**M2 (P3 extension) - Discuss how security issues in e-commerce can be overcome**

For M2, extend your report for P3 by discussing the security aspects of e-commerce, including both the benefits & drawbacks of potential solutions.

**Secure Socket Layers (SSL), HTTPS & RSA Certificates**

What is a SSL?

What is SSL used for and what security issue does it overcome?

What does SSL do? What is its purpose?

What is encryption?

What does encryption do? What is its purpose?

Which browsers (name several) understand and work with SSL?

What does HTTPS stand for?

What does the HTTPS protocol do? What is its purpose?

What does a HTTPS webpage contain? How does a user know if the e-commerce webpage is secure?

What protocol does the browser use to connect to the web server when credits cards details are ready to be transmitted at checkout?

What technology is used to return valid identification details back to the web browser?

Who does the browser contact after receiving the RSA digital certificate?

What happens if the check is successful?

What happens if the check is unsuccessful?

What are the potential risks if these technologies don’t work together well?

**Strong Passwords**

* + What are strong passwords?
  + Why is it important for customers to use strong passwords?
  + What simple rules can your e-commerce website set to ensure that customers use strong passwords?
  + What are the advantages of using strong passwords?
  + What are the disadvantages of using strong passwords?

**Alternative Authentication Methods**

* + What are the four other possible alternative authentication methods?
  + What are the advantages of using these methods?
  + What are the disadvantages of using these methods?

**Useful Websites:**

* + [Alternative authentication methods](http://cuc.carnet.hr/cuc2005/program/presentations/g6_dukic.pdf)
  + [15-ways-to-protect-your-ecommerce-site-from-hacking-and-fraud](http://www.cio.com/article/2384809/e-commerce5-ways-to-protect-your-ecommerce-site-fr/e-commerce/15-ways-to-protect-your-ecommerce-site-from-hacking-and-fraud.html)