

**Department of Computer Sc. & Engg, Govt. Engg. College – Thrissur**  
**SEMINAR PROPOSAL for approval**  
**2022-2023 ODD**

1. **Name of the student:** Gokul P Dinesh
2. **Uni. Reg. No:** TCR19CS029      **Programme:** B.Tech. CSE(2019rev)      **Batch:** 2019 Adm.
3. **Guided by:** Prof. Dileeshh E D
4. **Broad area:** Linux Kernel
5. **Sub area:** Windows Subsystem For Linux
6. **Seminar Title:** Implementation of Windows Subsystem For Linux
7. **Objectives of seminar:**
  - O1:** To identify the problem of incompatibility of running Linux applications in Windows
  - O2:** To understand the inner working of Windows Subsystem for Linux, by referring academic documents
  - O3:** To get familiarized with WSL Architecture
  - O4:** To understand the underline theory behind VMs and their correlation with WSL
  - O5:** To familiarize with the technical documents, and presentation
8. **Important information about seminar** Score off the unwanted choices in each group OR fill in the information in blank portions

<b>Idea context:</b> <del>Survey/study</del> <del>Business case study</del> {Implementation case study}	{PURE Theory}] {Application of theory} {Design Case study} <del>Education</del> <del>Training</del>	
<b>Source of Idea:</b>	{Student} <del>Guide</del> <del>BOTH</del>	
<b>Content of seminar:</b> <del>New variant of a core published work</del>	Re-telling a published work <del>New publishable Idea</del>	

9. **Related works:**

(a) WSL Documentation:

This reference will allow us to set up WSL and explore more about the technology

(b) The Linux Kernel Library:

The Linux kernel library is an integral part of the Linux OS, and it's working is explained in this document

(c) Memory Forensics of WSL:

This delves deep into the memory management architecture of WSL.

**10. Content of seminar:**

The seminar will be about the architecture of WSL, Windows Subsystem for Linux, and how it is implemented in Windows. It also delves into how it uses a virtual network connection to connect a virtual machine (Linux) to remotely access Windows

**11. Abstract finalised:**

To learn and understand the inner working and architecture of Subsystems in Windows and its implementation. The seminar also delves into how the Windows NT kernel and how it supports systems

**12. Table of contents:**

Include the Table of contents to appear in your Draft Seminar report, as an enumeration list

**13. Result of plagiarism check:**

The seminar is mainly based on the Developer Blogs from Microsoft themselves. The contents of the seminar are also referred to from the references cited below. The seminar is 50% unique from the source materials

**14. Scheduled date of presentation:**

October 20, 2022

**15. Facilities to be provided by department:**

Proper internet connection

**16. References:**

- [1] Nathan Lewis, Andrew Case, Aisha Ali-Gombe, and Golden G. Richard. Memory forensics and the windows subsystem for linux. *Digital Investigation*, 26:S3–S11, 2018.
- [2] John Ingve Olsen. Through the wormhole: Cross-os desktop integration for linux applications. *Master thesis, University of Oslo, 2022*, 2022.
- [3] Octavian Purdila, Lucian Adrian Grijincu, and Nicolae Tapus. Lkl: The linux kernel library. In *9th RoEduNet IEEE International Conference*, pages 328–333, 2010.

**17. Approval note of Guide:**

**Date of approval:** October 26, 2022

**Signature of Student**

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**Signature of Guide**

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Note:- Use these e-mail ids for communication. Communication send to any other address is invalid or is not part of seminar correspondence.