

Fashion Smart Store

Lucrare de disertație

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Introduction

1. Motivation

- Web applications increasing in popularity
- The relevance of e-commerce domain
- The need of high security systems and data protection

2. Primary Objective

- To present a real concept of a secure e-commerce web application
- Preference for security and user constraints, rather than for high configurability

State of the Art

1. The vulnerabilities of web applications and browser transparency
2. The Open Worldwide Application Security Project (OWASP)
 - Their role in the web applications domain
 - OWASP Top Ten and the relevance of this document in the development process of the presented application

Proposed Solution

1. Single Page Application (SPA)
2. Technical structure
 - MongoDB Cloud Database
 - NodeJS Express + Mongoose server-side application
 - Angular client-side application
3. External APIs
 - Cloudinary
 - Stripe Payments

Presentation of the Application

1. Main flows

- Browsing the store
- Adding items to cart and creating an order
- Checkout process
- Visiting the "My Account" page
- Site administration section (3 sub-flows)

2. Security systems

- Authentication mechanism
- JSON Web Token authorization
- Cross-Site Request Forgery (XSRF) protection
- Angular guards
- Input sanitization
- Express rate-limiter and DoS protection

Conclusions

1. The importance of cyber-security in web applications
2. Concluding that highly configurable and overly informative web applications cannot be entirely secure
3. Future plans and visions

Thank you for your attention !