CMPG 315: PROJECT SUMMARY

NORTH-WEST UNIVERSITY   Group 04

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Overview:

Scenario:

- No suitable network infrastructure, only a business ISP fibre connection and ONT.
- Set up new office network.
- No high expenses, keep cost at a low and satisfy requirements of company.
- Network should support all computer equipment that were purchased as part of expansion. Equipment should also be included.

- Addition to setting up a network,
- Develop a **small, simple, text messaging app**. Can be used for non-confidential communication inside organisation.
- Computers will run Windows. Thus, it should work on Windows.
- Must work over Internet and fully portable. Reason: work from home and abroad

Group Task 1: Preparation

(Recommended to complete by 29th March)

Complete courses: (or similar)

https://www.udemy.com/course/manageyourtime/

https://www.udemy.com/course/git-started-with-github/

https://www.udemy.com/course/git-expert-4-hours/

https://www.udemy.com/course/project-and-project-management/

https://skillsforall.com/topics/cisco-packet-tracer

Write reflection (**250 words**):

- Discuss soft skills you learned from courses.
- Reflections of all members of group is to be included in final documentation, dis document should be handed in prior to or on the day of demo.
- Source that can help with reflective writing:
  - https://students.unimelb.edu.au/academic-skills/resources/reading,-writing-and-referencing/reflective-writing/reflective-writing
  - https://www.ed.ac.uk/reflection/reflectors-toolkit/producing-reflections/academic-reflections/general-tips

Meet in person:

- Get to know each other.
- Discuss work division, assign roles (group coordinator/ leader, determine group's internal work ethic).
  - Internal ethic includes: When, where, manner of work being done and what group considers a delinquency.
  - This should enable a group to identify when someone isn't contributing.

Timeline:

- Setup timeline for work project.
- Setup time contingencies of 20% just-in-case something happens.

Draft submissions:

Submission open on 8 April
- Submit draft versions of reflections (each member)
- Timeframe
- Summary of work ethic (one summary for whole group)
- Group leader submits these files.

Group Task 2: Continuous Reporting

Entire project timeline

- Keep notes and attendance for every meeting and work session.
- Keep record of each member's assigned tasks and responsibilities.
    - Each task has a milestone date that is realistic and achievable.
- Group leader responsible for keeping track of when tasks are completed.
    - Completed task sheet should be included in final documentation.
- Use GitHub to manage project.

Group Task 3: Topological Network Design

(Recommended to complete by 19ᵗʰ April)

- Complete design of network using Pocket Tracer, explained in pdf attached and uploaded.

Group Task 4: Text Messaging App Development

(Recommended to complete by 16 May)

- Design and build small text messaging app, connects via Internet, includes following features:
  - Must run on Windows (10 or 11)
  - Useable and user-friendly GUI
  - Send and receive text messages.
  - Send individual and group messages.
  - Fully portable (nothing installed for app to function on Windows)
  - Connects via Internet, NOT LAN. (Demo won't have LAN available)

What to submit on eFundi

1. Packet traces files, videos made for presentation.
2. Application files for messaging app
3. Documentation:
    a. Group member's reflections on online courses.
    b. Work ethic that group decided on.
    c. Description of network designed in Packet Tracer
    d. Budget for network
    e. Discussion on issues encountered, such as group conflicts, scheduling problems, technical problems etc.
    f. Project management documentation
    g. Reflection on group's experience with project. (Refer to GROUP TASK 1 for guidance)
4. Presentation files
5. Anything else specified in either project guidelines, or assignment submission page on eFundi.

Notes, considerations, and penalties

- ❖ No restrictions on development of app.
  - o Can use any IDE's, program languages etc.
  - o May not install anything on demo computer, no external libraries like runtimes, IDE's, language packs etc. Must be FULLY PORTABLE.
- ❖ Topological network design must be done in Packet Traces
- ❖ TRY TO KEEP IT SIMPLE
- ❖ Multiple group tasks can run parallel, only completion date is set.
- ❖ Submit all relevant media (documents etc) before due date, should be prior to demonstration.
- ❖ SUBMIT FULLY BEFORE PROJECT DUE DATE TO AVOID PENALTIES
- ❖ Submitting late will let you lose marks (calculations in pdf file 2)
- ❖ Must submit prior to demo, submission = demonstration
- ❖ Demonstrations will take place from 16th May. Exact dates will be communicated.
- ❖ Opportunity to adjust mark of each member will be presented after memo. (contribution mark in a sense, calculations in pdf 2)