



Course-Materials Bug-Bounty Program (CMBBP)

Although the course materials were prepared with great care, some errors in these materials are inevitable. The Course-Materials Bug-Bounty Program (CMBBP) is designed to encourage students to find and report errors in the course materials and reward those students who take the time to do so. The CMBBP applies to most course materials prepared by the instructor (e.g., textbook, lecture slides, assignment solution sets, textbook solutions manual, and handouts). The CMBBP also applies to software developed by the instructor for the course (including documentation for the software).

Generally, the above program works as follows. For each error reported by a student, the student is awarded one CMBBP point, subject to the following conditions:

1. The error must be reported to the instructor in writing via email.
2. The bug report must clearly identify the error. If the error is in a document, the report must state: the document title, the document version/edition (if the document has a version/edition), and the precise location of the error in that document, including the page number and, if appropriate, section/paragraph/line numbers. If the error is in source code, the report must state: the software package to which the code belongs, the version of this software (if versioned), the file in which the code is contained, and the location within that file (i.e., line numbers).
3. The bug report must clearly explain the nature of the error (i.e., what the mistake actually is) and how the error may be corrected.
4. The error must be present in the most recent version of the document or software at the time the bug report is received. The error must not appear in any of the errata lists for the course materials (in the CMBBP section of the course website). The error must have been previously unreported and also not already found by the instructor.
5. If multiple students submit reports for the same error, credit will be given only for the first acceptable report received (i.e., the first report received that meets all bug-reporting requirements).
6. The decision of what constitutes a single error is solely at the discretion of the instructor. For example, if a student finds a particular error that is repeated N times, this would most likely be considered as a single error (and not as N errors) for the purposes of awarding CMBBP points (i.e., only one point would probably be awarded in such a case).
7. The error must be reported prior to the deadline for bug reporting. This deadline is: at the start of the final exam, in the case of a course with a final exam; and at 23:59:59 on the day of the last lecture otherwise.

An error may take one of many forms, including but not limited to: a spelling error, grammatical error, typographical error, technical error/inaccuracy, or software bug. Some examples of acceptable and unacceptable bug reports can be found in Section A. The use of AI tools in finding errors or preparing bug reports is not permitted. Submitting reports of errors without a genuine basis for believing them to be errors, submitting large numbers of speculative reports, or otherwise abusing the program **may result in the student being banned from participation** at the instructor's discretion. In special circumstances, the instructor may temporarily suspend acceptance of bug reports for some or all course materials and notify students accordingly; reports received during such a suspension will be discarded.

The total number of CMBBP points awarded to a student is referred to as their CMBBP score. Each student is awarded a certain fraction of the CMBBP bonus (whose weight is specified on the course outline) based on their CMBBP score at the time of the deadline (as specified above). In particular, a student with the CMBBP score s is awarded the fraction $f(s)$ of the CMBBP bonus according to the formula:

$$f(s) = \begin{cases} \frac{1}{2}(s/T_1) & 0 \leq s < T_1 \\ \frac{1}{2} + \frac{1}{2}(s - T_1)/T_2 & T_1 \leq s < T_1 + T_2 \\ 1 & s \geq T_1 + T_2, \end{cases}$$

where $T_1 = 8$ and $T_2 = 16$. Note that f is a continuous piecewise-linear function such that $f(T_1) = 0.5$ and $f(T_1 + T_2) = 1$. For example (for $T_1 = 8$ and $T_2 = 16$), a student with a CMBBP score of 8 receives 50% of the CMBBP bonus, and a student with a CMBBP score of 24 or more receives 100% of the CMBBP bonus.

A Examples of Bug Reports

Examples of (possibly fictitious) bug reports are given below, some of which are acceptable (i.e., meet all bug-reporting requirements) while others are not.

1. Example of an acceptable bug report:

Document: Textbook: Michael D. Adams, *Signals and Systems*, Edition 6.0, Dec. 2024

Location: p. 136, Section 5.5, second paragraph

Error: The text reads “whereas the the exponential form involves some complex quantities”. The word “the” is duplicated.

Correction: The text should read “whereas the exponential form involves some complex quantities”.

2. Example of an acceptable bug report:

Document: Lecture Slides: Zaphod Beeblebrox, *Lecture Slides on Life, the Universe, and Everything*, Edition 42, 1979

Location: Slide 247 according to the number in the slide footer (which corresponds to physical page 253 of the PDF document), second bullet point

Error: The Answer to the Ultimate Question of Life, the Universe, and Everything is given as 41. The correct value is 42, as established by Deep Thought after 7.5 million years of computation.

Correction: The Answer should be given as 42.

3. Example of an acceptable bug report:

Document: Handout: *Assignment 3A Solutions*, Version 2024-09-01

Location: p. 214 according to the number in the page header (which corresponds to physical page 10 of the PDF document), solution to Exercise 4.11(a), second line of the expression for $h(t)$ (first case)

Error: The inequality is given as $t > 0$. The boundary case $t = 0$ belongs to this branch, so as written the solution leaves $h(0)$ undefined.

Correction: The inequality should be $t \geq 0$.

4. Example of an **unacceptable** bug report:

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The following text is used twice in two successive sentences:

(i.e., “.”)

This level of repetition is not really necessary.

This report is unacceptable as it: 1) fails to identify the document containing the error; 2) fails to identify the specific sentences on the page in which the error occurs; and 3) does not directly state how the error should be corrected.