## Home Assignment 1 EITN41

## Rasmus Olofzon, 9104192472

**A-4** What is the difference between a three-party scheme and a four-party scheme for credit card payments?

Blah blah blah.

A-7 Is SSL required in SET? Motivate your answer.

**A-13** What is the difference between authorization and authentication in VbV (3D Secure)?

**A-23** In PayWord, a unit could be, e.g., one cent (or one öre), so even though the payments are "micro", the hash chains could be pretty long. Could this pose a storage problem to Alice, who has to generate the entire chain when (before) she makes her first purchase from a merchant?

**A-27** In the PayWord protocol, give the Bank's algorithm for verifying how much money should be taken from the user's account.

**A-29** What is meant by a probabilistic payment? How does the Electronic Lottery Tickets scheme differ from Peppercoin from the user's perspective? How do they differ from the Merchant's perspective?

**A-31** How much is the transaction fee for a Bitcoin transaction and how is it determined?

**A-34** How is the difficulty in Bitcoin block hashing adapted so that it (almost) always takes about 10 minutes for the system to produce a new block, regardless of the computational power that enters the system?