

## Review for midterm exam

10:00 AM – 12:30 PM, Tuesday (10/10/2023)

### 1. NodeJS

- Create Restful API using NodeJS Express: Naming convention

### 2. MongoDB

- CRUD for a new document
  - + Create: insertOne
  - + Read: find
  - + Update: updateOne, updateMany
  - + Delete: deleteOne, deleteMany
- CRUD for an array inside a document
  - + Create: update with \$push
  - + Read: find
  - + Update: update with \$set
  - + Delete: update with \$pull

### 3. React Hooks

- **useState**, **useEffect**, useMemo, useRef, useReducer
- Context: createContext, useContext, provide Context
- Custom Hooks
- pure functional component: React.memo

### 4. Exam structure

- Understanding the existing code
- Coding: React Functional components, Restful API, CRUD MongoDB
- **Compro students will have one more question (10%), but it is not a bonus for MSD students.**