BINUS UNIVERSITY INTERNATIONAL
OFF-CAMPUS EXAM

DAY – DATE: Wednesday, January 20th, 2021 at 13.00 pm – 16.00 pm, Western Indonesia Time (Jakarta,GMT+07:00)	
SEMESTER:	ODD Semester 2020/2021
EXAM TYPE:	Off Campus Examination (FIN)
PROGRAM:	Computer Science
CODE - COURSE NAME:	COMP6341 - Multimedia and Human Computer Interaction
LECTURER:	D4048 - Raymond Bahana, ST., M.Sc
CLASS:	L1AC/L1BC
TIME ALLOWED:	Wednesday, January 20th, 2021 at 13.00 pm – 16.00 pm (180 minutes), Western Indonesia Time (Jakarta,GMT+07:00)

OFF-CAMPUS EXAM REGULATIONS:

1. Write your answers in **correct** and **proper English** only.
2. Students are responsible for preparing all their needs for the exam, for example: Internet connection, laptop, etc.
3. You MUST STAND BY 5 minutes before the exam starts by signing in the system.
4. Students must submit and upload their answers through the system within the exam time.
5. A student may complete and submit the answers of the exam into the portal before – but not after – the exam time ends.
6. No additional exam time will be given for tardy students.
7. A student will be considered cheating if he or she is suspected of doing plagiarism ***as already defined in the student guidelines. Plagiarism is committed through, but not limited to, the following acts:***
    - ***Copying the work of another student***
    - ***Directly copying any part of another person's work***
    - ***Summarizing the work of another person***
    - ***Using or developing an idea or thesis derived from another person's work***
    - ***Using experimental results obtained by another person***
    - ***Incitement by a student of another to plagiarize***
    - ***Copy pasting from a book / textbook.***
8. Any student who is caught doing the above action (s), will be listed by name and the Ethics Committee will decide whether or not the action is considered as cheating.
9. Should the Ethics Committee consider and verify your actions as cheating, **you will immediately face expulsion** from BINUS UNIVERSITY INTERNATIONAL/~~BINUS BUSINESS SCHOOL - MASTER PROGRAM~~ *).
10. If a student finds difficulty to upload the answers, they have to contact the staff within the exam time with evidence to further process.

*) Choose one

FINAL EXAM QUESTIONS

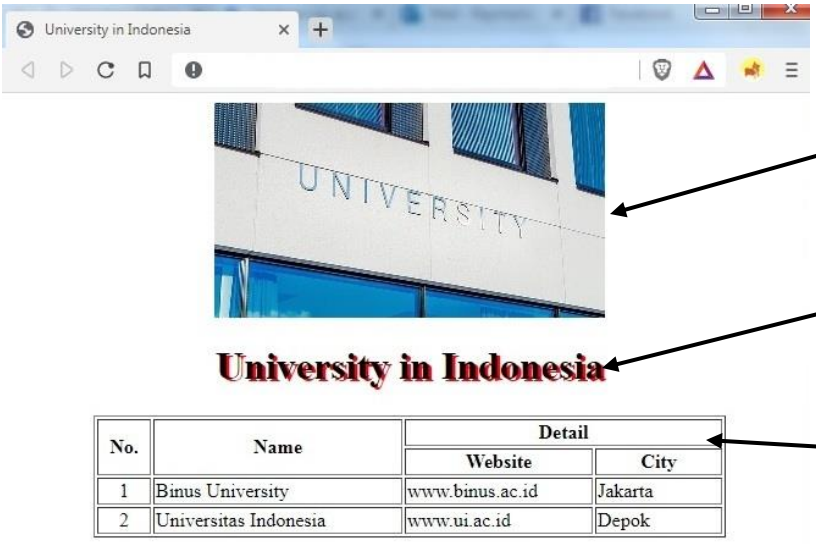
INSTRUCTION: PLEASE READ CAREFULLY!!!

You can answer the questions by typing on MS Word and/or by writing on paper(s) and then take a photo(s) of the paper(s). If you have more than 1 file, please put all files in 1 folder and zip that folder. The folder name is your BinusianID. When you upload to Content.jwc.binus.ac.id, please also send it to my gmail email, with the subject in the email: **Final Exam COMP6341 – [your name] [your binusian ID]**

1. Using Lempel-Ziv algorithm, create a dictionary/table with index number and the encoding output, based on this string **(10 points)**:

   KAKIKIRIKAKIKANANKAKEKKAKEKKUKAKUKAKU

2. Below is a picture of a website. Using HTML and CSS3, write the code to make this website. You may use any method you want for giving your table the right dimensions (either directly specifying the lengths in HTML or applying the lengths with inline styles). **(20 points)**



No.	Name	Detail	
		Website	City
1	Binus University	www.binus.ac.id	Jakarta
2	Universitas Indonesia	www.ui.ac.id	Depok

3. Please count the frequency of occurrence every character, the character code (in binary and use tree), and calculate the percentage of compression to compress the sentence below **(20 points)**:

   A SKUNK SAT ON A STUMP AND THUNK THE STUMP STUNK, BUT THE STUMP THUNK THE SKUNK STUNK

   using:
   a. Shannon-Fano Algorithm
   b. Huffman Coding

4. Scenario is a story about a user using the system. Based on your persona assignment (if you missed this assignment, write about your persona first before creating a scenario), create a scenario that describes how your persona is playing your game application. The scenario should be different with the scenario that you posted in the forum (**10 points**)

5. Pick one of screenshots from your game.
   Copy that screenshot on your answer sheet.
   Then, describe at least four of the Nielsen's ten heuristics that you followed. List each separately.
   Do you find any violation in your screenshot? If yes, please explain. **(10 points)**

6. What is the difference between useful and usable? Based on your screenshot at number 4, which part on your game is usable (if any) and which part is useful? **(10 points)**

7. When you developed your game application, which development process that you used, UCSD or the traditional software development process (Waterfall model)? And explain what you did in every step **(20 points)**