

CS572 Final exam Review

The final exam will consist of those questions. Total Score: ?

1. Short answer questions – ? questions – ? points
2. Programming question – 1 question – ? points

Location: M115

Time: April; 21, 10am ~ 12:30pm, 2.5 hours (Arrive 5 minutes earlier). Find your name tag to sit.

Exam Policy:

There is no tolerance policy for exams. **You will be asked to leave the exam room immediately without a warning** once you do the following things which mean you'll get **NC**.

1. You are caught cheating or trying to cheat.
2. Answers should be written with a Pen or Pencil, but if you want to use a pencil please bring your own eraser and sharpener. You're not allowed to borrow from other students or proctors during exam.
3. All mobile phones should be turned off and submitted along with your luggage at the beginning of the exam.
4. No restroom. The time you leave the room is the time you submit your paper.
5. You're not allowed to ask/get extra papers from other students or proctors. All your notes must be written on the exam paper provided. Use the back side if you need to draft.
6. Please write down your answer clearly. If I cannot read your answer, you'll not get credit.
7. Write your answers with clear handwriting and clear English language. If I don't understand your handwriting you might receive the big O-notation.

Get yourself familiar with the following topics:

- How SPA work?
- ngModule, Bootstrap your app
- Components, Tree of Components, Inputs, Outputs, ng-content, Emitting custom events, using \$event, using template variables, Component lifecycle hooks.

- Shadow DOM and view encapsulation
- Change Detection, how it is triggered? Zones, Angular CD Algorithms, Angular monomorphic class output, using Immutables/Observables.
- Know the difference between attribute and structural directives
- Using HostBinder and HostListener decorators.
- Using ViewChild and ContentChild decorators.
- Dependency Injection framework, how Angular instantiate our services (custom classes) @Injectable
- Cross Component communication.
- Routing/Changing URL techniques and why we use each of them.
- Main components to implement Routing. Reading params, query params and fragments, Guards.
- Differences between JiT and AoT compilation – Lazy loading, preloading, eager loading
- Pipes, Pure pipes, Async pipes.
- JSON Web Token Authentication.

Programming Questions:

1. Template Driven form – HTML template, Template Directive, Validation (required, maxlength, minlength..) ngIf, ngFor
2. HTTP CRUD - Observable
3. Service

See Lesson15 – http-demo, form-demo