

Pak-Austria Fachhochschule: Institute of Applied Sciences & Technology

Kanpur Road, Mang, Haripur, Pakistan Tel: +92-995-645112-16

Final Year Project (FYP) Proposal Form

Department: IT & CS	Degree Program: Computer Science

No. of students: 2 **FYP Type:** Industrial Faculty offered Self proposed

*Note: Please attach a copy of approved notification in case of industrial project.

Project Title: Hive Sentinel: The Hacker Confine

Academic Supervisor: Dr. Abdul Waheed Khan **Industry Supervisor:** Dr. Nabeel Ahmed Awan

FYP students group information:

*Note: A group cannot be more than 3 students.

S. No.	Registration No.	Student Name	CGPA	Email ID
1	B20F0165CS004	Mariyam	3.70	B20F0165CS004@fecid.paf-iast.edu.pk
2	B20F0279CS013	Qaseem-ul-Hassan	2.4	B20F0279CS013@fecid.paf-iast.edu.pk
3				

Abstract (Max. 100 words):

The "Hive Sentinel" project, a comprehensive solution addressing the critical issue of monitoring and managing honeypots to enhance cybersecurity. Honeypots serve as essential tools for detecting and analyzing unauthorized access attempts, but without a dedicated health monitoring system, organizations face significant risks. Hive Sentinel's framework leverages the Kill-Chain model and Deception 2.0 strategies to ensure proactive threat detection and effective mitigation. It offers features like continuous health monitoring, real-time threat detection, and snapshot restoration.

- 1. Automated deployment of high interaction honeypots for deception platform 2.0.
- 2. Health monitoring for high interaction honeypots for deception platform 2.0.
- 3. Machine re-spawning as per health monitoring guidelines.
- 4. Hackers' intelligence gathering from high interaction honeypots.
- 5. Dashboard to show gathered intelligent information of visual charts and statistics.

Industrial / Commercial / Social Impact (Max. 100 words):

The "Hive Sentinel" project has substantial industrial, commercial, and social impact. Industrially, it revolutionizes cybersecurity by offering a comprehensive solution for monitoring and managing honeypots. This innovation improves the overall security posture of organizations, reducing the risk of cyberattacks. On the commercial front, Hive Sentinel provides a competitive edge by enhancing incident response and threat intelligence. It integrates seamlessly with existing security infrastructure, saving costs and resources. Socially, the project strengthens data protection, helping safeguard critical assets, and ultimately enhances the security of personal information for individuals. It also contributes to a safer digital environment, making the internet a more secure place for all users.

Declaration: I/we hereby state that the defined goals of final year project (FYP) shall be completed within the due dates announced by the department, and I/we shall abide by all the rules set by the department.

Student (1) Registration no. & Signature	B20F0165CS004
Student (2) Registration no. & Signature	B20F0279CS013
Student (3) Registration no. & Signature	
Student (1) Class Advisor Studen	nt (2) Class Advisor Student (3) Class Advisor
Academic Supervisor (Signature & Date)	Industry Sapervisor (Signature & Date)
FYP Departmental Coordinato3r (Signature & Dat	ce) Chairman/HOD (Signature & Date)