

# Project 1 (Due 03/21/2025)

## Tax Filing Management

### Objective:

Create a browser-based, full-stack tax-filing management application that a CPA (Certified Public Accountant) might use to organize tax returns from multiple taxpayers/clients. The CPA must possess the ability to create new returns and view all of them, as well as update and delete individual returns. Additionally, the CPA must be able to categorize the returns by employment sector (corporate, military, education, etc.), move them from one category to another, and view them by category. The site should provide the CPA with an easy portal to do their job, so having clear and concise UI/UX is critical. The application should also take into consideration possible edge cases such as the CPA's overall workload having a maximum capacity per tax year and/or per category, or the handling of category deletion for categories containing active returns.

### Functional Requirements:

- Must be a full-stack solution consisting of:
  - React frontend (HTML, CSS, TS)
  - Spring Boot (Java 17) backend
  - MySQL database
- Code should be available in a public GitHub repository
- Possesses all required CRUD functionality
- Handles edge cases, errors and exceptions effectively

### Non-Functional Requirements:

- Well-documented code
- Code upholds industry best practices (Solid/Dry)
- Industry-Grade UI (User Interface)
- Intuitive UX (User Experience)

### Bonus Objectives (merely suggestions):

- Open the site up to multiple CPAs who can log in separately, then see only returns assigned to them and not those of their colleagues
- Deploy some or all of the site to the AWS Cloud
- Add Spring Security to enable basic authentication and/or role-based access
- Anything else practical...*but finish the requirements first!!*