# https://encrypted-tbn3.google.com/images?q=tbn:ANd9GcTLAZpQzmzAPnXtyNCq1onsRE4y0bvoWlMvd3YA8Lt715oLXEJxWAIT 5443 Web Technologies Study Guide **Module 12: Web Application Security**

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## Overview and learning outcomes

Security is a universal issue in all IT areas and it’s no expectation in web development. We are going to survey major security issues in the Web in this module, including:

1. Describe web security levels.
2. Describe general information security components and its application to web applications.
3. Describe OWASP Top 10 Project and the top 10 threats to web applications.

Other aspects of web security needs more advanced knowledge of web technologies and application development; you will learn more in other advanced courses. This module is related to course level learning outcomes 5.

## Task list

1. Follow the core learning materials listed in learning materials and use the review and research question to guide your readings.
2. Review and research (look for more resources if needed):
   1. What is the relationship between physical security, cybersecurity, information security, and web security?
   2. What is OWASP Top 10 project? How should we value and assess this top 10 list?
   3. How is web privacy related to security issues? How are they different?

## Learning materials

1. Required readings
   1. The CIA triad: <https://whatis.techtarget.com/definition/Confidentiality-integrity-and-availability-CIA>
   2. OWASP Top 10 Project: <https://www.owasp.org/index.php/Category:OWASP_Top_Ten_Project>
   3. <https://www.youtube.com/playlist?list=PLyqga7AXMtPPuibxp1N0TdyDrKwP9H_jD>
2. Additional resources and readings
   1. Mozilla resources
      1. <https://developer.mozilla.org/en-US/docs/Web/Security>
      2. Brief overview of top threats: <https://developer.mozilla.org/en-US/docs/Learn/Server-side/First_steps/Website_security>
   2. <https://www.youtube.com/playlist?list=PLbKl_RtocZetEzdHyZCgZHwaUHjE_jeQT>
   3. OWASP Top 10 2013
      1. <https://www.owasp.org/index.php/Category:OWASP_Top_Ten_Project#tab=OWASP_Top_10_for_2013>