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| Name Of The Student | Jaganathan G |
| Internship Project Topic | TCS iON RIO-125: Application of Static Application Security Testing (SAST) Tools – Find Defects in Insecure Web-based Applications |
| Name of the Organization | TCS iON |
| Name of the Industry Mentor | Uma Devi |
| Name of the Institute | Government College of Engineering, Bodinayakkanur, Theni – 625583 |

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| Date | Day # | Hours Spent |
| 19-05-2023 | DAY 29 | 4 Hours |
| Activities done during the day:   1. Scanned an insecure application named “WebGoat-2023”. The scan result contains.  * Some Critical issues are found: * Code Smells  Make the enclosing method "static" or remove this set. **File Name:** Make Sure this file name for EnvironmentExposure.java  **Description:**  Instance methods should not write to "static" fields  **Explanation with Code snippets:**  src/main/java/org/owasp/webgoat/container/asciidoc/EnvironmentExposure.java    **Risk / Undesirable impact:**  Potential Memory Leak: Assigning the applicationContext to a non-static variable (context) may lead to a potential memory leak. If the enclosing method is not static and the context variable is not properly managed or released, it can cause the ApplicationContext object to remain in memory longer than necessary. This can result in increased memory usage and potentially impact the performance and stability of the application.  **Recommendations**   1. Remove or Refactor the Assignment: If the context variable is not required for further usage within the class or method, consider removing the assignment statement. If the variable is needed elsewhere, evaluate whether it can be made static or if there are alternative design approaches that avoid potential memory leaks. 2. Manage the Lifecycle of the ApplicationContext: Ensure that the lifecycle of the ApplicationContext is appropriately managed. If the context variable needs to be assigned, make sure it is properly released or set to null when it is no longer needed. This helps prevent unnecessary memory retention and potential memory leaks.   **Solution:**  static void yourEnclosingMethod() {  ApplicationContext context = applicationContext;  // Rest of the method implementation  }   1. Visited the digital discussion room and checked for any new announcements. 2. Finally, I wrote the Activity Report | | |