

## Requirements

- Must have:
  - The system should allow HR to hire new employees
  - Employees must be able to request modifications to the contract
  - The system must allow HR to modify existing contracts
  - The system must allow HR to terminate existing contracts
  - The system must have two roles, HR and employees
  - The system must allow HR to create employee roles
  - HR employees must be able to create an account for the candidate
  - HR employees must be able to make the first draft of the contract to be shared with the candidate
  - Candidates must be able to request modifications to the contract as a part of the negotiations process
  - Contracts must be signed by both sides once an agreement has been reached
  - Contracts must contain employer name and address
  - Contract must include the name of the employer and address of the candidate
  - Contracts must include the duration
  - Contracts must include the number of hours per week
  - Contracts must include the number of vacation days
  - Contracts must include the pension scheme
  - Contracts must include the salary scale and steps
  - Contracts must include additional benefits information
  - Employees must not be able to cancel or edit contracts of other employees (unless they are from HR)
  - The individual components of the system need to be scalable
  - The system needs to implement microservices
  - The system will be built using Java 11, Spring Boot and Gradle
  - Interactions are handled by APIs
  - The system must authenticate users using a unique NetID(String) + password
  - The system must encrypt passwords and store them safely
- Should have:
  - Employees should be able to request for documents and certificates
  - Employees should be able to request for sick leaves
  - Employees should be able to request for special leaves
  - Employees should be able to request contract termination
  - The system should allow for easy integration with other API systems
  - The system should be modular
  - The system should have Spring Security
- Could have:
  - Roles could have a dedicated set of available scales
  - Temporary contracts could be only renewed more than once
  - Temporary contracts could last for a maximum of 5 years
  - Employees could be promoted after positive advice from the Dean (Need clarification from TA)
  - Employees could be able to receive a jump to the next step within the same salary scales every 12 months
  - Jumps from one salary scale to the next one could only be done only within a promotion procedure
  - Job contracts could start on the 1st or the 15th day of each month.

- HR Employees could notify candidates with a close-to-terminate contract by two months before the end date of the contract.
  - Contracts could be extended depending on the conditions/constraints mentioned above.
- Won't have:
  - Application won't have user interface

Questions for TA:

- Should there be a way for new HR hires/promotions
- "Employees can be promoted after positive advice from the Dean" - Clarification
- Further constraints are could have?
- How should employee and HR agree on a modified contract, should employee be notified
- Do sick leaves need to be approved and somehow stored