Exam Policy:

- 1. The exam is close book exam which means you cannot search answers using laptops, phone online; open your vs code to see class demos, lab solutions, etc; no cheatsheets on your desks, etc. If you share your answers with your friends, you and your friends get NC.
- 2. You must take the exam using ProctorTrack, otherwise 0 for the exam. Make sure you use ProctorTrack correctly, submit ProctorTrack at the end of the exam.
- 3. Make sure you have camera facing straight to your face during entire exam. ProctorTrack will record your desktop and your camera, if your face isn't shown in the video, you'll receive 0 for the exam. Make sure your face is facing straight to the screen too.
- 4. You're not allowed to leave the desk, because no one knows what will happen behind the camera.
- 5. only 1 tab in browser is allowed. Don't open Sakai in multiple browsers or multiple tabs. If you do, you'll facing technique issues which prevent you to go back the exam. If you opened multiple tabs which cause your answers are not saved, you need to accept getting 0 as the grade.
- 6. You're not allowed to use developer tools of the browser during the exam.
- 7. All questions will be in one page, I do this is to prevent Sakai doesn't load or takes time to load the next question. The downside is you need to remember to save your answers constantly.
- 8. Make sure submit your exam 5 minutes earlier. If you wait till the last minute to submit paper, the timer may be faster than you which cause all your answers are not saved. I'll give you extra 5 minutes.
- 9. If you have technique problems taking the exam, you MUST report to me on Teams immediately.

Exam time: May 4th 10:00 am ~12:05pm.

Questions in the exam – Total: 40 points

- 1. True/False 10 questions 10 points
- 2. Programming Questions 4 questions 30 points
 - a. TypeScript 10 points add Types
 - b. Module Pattern 7 points
 - c. Memoization 6 points
 - d. Observer/Singleton/Strategy One of them 7 points

Review:

Lecture 1: Git – only in true/false

Not in the exam:

Page 2 and 3

Page 8 - .gitignore

Page 14 – git diff

Page 15 – git log

Page 23 - Updating The Last Commit

Page 32 – README.md

Page 39 – start a repository

Page 40– watch a repository

Page 42, 43, 44, 47, 48

Lecture 2: TypeScipt – true/false and programming question

Not in the exam:

Page 3, 4

Page 7 – TypeScript Compiler

Page 8 – Typescript setup

Page 9-11 – tsconfig.json

Page 40 - 43 - Type Assertion

Lesson 3: Module, Singleton, Observer – only in programming question

Only the content below in the exam:

Page 13 – 14 – Module

Page 15 – 16 – Singleton

Page 17 – 18 - Observer

Lesson 4: Strategy, Memoization – only in programming question

Only the content below in the exam:

Page 15 – 18 – Strategy

Page 19 – 23 – Memoization

Lecture 5: Browser and engine – not in the exam