

## Bootstrap Upgrade

**Client:** Anonymous

**Business Size:** Corporation

**Industry:** High end Retail

**Country:** UK

**Technology:** Bootstrap, HTML, CSS, jQuery, CI/CD using Git

## Objective: Upgrade Software

### Background

The client is a renowned global luxury retailer who has been a long-standing client of OCS. Following a security scan on one of their business-critical applications, it was identified that some packages were outdated and contained vulnerabilities, necessitating their upgrade. The most critical and error-prone package was the Bootstrap framework, which required a version update.

### Challenges

The application utilised multiple Bootstrap-related packages. After upgrading all Bootstrap versions from 3.5 to 5.2, significant visual and functional issues emerged across the application. To address these, the updated version with the older QA environment were compared and the issues systematically resolved.

Initially, the focus was on fixing the functionality and visuals of the data tables and pagination components, which were widely used throughout the application. Following this, all pages were reviewed and corrected by comparing them with the older QA environment.

Most issues were resolved by referencing Bootstrap documentation and understanding the differences between versions 3.5 and 5.2. Errors across all pages were rectified and it was ensured they were functionally operational through comprehensive testing.

Given the diverse user roles within the client's application, the application was tested repeatedly under various user profiles, identifying and resolving issues specific to each scenario.

### **Solution and implementation**

The technologies used on this assignment were:

- Frontend: HTML, CSS, jQuery, Bootstrap
- CI/CD: Git

All issues in the application were tracked after being discovered, solved, and evaluated. Visual Studio 2022, MS Teams tools were used. Git and SourceTree were used for branch management.

### **Results**

Development work in the client's web application:

- fixed bugs in the customer workflow
- resolved all visual issues after bootstrap upgrade
- resolved all functional issues after bootstrap upgrade

Application was tested multiple times, including thorough testing with different user types and scenarios.

Issues and bugs that needed to be addressed to the customer were resolved when and appropriately.