

Module name and code	Fundamentals of Information Technology			
	4BUISO12C			
CW number and weighting	CW 1, 40%			
Lecturer setting the task with contact details and office hours	Olga Yugay, <u>oyugay@wiut.uz</u>			
	Wednesday, 11:00 - 12:00 ATB309B			
	Set appointment via email			
Submission deadline	16 March 2020 (online submission only)			
Results date and type of feedback	8 April 2020			
	Electronic feedback			
The CW checks the following learning outcomes:				
 To have strong understanding of information technology concepts and be able to explain its various components 				
To apply acquired knowledge in future workplaces as advanced IT users				

Task

General guidelines:

- The coursework must be submitted online through intranet system
- The coursework deadline is not negotiable. Cheating and plagiarism carry severe penalties.
 Your work must be properly referenced. All sources including material from the web must be acknowledged.

Task overview

The coursework requires you to produce a written report on the given task. You can complete the assignment **individually** or **paired** with a coursemate. The coursemate can be from different group.

Recommended word limit: 1500 words excluding information in tables, references.

To produce coursework:

- 1. Decide whether you work **individually** or in **pair** and provide your ID(s) in the <u>Google form</u> by **20 February**. You are not allowed to change the arrangement later.
- 2. Read the case scenario
- 3. Find and review software and hardware solutions
- 4. Write a report summarizing the findings using Google Docs
- 5. Git subtask: demonstrate how well you can use git to keep track of changes on several files (any files) and push updates to github under corresponding username

Case scenario

A start-up specializing in making <u>mobile applications (both Android and IOS)</u> aims to equip itself with relevant hardware and software tools. The start-up contacts an IT consultancy company to explore its options. On behalf of an IT consultancy company, you are required to explore relevant computers (desktop/laptop/server) and software solutions/tools to aid the development process (e.g. design and prototyping, development, project management, testing) and summarize your findings in the report. While compiling the list, you have to differentiate between the needs of various development team members, i.e. developer, designer, project manager, tester and make appropriate choice of both hardware and software further supported with justification.

Task details

Prepare a report summarising the findings and include justification with relevant recommendations taking into consideration suitability, costs, benefits and limitations, compatibility (if required).

In detail, your report should include the following:

- 1. Introduction
 - Describe the case, mention specific needs assumed and any other assumptions (e.g. size, mode of work, types of apps to be built)
- 2. Review of hardware¹ and solutions.
 - Include configuration details for computers and server
 - Group the hardware and software into different sets of options (e.g. option A set -"on premises oriented", option B set "cloud oriented", option C set "hybrid"), where each option has appropriate set of hardware and software solutions for each user category (designer, developer, project manager, tester). Specify description, advantages and disadvantages for each item.
 - Specify Saas/PaaS/laaS model(s) of the chosen cloud-based solutions
 - Table format is recommended for this section, see example below
- 3. Justification and recommendations.
 - Refer to the solutions listed in a previous section and provide justification and relevant recommendations about the above sets
 - Comment on the advantages and disadvantages associated with reliance on cloud and/or open source technology.

¹ The task is simplified not to include office and network related hardware and etc. Only personal computers/laptops and server

- 4. Conclusion
 - Make conclusions based on recommendations given above. Suggest further actions regarding the purchase and further arrangements.
 - Reflect on planning/collaboration while working on the coursework and provide link to Github repository
- 5. References (appendices if applicable)

NB: Please, consider using table format below for the review part of the coursework. Examples are given in red.

Name and Price	OS/browsers	Short description	Benefits	Limitations		
	support/					
Software Design and Prototyping Tools						
Adobe Photoshop CC Price: US\$407.88/year	Platform: Mac/Windows	Provide very short description in approximately 10-15 words, include only key information.	 List the key benefits for your chosen case in bullets Be brief 	 List the limitations in bullets Be brief Use <u>Vancouver numbered</u> referencing (1) 		
Figma Organisation Plan Price: US\$45/month	Cloud based SaaS solution Browser support: Chrome	Provide very short description in approximately 10-15 words, include only key information.	List the key benefits for your chosen case in bullets	 List the limitations in bullets Be brief 		

As you work on the coursework, you should use such tools as Google Docs and git.

Google docs instructions

Work on the coursework under Google account named with your ID. For example, o000XXXX@gmail.com, where XXXX is your ID. Share the Google Document version of the report with wiut.tutor@gmail.com.

