

# Fabio Meloni

<https://faboid.github.io/portfolio/> • <https://github.com/Faboid> • Italy

## Skills

---

Languages: C# • XAML • SQL • HTML • CSS • Javascript • Italian(Native)

Frameworks and Databases: ASP.NET Core MVC • React • WPF • MySQL • SQLite

Tools: Visual Studio • MySQL Workbench • Git • GitHub • Postman

## Projects

---

### Portfolio Site

<https://github.com/Faboid/portfolio>

- Hosted with GitHub Pages, live at <https://faboid.github.io/portfolio/>.
- Automated updates publication using GitHub Actions.
- Built with React, Javascript, CSS, and HTML.

### SuperSold

<https://github.com/Faboid/SuperSold>

- Developed a marketplace website using ASP.NET Core MVC with user roles and administrative privileges. Administrators can delete existing products and prevent the publication of new ones.
- Used EF Core to communicate with a MySQL database structured with MySQL Workbench.
- Implemented cookie-based authentication using ClaimsPrincipal and protected account credentials by hashing passwords with BCrypt.
- Enhanced user experience through dynamic product loading using jQuery (AJAX).
- Integrated MimeKit and Mailtrap for sending HTML emails with password reset links.
- Automated the removal of expired tokens with a polling operation through a custom IHostedService.
- Separated controller logic and dependencies into commands and queries using MediatR.

### Backuper

<https://github.com/Faboid/Backuper>

- Developed an MVVM WPF application to manage automatic backups of files and folders.
- Created a startup folder shortcut using IWshRuntimeLibrary to perform backups at startup.
- Implemented a custom file explorer window to navigate the file system and obtain the backup path.
- Safeguarded against corrupted data and anomalous states with smart use of polymorphism.
- Tested business logic with XUnit and Moq.

### