https://www.360logica.com/blog/difference-between-defect-error-bug-failure-and-fault/

https://www.linkedin.com/pulse/difference-between-error-fault-defect-failure-ivan-luizio-magalh%C3%A3es

https://www.geeksforgeeks.org/software-engineering-differences-between-defect-bug-and-failure/

1. DEFECT
   1. definition
      1. Variance between expected and actual.
      2. any deviation or irregularity from the specifications mentioned in the product functional specification document.
   2. found after application goes into production
   3. a difference between expected and actual results in the context of testing
   4. the deviation of the customer requirement
   5. types
      1. wrong = When requirements are implemented not in the right way. This defect is a variance from the given specification.
      2. missing = A requirement of the customer that was not fulfilled
      3. extra = A requirement incorporated into the product that was not given by the end customer
   6. created in the software due to the Error by the programmer
   7. solved by the developer in development phase or stage
2. ERROR
   1. definition
      1. An error is a mistake, misconception, or misunderstanding on the part of a software developer.
   2. A human action that produces an incorrect result
3. BUG
   1. definition
      1. the result of a coding error
   2. An Error found in the development environment before the product is shipped to the customer.
4. FAILURE
   1. definition
      1. A failure is the inability of a software system or component to perform its required functions within specified performance requirements.
   2. When a defect reaches the end customer it is called a Failure
   3. Failure is a deviation of the software from its intended purpose
   4. When a defect reaches the end customer, it is called as Failure.
5. FAULT
   1. definition
      1. An incorrect step, process or data definition in a computer program that causes the program to perform in an unintended or unanticipated manner
   2. introduced into the software as the result of an error
   3. the result of the error
   4. A manifestation of an 'Error' in software