

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: Best Practices 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: Professional-standard; Independent learning.**
- **Possible features include:**
 - **Advanced Web Form processing (useForms hook).**
 - **Storybook addons.**
 - **Styled Components.**
 - **Other Hooks.**
 - **Memoization.**
 - **Redux.**
 - **3rd party components.**
 - **3rd party authentication (e.g. Firebase, Cognito); Customized views,**
 - **Higher Order Component implementation.**
 - **Testing.**
 - **Other.**

