

# MSc. In Computing (Enterprise Software Systems)

Module: Enterprise Web Development

Assignment 1 – React SPA  
(Client-side)

Due date: End of semester

# Assignment 1

- Objective:
  1. Design and Develop a SPA, using React, for a context of your choice:
    - Productivity, Social networking, E-Commerce, etc
  - OR
  2. (Alternative) Extend the Movies Fan apps (Equal weighting).
- Constraint: Must use create-react-app and Storybook
- CA percentage: 60%
- No robust persistence/server-side necessary.
- Deliverables:
  - GitHub repository, including README (details later).

# Grading spectrum

- **Good (40-60%) – Theme: Foundation-standard app.**
  - **Similar standard to the Movies Fan app part2.**
  - **Qualities:**
    1. **Design: Mix of Stateful and stateless components. Data down/Actions up; Core hooks.**
    2. **UI – User input, e.g. filtering; Dynamic behavior; Some storybook support.**
    3. **Routing - ~3 routes, 1 parameterized.**
    4. **Data model: Open API; 2+ entities.**
  - **Alternative (Extend Movies Fan app):**
    - **Uses 2 new API endpoint**
    - **3 views/routes, 1 parameterized.**

# Grading spectrum

- **Excellent (60-80%) – Theme: Complete Demo app.**
  - **Similar standard to the Movies Fan app part 3 - 4.**
  - **Qualities:**
    1. **Design – Composition patterns. State Management/Contexts. Custom hooks.**
    2. **UI design – Web forms; Storybook catalogue. Basic Authentication support; Public/Private views.**
    3. **Routing – 5+ routes;; Header/Footer navigation; Data Hyperlinking. Advanced routing, e.g. Nested routes; Extended Link.**
    4. **Data Model – 3+ entities; Stub API for write operations (save/update/delete)**
  - **Alternative:**
    - **>2 new API endpoints.**
    - **Similar criteria in 1-3 above for new features.**

# Grading spectrum

- **Outstanding (80-100) – Theme: Independent learning.**
- **Possible areas include:**
  - **Advanced Web Form processing (useForms hook).**
  - **Storybook addons.**
  - **Styled Components.**
  - **Other Hooks.**
  - **Memoization.**
  - **Redux.**
  - **3<sup>rd</sup> party components.**
  - **3rd party authentication (e.g. Firebase, Cognito); Customized views,**
  - **Higher Order Component implementation.**
  - **Testing.**
  - **Other.**

