

# Beauty Meets Code: Development of a Full-Stack Web Application for a Makeup Services Platform

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## Abstract

This project was designed for client which consists of a makeup firm. The requirements of the project were given by said client.

The objectives of the application were given by the client. They are the following:

- The users must be able to create accounts in the system with their personal information.
- The registered users must be able to schedule appointments of given categories with the following information:
  - A brief description of the appointment.
  - An estimate of the time it will take to finish the appointment. A minimum of 60 minutes.
  - The category.
- The user must be able to browse the available courses, as well as enroll into them.
- The user must be able to browse the available products, as well as add them to the shopping cart.
- The user must be able to perform the payment, whether it's for an appointment scheduling, an enrollment into a course or to pay out the cart.
- There must be an Administrator with the following capabilities:
  - View, accept and decline appointments.
  - Create appointment categories.
  - View, create and modify courses.
  - View, create and modify course categories.
  - View, create and modify products.
  - View, create and modify product categories.
  - View and create users.
  - View invoices.

The application was developed using modern tools and paradigms. First, a comprehensive API was specified using the **Open API** specification. Then, the back-end was designed using Java and the Spring Boot framework to comply with this API specification. Afterward, the front-end was designed based around said specification to fulfill all the characteristics required by the client.

The project successfully met the client's requirements by delivering a fully functional web application tailored for a makeup firm. Through a clear API specification, robust backend development with Spring Boot, and a responsive frontend, the system enables both users and administrators to perform their respective tasks efficiently. All functionalities were implemented as requested, except for the payment logic, which will be integrated later through an external application. The use of modern development practices ensured scalability, maintainability, and a smooth user experience.

## **Keywords**

- Full-Stack Development
- Spring Boot
- Web Application
- API Specification
- Appointment Management