Writing and Defending a Diploma Thesis VÕSA seminar

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Margus Ernits

My Subjects 2007-2017:

- Introduction to Cyber Security
- Configuration management systems (puppet)
- IT Infrastructure Services (DNS, DHCP, HTTPD, HTTPD, e-mail...)
- Linux Administration
- Scripting Languages (bash, python)
- Introduction to profession
- Digital processiong of audio/video (OpenCV, C++)
- Operating Systems
- Logging and Monitoring
- Robotics (local robotics club)
- etc







- VÕSA project and virtual learningspaces
- Thesis (Thanks to Henn Sarvele and Priit Raspel for greate ideas)
- DEMO thesises done in VÕSA project
- Possible topics

TTJ>100 The problem with lecturing





- Teaching the cyber (or ICT) is too theoretical and relies on powerpoint
- Distance learners don't have enought time
- Learnerd do not get enought hands on learning
- To learn cyber or ICT you need administrative privileges
- To play with malware or cyberattacks we need a safe sandbox for each student



- VÕSA Virtual Learingspaces and Simulation Environment (VLSE)
- The aim of the project is to create Simulation
 Environment and LearningSpaces for teaching ICT in problem based and hands-on
- Simulation evnironment is accessable from home (and from classroom)
- Simuation environment provides sandbox for each student
- Create learningspaces
 - Problem based
 - Hands-on
 - Interactive feedback



Web page -> Media Inject -> Defacement -> Solutuion



Home About Contest

The Kingdom of Banania lies on a flourishing archipelago of green islands between the continents of Fruitsalad and Barbecua. Its area is rougly 45 thousand square kilometres and it has about 1.6 million inhabitants. Bananian neighbours are Grenadillia, Mangomania and (unortunately) the Empire of Pineapplia.

While historically agricultural (as seen from its name), today's Banania has by great efforts of its citizens turned into a modern nation with a sizable hi-tech sector. Companies like Banana & Olafsson, International Banana Machinery (IBM) and others have established their branches in Banania and keep contributing towards the growing well-being of the society. Banania also has a good infrastructure in education that is topped by the Banania University and the Academy of Sciences.

Banania has extensive international relations, being the member of UN, International Olympic Committee and various other organizations. The country also has rich culture, ranging from its distinct folk music (that some experts consider the original source of









start very early or early (most important thing)

- Cooperate with your supervisor
 - Regular meeting with your supervisor
 - Choose your supervisor carefuley

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Common mistakes

- Weak topic
 - Hard to defend
 - Not novel





- Before start writing prepare a presentation
 - Topic
 - Background
 - Problem statement
 - Hypothesis
 - Method
- Present the problem to your friends, students, co-workers





- Abstract
- Introduction
- The Problem (use examples to explain the problem)
- Related work
- Your Idea
- Details (state clearly your's contributions)
- Future work
- Evaluation (provide evidence that your solution solves the problem)
- Conclusions

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Your's contribution

- Make sure that you state clearly:
 - What is your's contribution



Citations

- Text
- Tables
- Illustrations
- Code

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Content for defense

- There is a real problem
- This is important problem
- This is unsolved problem (at least for your company, research group etc)
- Present your idea how to solve this problem
- Present how your idea works
- How other people solved similar type of problems

TUD Possible topics

- Document with topics and subjects
 - https://docs.google.com/document/d/1Amp_Th6LcbK34yLGvI51OXzKniJStzAlFdqgoS0UiCQ/edit?usp=sharing
- List is under construction
- In case you want topic and supervisor then send an e-mail vosa@itcollege.ee





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