

CS2100 Final Assessment

Instructions For Students

The Final Assessment for CS2100 will be held on **Tuesday, 27 April 2021** from **5.00pm to 7.00pm**. This document contains the instructions and the expectations required from students who will be taking the Final Assessment.

1 Preparing for the Final Assessment

- 1.1. **ENSURE** that you are familiar with the **E-Exam SOP for Students** found [here](#). Login with your NUSNET account to access the web-page.
- 1.2. Ensure that you have the following available and running on a computer with internet access:
 - Web browser such as Firefox or Chrome
 - The Zoom desktop application (Audio should be enabled so that you can hear your proctor, microphone should be muted and video disabled)
 - FFmpeg (recommended) or other tools for screen recording
 - **(NEW):** A PDF scanner like CamScanner, Microsoft Office Lens or Adobe Scan for scanning your answers.
- 1.3. Ensure that you have the following available on a mobile device with internet access:
 - A camera for recording your surroundings
 - Zoom mobile application (Audio should be disabled and video enabled)
 - LumiNUS mobile application. Alternatively, a web browser such as Firefox or Chrome to access the LumiNUS web-page
 - **(NEW):** A PDF scanner like CamScanner for scanning your answers.
- 1.4. Alternatively, you may use an external webcam or camera connected to your computer instead of a separate mobile device.
- 1.5. The test is **OPEN INTERNET**. You are allowed to access both physical and digital notes, or other material. You may also access any online resource **as long as you do not use it to communicate with anyone within or outside of CS2100**.
- 1.6. **Only one monitor screen, one keyboard, and one mouse are allowed to be used. If you are connecting a WIRED keyboard or WIRED mouse to your laptop, ensure that your laptop keyboard and touch-pad are covered by a piece of paper throughout the assessment. Wireless keyboards and mice are NOT ALLOWED.**
- 1.7. You are allowed to use a calculator.
- 1.8. **No wireless equipment is allowed to be used.** This includes wireless mice, wireless keyboards, etc.
- 1.9. **No headphones or earphones are allowed to be used during the exam.**
- 1.10. **No other electronic devices, other than the ones stated above, are allowed to be used during the exam.**

2 Zoom Policies

- 2.1. Your Zoom details will be uploaded to your Gradebook under the items “Final Assessment Zoom Links”. Please check at least a week before the exam to ensure that you can access your Zoom meeting.
- 2.2. Please join your Zoom meeting by 4.30 pm latest. You **will be disqualified from the Final Assessment if you are not in the Zoom meeting by 4.50 pm** and will receive zero even if you submit your answers.

3 Recording Your Screen with ffmpeg

- 3.1 Instructions for using ffmpeg on Windows, MacOS and Linux can be found [here](#). You can also use other software like VLC, Quicktime, etc. Please familiarize yourself with how to record your screen before the Final Assessment.

4 Q&A During the Final Assessment (NEW!)

- 4.1. **(NOTE: Different instructions from your Midterm Test, so please read.)** Send your question to your proctor via **Zoom Chat**, which will be forwarded it to the examiners. The proctor will relay the instructors’ replies back to you.
- 4.2. Phrase your questions so that they can be answered with “Yes”, “No” or “No comment”. Ask only single questions at a time (i.e. do not ask questions with multiple parts).
- 4.3. If you get a “No comment” reply, it may mean that you have phrased your question in a way that cannot be answered with a “yes” or “no”. It can also mean that your question is already answered in the paper, or it is irrelevant, or answering the question may give out hint or mislead you. It may also mean that you have a multi-part question with some parts that are “yes” and some “no”. In rare cases, the reply may be “Rephrase”, in which case you are to rephrase your question appropriately.
- 4.4. Do not use any other device to communicate, or you will be **disqualified** from the final assessment and receive 0 even if you submit your answers. You must not be seen to be using ANY OTHER DEVICE during the Final Assessment.

5 Before 4.15pm

- 5.1. Ensure that you have fulfilled the equipment requirements and restrictions listed down in Section **1 Preparing for the Final Assessment**.
- 5.2. Set up your recording camera and work environment. Ensure that the following can be seen by the video footage of your camera:
 - The computer/laptop, including its keyboard and its monitor;
 - Your work environment, including the desk, and the writing materials being used;
 - Your upper body, inclusive of your head, shoulders and hands. This is to ensure the pair of hands shown belongs to you.
- 5.3. If required, prepare the command needed to start the FFmpeg screen recording.
- 5.4. Prepare your Matriculation Card or other photo identification (eg. Passport) **BEFORE** the exam. This will be required for attendance taking.
- 5.5. Prepare your notes, references and other writing materials.
- 5.6. You are advised to go to the toilet before the start of the exam.

