# CPSC 349 - Web Front-End Engineering

# Homework 2: HTML, CSS, and JavaScript Exercise

## 1. Objectives

This assignment aims to:

- Develop proficiency in HTML, CSS, and JavaScript.
- Enhance the ability to accurately replicate a web page's appearance and functionality.

## 2. Description

In this exercise, you will create a web page from scratch using HTML, CSS, and JavaScript. The goal is to:

- Strengthen your ability to edit and structure HTML and CSS files.
- Build foundational skills for generating dynamic HTML output in future server-side scripting tasks.

## 3. Task

You will be provided with a demo video (**Demo.mov**) showcasing a web page. Your objective is to replicate the web page's appearance and behavior as closely as possible by creating the following files:

- **index.html** (HTML structure)
- **styles.css** (CSS styling)
- **script.js** (JavaScript functionality)

## 4. Requirements

**Development**

- Use a text editor to create your files (no website builders or frameworks).
- Apply CSS to style the web page.
- Ensure the web page behaves exactly as shown in the demo video.

**Features**

Your web application should include the following functionality:

- **Movie Display**
  - Fetch movie data using **The Movie Database (TMDB) API**: [TMDB API Documentation](#).
  - Sign up for a free **TMDB API Key** to access movie data.
  - Display 20 movies per page.
  - Each movie should include:
    - Movie poster (image)
    - Movie title
    - Release date
    - Average rating
- **Pagination**
  - Show the current page number at the bottom.
  - Include "Previous" and "Next" buttons for navigation between pages.
- **Search Functionality**
  - Implement a search bar that allows users to search for movies by title.
  - Display only the movies that match the search input.
- **Sorting**
  - Include a dropdown menu to sort movies by:
    - Release date
    - Average rating
- **Consistency with Demo Video**
  - Ensure all interactions and visuals closely match the **Demo.mov** video.

## 5. Testing

- Open and test your web page in **Google Chrome** to ensure proper functionality.

## 6. Submission

Submit only the following files:

- **index.html**
- **styles.css**
- **script.js**
- **readme.txt** (optional)

Ensure that your submission meets all requirements and accurately replicates the web page demonstrated in the provided video.