Client-server environment:
Personalised ordering system for handmade books.

Accenture Bootcamp, 2022

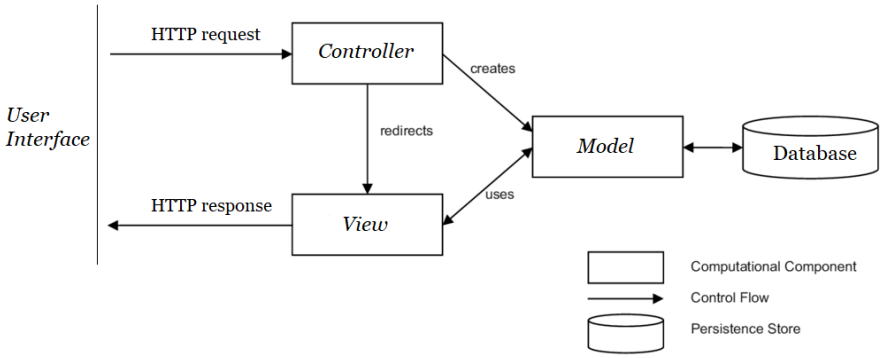
This is an application for creating personalised orders of handmade books. It allows for visual tinkering with different features whilst revealing in the price calculator how each selection affects the expenses.

In person, personalised ordering is a repetitive, time-consuming process which begs automation. Owners of the business say that it can take up to three weeks of continuous advising. For each and every customer, the process starts all over again. It drains company's resources and raises the price of the product.

On the other extreme, a customer already knows what he or she wants. What she doesn't know is that she has exhausted all the possibilities a book can offer. When given the price, the shock leads to dropping the order altogether. Reviving discussions is difficult. The idea behind this project is to slow this decision process while retaining the customer's sense of agency unaltered.

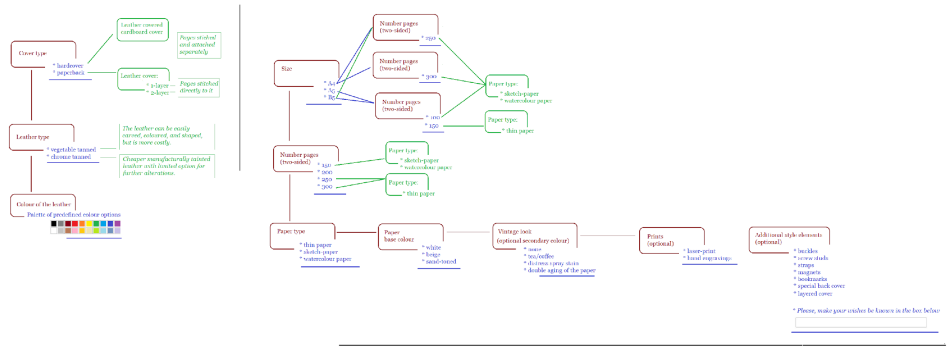
The application allows for unique book designs to be created while monitoring the price as various details are added and removed. It highlights priorities and leads to additional features one by one, leaving only the most creative advisory aspects to the experts in person. This should facilitate the interactions between the craftsman and client making the shopping experience as smooth as possible.

**Project structure** follows a layered pattern with the user interface (UI) at the front and the database (DB) at the back surrounding the standard Model-View-Controller (MVC) architecture for the internal workings of the program: UI <-> MVC <-> DB.



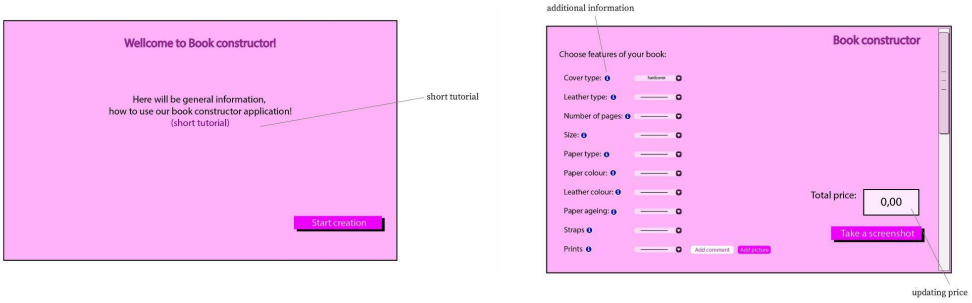

*A figure showing the project structure using MVC architectural framework (larger).*

The following is a diagram offering logistics behind the personal ordering system.



*A diagram showing the automated ordering options within the program (larger)*

Two prototype pages for the user interface have been designed to serve as an illustration for the final product (for larger view: page 1, page 2).




**Tools** used in this project are as follows:

IntelliJ IDEA

*Java programming will be accommodated by this platform.*

Java Persistence API

*The SQL operations will be accommodated on the IntelliJ IDEA using Java Persistence API.*

MySQL Workbench

*For the database used in this application, the MySQL Workbench environment will be employed.*

Spring Boot

*The graphical user interface will be built using the Spring Framework to further the functional qualities of the system for real-life usability.*

Trello

*During the workflow, Agile principles will be observed using the Kanban inspired web application Trello.*