6 From 4.15pm to 4.50pm

- 6.1. Enter the zoom meeting room assigned to you latest by 4.30pm. The room will be opened at about 4.15pm. You will be put in a waiting room, so please wait patiently.
- 6.2. The proctor will take attendance, and check your Matriculation Card or photo identification. While waiting for your name to be called, you may continue preparing your work environment if required.
- 6.3. If required, the proctor may ask you to adjust your camera or other equipment to ensure you adhere to the required setup.
- 6.4. The Final Assessment consists of three files available on **LumiNUS > Files > Final Assessment**:
 - The question paper: **exam.pdf**.
 - The answer sheets: **ans.docx** and **ans.pdf**.

In the event that LumiNUS is down, the above documents will also be made available on the CS2100 website <https://www.comp.nus.edu.sg/~cs2100>.

- 6.5. If you use the answer sheets provided, remember to submit only a pdf file and rename it to your Student Number (eg: A1234567X.pdf).
- 6.6. The proctor will give you the instruction to start the screen recording.
- 6.7. Await any further instructions from the proctor.
- 6.8. Please handle all your biological needs first before the start of the assessment. You are to refrain from visiting the toilet during the assessment. If you absolutely must, please obtain permission from your proctor first, and keep it within 3 minutes. You are allowed to visit the toilet only once during the assessment. During this time you may exit the view of the proctoring camera.
- 6.9. If you exit the view of the proctoring camera more than once or for more than 3 minutes, you will receive 0 mark for the assessment.**

7 From 4.50pm to 5.00pm

- 7.1. All to get ready for the start of the exam.
- 7.2. You may download the question paper **exam.pdf**. If you intend to use the answer sheets provided, you may also download **ans.docx** or **ans.pdf**.
- 7.3. You are not allowed to start answering until you are told to do so.
- 7.4. In the event that LumiNUS is down, the question paper and answer sheets will be made available on the CS2100 website at <https://www.comp.nus.edu.sg/~cs2100>. Listen to the instructions from your proctor and check your email for instructions.**

8 From 5.00pm to 7.00pm

- 8.1. At 5.00pm, the proctor will release the password by reading it out to you and also typing it on the Zoom text chat. This will signal the start of the 2 hours of the Final Assessment.
- 8.2. Your recording camera should be switched on at all times.**
- 8.3. You may visit the toilet at most ONCE for at most 3 minutes during the Final Assessment. This is the only time you are allowed to leave the view of the proctoring camera.**
- 8.4. If you leave the view of the proctoring camera more than once or for more than 3 minutes, you will receive 0 mark for the Final Assessment.**
- 8.5. You are not allowed to communicate with anyone other than the proctor or other teaching staff during the exam.** This also includes anyone outside of the CS2100 module.
- 8.6. If you require any clarification with regards to the exam questions, **please ask your proctor, who will relay your question to the course instructors.** The proctor will also relay their answers back to you.

9 7.00pm: Submission of Answers

- 9.1 Stop writing when you are told to do so.
- 9.2 After the end of the assessment, you have **10 minutes** to scan your answers using CamScanner or similar tools. During this scanning time you may turn off your proctoring camera if you are using it to scan.
- 9.3 If you are using other equipment to scan such as your scanner, please put your scanner in view if possible.
- 9.4 Scan your answers into a **SINGLE PDF FILE** with your **Student Number as the filename** (eg: A1234567X.pdf).
- 9.5 Upload your pdf file to **LumiNUS > Files > Final Assessment > your tutorial group > your personal folder**.

10 After the exam

- 10.1. Please wait for instructions from the Proctor on when you can leave the Zoom meeting.
- 10.2. After leaving the zoom session, you may stop the FFmpeg recording. Name your file with your Student Number (eg: A1234567X.mp4)
- 10.3. Ensure that the file size of your recording file does not exceed 800MB.
- 10.4. Submit the FFmpeg recording by **11.59pm on the next day** HERE:

Video Upload Link:

<https://mediaweb.ap.panopto.com/Panopto/Pages/Sessions/List.aspx?folderID=336045d5-b702-4731-9ba5-ad1500d6261a>

11 Frequently Asked Questions

- 11.1. What happens if the recording stops or pauses halfway through the exam?
Ans: Attempt to resume or restart the recording. If required, you will upload multiple video files.
- 11.2. Can I display my screen on an external monitor with the screen on the laptop off?
Ans: Yes, if the monitor on the laptop is off at all times. To prevent problems such as the laptop screen turning on accidentally, keep the laptop lid closed or cover the screen physically.
- 11.3. What if I have more than one screen?
Ans: All additional screens must be switched off AND covered. Use paper, cloth etc to cover all additional screens. If any additional screens are left open, you are considered to be using them even if they appear to be powered off. Please cover ALL additional screens.
- 11.4. What does “Any printed or online materials” mean?
Ans: Literally what it means. You can use anything printed like textbooks, notes, tutorials, etc., and any website, electronic document etc. Yes, Google is allowed.
HOWEVER, you MUST NOT communicate at all with anyone, whether through a website, through a Google sheet, etc. There is to be NO COMMUNICATION OF ANY FORM except with the proctor.