There should be clear evidence of:

- detailed planning started early (e.g. at least before 20 Feb)
- progress made (Google docs: named version history)
- detailed history of edits
- use of comments
- collaboration (if the work was done in pair)

Git instructions

Demonstrate how you can use git to track changes made to a set of files. Create a repository, where you will be keeping track of changes made to files. The name of the repository should contain your ID number(s). Your username should be your ID. Add your pair and wiut-tutor/wiut.tutor@gmail.com as collaborator to your project. The project should have evidence of several commits related to updating files. If you work in pair there should be commits from both students. Demonstrate use of commit, branch, merge on a sample of files. Push the updates to GitHub and specify a link to your repository in the report.

Check that the CW has a standard cover page, table of contents, page numbers and bibliography. Your name should not appear on the cover page or anywhere else. Put your ID number on the cover page and on every other page.

Useful sources (consider using other resources as well)

https://www.g2crowd.com/ https://alternativeto.net https://www.capterra.com

Recommended structure of the report:

- 1. Introduction
- 2. Review of computers/solutions/tools
- 3. Justification and recommendations
- 4. Conclusion
- 5. Links: Google doc, Github
- 6. References

NB: Coursework related questions can be asked here: http://intranet.wiut.uz/Social/GetGroup/15

Format

- 1. Word-processed Times New Roman/ Arial 12, double-spaced and printed single-sided on A4 paper.
- 2. The cover sheet should state your ID number, module title and marker's name, available at http://sp.wiut.uz/Shared%20Documents/Forms/AllItems.aspx
- 3. Maximum number of words should not exceed 1500.
- 4. Include a contents page giving the headings and page numbers of each section.
- 5. Pages should be numbered.
- 6. Word-count must be included on the cover page (do not include attachments and bibliography in the word-count).
- 7. Please do not submit any loose pages.
- 8. Use Vancouver numbered referencing style

Submission requirements

Coursework must be submitted <u>electronically</u> through intranet. Login under your account, find the FIT module, Coursework 1 and submit your coursework there. Electronic submission only. No hard copy required.

File naming conventions

Always save the file as follows: Modulename.CWNumber.IDnumber

Example: **FIT.CW1.467**

This is your responsibility to put CW through the anti-plagiarism software before submission.

Assessment criteria/marking scheme

The report will be marked according to the following criteria:

- The quality of the submitted report
- There is a good evidence of the research performed in order to complete the task.
- There is evidence of critical thinking demonstrated in evaluation (justification) of the recommendations

All referenced sources should be acknowledged.

Component	Weight (marks)
1. Case introduction	10
1.1 Describe the case and specific needs assumed by the chosen company. Assumptions should be fully outlined to get full mark. Assumptions should be fairly well described to get a passing mark.	
2. Review of hardware and software solutions and tools	40
Review of computer hardware. To get full mark appropriate hardware choice is listed (desktop/laptop/server) taking into consideration the type of users. To get a passing mark, some attempt is identified	10
Option A "on premises oriented" set: 2.1 Description of tools. Brief and to the point description of 3 or more relevant solutions per user category should be provided to get full mark. Fair description of at least 2 solutions per category should be given to get a passing mark. Benefits and limitations are carefully considered.	10
Option B "cloud oriented" set: 2.2 Description of tools. Brief and to the point description of 3 or more relevant solutions per user category should be provided to get full mark. Fair description of at least 2 solutions per category should be given to get a passing mark. Benefits and limitations are carefully considered.	10
Option C "hybrid" set: 2.3 Description of tools. Brief and to the point description of 3 or more relevant solutions per user category should be provided to get full mark. Fair description of at least 2 solutions per category should be given to get a passing mark. Benefits and limitations are carefully considered.	10
3. Justification and recommendation To get full mark: full justification is done taking into consideration the specifics of a given case and relevant recommendations are given. To get passing mark: fairly justified taking into consideration only some of the specifics.	
4. Conclusion To get full mark: relevant conclusions are made taking into consideration the specifics of a given case and relevant recommendations are given. To get a passing mark: fair attempt to make conclusions taking into consideration only some of the specifics of the case/solutions	
5. Evidence of using Google docs, Git To get full mark: detailed planning started early (e.g. at least before 20 Feb). There is evidence of progress made (Google docs: version history, git: multiple commits, branch, merge), detailed history of edits, collaboration (if the work was done in pair). To get a passing mark: fair attempt to plan, collaborate and keep track of changes is present.	
6. General requirements. General requirements are fully satisfied get full mark. General requirements are fairly well satisfied to get a passing mark.	10
6.1 Presentation of the report. Report should be well formatted to get full mark. Report should be fairly well presented to get a passing mark.	5
6.2 Referencing. Good range of current references should be given to get full mark. Fair range of fairly current references should be provided to get a passing mark.	5