

1. Study the Nature of Zero-Day Vulnerabilities:

- **MITRE ATT&CK Framework:**
 - Website: MITRE ATT&CK
 - This is a free, comprehensive database of tactics, techniques, and procedures used in cyber attacks, including zero-day exploits.
- **OWASP (Open Web Application Security Project):**
 - Website: OWASP Top Ten
 - Provides detailed explanations of various vulnerabilities, including zero-day vulnerabilities.
- **Exploit Database:**
 - Website: [Exploit Database](#)
 - A free archive of public exploits and vulnerable software, useful for understanding how zero-day vulnerabilities are exploited.
- **Google Scholar:**
 - Website: [Google Scholar](#)
 - Search for free academic papers on zero-day vulnerabilities and exploit detection.

2. Look into AI-Based Methodologies in Cybersecurity:

- **arXiv.org:**
 - Website: [arXiv](#)
 - A repository of free research papers, including those on AI and machine learning in cybersecurity. Search for terms like “AI in cybersecurity” or “anomaly detection.”
- **KDNuggets:**
 - Website: [KDNuggets](#)
 - Offers free articles and tutorials on AI, machine learning, and their applications in cybersecurity.
- **IBM Security Intelligence Blog:**
 - Website: [IBM Security Intelligence](#)
 - Provides free insights and articles on AI-driven security practices and technologies.
- **YouTube - "Black Hat" Channel:**
 - Website: [Black Hat on YouTube](#)
 - Offers free videos of talks and presentations on cybersecurity, including AI-based methodologies.

3. Define Project Scope and Objectives:

- **Coursera - Free Courses:**
 - Website: [Coursera](#)

- Search for free courses on project management, which include defining project scope and objectives. Courses like "Introduction to Project Management" are often available with free access.
- **edX - Free Courses:**
 - Website: [edX](#)
 - Offers free project management and cybersecurity courses that can help you define your project scope and objectives.
- **Project Management Institute (PMI) - Free Resources:**
 - Website: [PMI](#)
 - Provides free articles and resources on project management basics, including defining scope and objectives.
- **GitHub - Open Source Projects:**
 - Website: [GitHub](#)
 - Explore open-source projects related to zero-day detection and AI in cybersecurity to see how others have structured their projects.