

Ver	Reason for change	Minor/Major	Ver	Reason for Change	Minor/Major
0	Obj. rewriting@zeroth	Major	1	correlation change@zeroth	Minor
1.1	work rejection@approval	Minor	2	Current document	Approved

Department of Computer Sc. & Engg, Govt. Engg. College – Thrissur
SEMINAR IDEA RESERVATION
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. Dileesh 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. **Correlation to course outcomes:**
 - CSQ 413.CO1:** Identify academic documents from the literature that is related to her/his areas of interest (Cognitive knowledge level: Apply)
 - CSQ 413.CO2:** Read and apprehend an academic document from the literature which is related to her/ his areas of interest (Cognitive knowledge level: Analyze)
 - CSQ 413.CO3:** Prepare a presentation about an academic document (Cognitive knowledge level: Apply)
 - CSQ 413.CO4:** Give a presentation about an academic document (Cognitive knowledge level: Apply)
 - CSQ 413.CO5:** Prepare a technical report (Cognitive knowledge level: Apply)

	CO1	CO2	Justification
O1	1	3	CO1: No detailed study of academic documents is required CO2: Understand the cause
O2	3	3	CO1: Academic documents should be identified CO2: Proper understanding of the topic is required
O3	2	3	CO1: Documents should be identified CO2: The documents must be thoroughly understood
O4	2	3	CO1: Documents should be identified CO2: The documents must be thoroughly understood
O5	0	0	CO1: Statistical study should be done CO2: No learning required

	CO3	CO4	Justification
O1	0	1	CO3: No correlation CO4: The topic will be glanced over during the presentation
O2	3	3	CO3: High Correlation CO4: High Correlation
O3	3	3	CO3: High Correlation CO4: Should be included in the presentation
O4	0	0	CO3: This objective only delves with understanding concepts CO4: This objective only delves into understanding concepts
O5	1	1	CO3: The data will be prepared for presentation CO4: The data will be presented

	CO5	Justification
O1	2	CO5: The details will be included in Technical Report
O2	3	CO5: The detailed working mechanism will be included in the report
O3	3	CO5: Should be included in report
O4	1	CO5: Details will only be vaguely mentioned in the report
O4	1	CO5: Details will only be vaguely mentioned in the report
O5	1	CO5: Details will only be vaguely mentioned in the report

9. Important Statistics about seminar Score off the unwanted choices in each group OR fill in the information in blank portions

Date from which working for this idea:	25-09-22
The date on which the guide approved this idea:	27-09-22
Seminar related to:	Project undertaken TOPIC/of/interest/of/guide RESEARCH/INTEREST/of/Guide Guide/started/a/new/RESEARCH interest/NOW Guide/s/new/TOPIC/of/interest/NOW Seminar/not/related/to/any/of/above
Idea context: Survey/study/Business/case study/ {Implementation case study}	{PURE Theory}] {Application of theory} {Design Case study} Education////Training
Source of Idea:	{Student} Guide BOTH
Content of seminar: A/new/variant/of/a/core/published/work	Re-telling a published work New/publicable/Idea

10. 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.

11. Work plan:

Action plan				
Sl. No.	Activity	Date	Signature of guide	Remarks
	SEM course activity starting	12-09-22		
	Date of fixing seminar topic,title	18-10-22		
	Date of Zeroth evaluation	22-09-22		
	Dt. of completion of seminar proposal	18-10-22		
	Dt. of Proposal eval., fixing dt. of pre-sentation	24-10-22		
	Date of Seminar presentation	20-10-22		
	Date of starting submission of reports	05-12-22		
	Date of completion of report review	12-12-22		
	Date of approval by coordinators	16-12-22		

12. 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

13. Facilities to be provided by department:

Digital Library to access IEEE Research Papers
Stable internet connection

14. 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.

15. Approval note of Guide:

Remarks guide wants to mark specific to **this** seminar by **this** Student using **this** idea reservation request. If no comments, put NIL; do not leave as blank

Date of approval:

Signature of Student

email-id: tcr19cs029@gectcr.ac.in

Signature of Guide

email-id: (email-id of guide)

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