

# DS3103 Webutvikling exam 2024

Candidate number: 29

## Overview of Features and Techniques

This application allows Trump supporters and administrators to browse staff profiles and merchandise, purchase items, and manage administrative tasks. Users can view lists of staff and merchandise retrieved from an API, with details like names, roles, prices, and images. Admins can perform CRUD operations (create, read, update, delete) on both staff and merchandise, while regular users can search staff by name, filter merchandise by price, and manage a shopping cart.

## Techniques Used:

- **React Functional Components:** Modular design for clean and reusable code.
- **React Routing:** to implement different views for different parts of my application, without having to do a full-page refresh.
- **State Management:** `useState`, `useEffect` and `useContext` to manage data and dynamic updates.
- **API Integration:** Axios HTTP requests to the Web API for fetching and managing data (CRUD).
- **Responsive Design:** CSS Grid, Flexbox, and media queries ensures that layouts work well on all devices, while following mobile first approach.
- **Form Handling:** Validations and labeled inputs for accessibility.
- **Image Uploads:** A reusable service for handling profile and product images.
- **Shopping Cart Management:** React Context API for managing cart state and `localStorage` for persistence.
- **Error Handling:** try-catch blocks and feedback messages for success or error states.

- **Search Optimization:** Real-time updates for filters with user-friendly feedback.

### **Accessibility (Universal Design)**

To ensure accessibility for all users, the application incorporates high-contrast text and large fonts for readability. All images include alt text for screen readers, and forms have labeled fields with keyboard navigation. Buttons and interactive elements provide clear focus styles for better usability. Real-time feedback is used throughout the application for actions like form submissions, searches, and cart updates, making the interface user-friendly and intuitive.

By combining modular coding techniques with accessibility features, the application ensures a seamless and inclusive user experience.