team) work is present on her or his repository.

- The graded student (or team) is able to explain her or his work at any time of the evaluation.

- The general rules and the possible day-specific rules are respected at any time of the evaluation.

⊘ Yes   ✕ No

OCaml piscine D03

- For each exercice, you must compile the exercice using ocamlopt and run the generated executable. If the compilation fails or warns, or an exception is thrown at runtime, the exercice is failed. - Whether the graded student provided tests or not, you must test her or his work extensivelly and asses if the work is done or not. - Remember to check function names, types, behaviours and outputs.

Ex00, Chucalescu - Stupalacci

Test the program. It should draw a square in a x11 window and a node of a btree and it's value. The node can be drawn horizontaly or vertically, it doesn't matter at all. If any function other than lineto, moveto or draw_string is used, it should be considered as cheating so give the student a little snap on the back of the head and click the cheat button. The beauty of the drawings is not mandatory. So if it's ugly but works as intented, give the student the points.

⊘ Yes   ✕ No

Ex01, Basic Gardening

Test the following functions, including a test with the empty tree:
- size : should return the size of a Binary Search Tree (BST). (1 pts)
- height : should return the height of a BST. (2 pts)
- draw_tree : should draw a BST and the corresponding nodes in a
graphical window using the graphics module. (2 pts)

For instance, the tree Node("root", Node("left", Nil, Nil),
Node("right"), Nil, Nil) should have a size of 3, an height of
2.

Rate it from 0 (failed) through 5 (excellent)

Ex02, All Good Ciphers Go To Heaven

Check that the rot42 and unrot42 functions work as intended. (1 pts)
Check that the caesar and uncaesar functions work as intented. (1 pts)
Check that the xor function works as intented. (1 pts)
Check that the ft_crypt and ft_uncrypt work as intented (2 pts)

Rate it from 0 (failed) through 5 (excellent)

Ex03, Gardening Research

Check the following functions :
- is_bst (1 pts)
- is_perfect (1 pts)
- is_balanced (1 pts)
- search_bst (1 pts)
- delete_bst (1 pts)

Feel free to check the behaviour of any function with an empty
tree. As written in the subject, the student must have provided
sufficient material for defence testing. Anything that can't be
tested is NOT graded.

Rate it from 0 (failed) through 5 (excellent)

Ex04, Adelson Velsky Landis

Check the following functions :

- insert_avl : the main purpose of this function is to add an element to an AVL tree. There's a trap, since an AVL tree must be balanced, the student must have implemented functions to re-balance the tree after the add. Be torough evaluating this function.

- delete_avl : same rule as above, after the deletion, the AVL tree must be re-balanced.

⊘ Yes   ✕ No

Bonus

If at any exercise the student made a graphic implementation of the program or the function, give some bonus points according to the accuracy of the drawing and the relative beauty of all living things. Although, if the student has provided additionnal function about the tree implementation, you should give him some bonus points. Hint -> for the last part about the AVL, the student should have implemented rebalancing functions and min/max of sub tree functions. It counts also as bonus.

Rate it from 0 (failed) through 5 (excellent)

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Ratings

Don't forget to check the flag corresponding to the defense

✔ Ok

📄 Empty work   📄 Incomplete work   💬 No author file   💀 Invalid compilation

📑 Norme   🗐 Cheat   ☁ Crash   🚫 Forbidden function

Conclusion

Leave a comment on this evaluation

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