

ICT283 Assignment 2, 2021

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Components	Comments
Evaluation (pros/cons) and rationale for data structures.	Evaluation was very good. Rationale was very good.
Program Design (determined from code and doxygen output) – <i>Full Doxygen output in html is needed to get marks for this section.</i>	Application design was modular; main function should remain in control of program flow. Double handling of data by inserting into map then multimap possibly nullifies time gained by search efficiency. Doxygen: output generated, with appropriate graphics. Provided comments including parameters, return types, and pre and post conditions.
Working Program (includes C++ code and classes, coding style, comments, test plan) – <i>Test plan and evaluation.txt need to be provided to get marks for this section.</i>	The application program did build and run to provide the following working options: Option 1; Avg and stddev wind speed (km/h) for specified month and year correct: yes Option 2; Avg and stddev ambient temperature for each month of specified year correct: yes Option 3; Total solar radiation (kWh/m) for each month of specified year correct: yes; exclude values $\geq 100 \text{ W/m}^2$. Option 4; Avg and stddev wind speed (km/h), avg and stddev ambient temperature, and total solar radiation (kWh/m ²) for each month of a specified year and written to file only: yes Option 5; Max solar radiation (kWh/m ²) for given day/month/year: yes Option 6; Exit the program: yes A separate plan to test the overall functionality of the application program should have been provided. Testing could have been more comprehensive. Test data (actual program output) should be provided to demonstrate the outcome of testing according to the plan. Try using a spreadsheet to verify your results.
BST: C++ design, implementation, and usage, <i>including function pointers.</i>	BST class was provided and templated; usage was good. BST not minimal; public interface of BreadthSearch and DepthSearch not used outside tree and not needed.
Use of STL map (or map variants like multimap).	The STL Map usage was good.
Bonus Menu Option <i>(only if all the 4 options are working).</i>	Not implemented.

Other advice (if any): Very good work.

Final Grade: HD (88%)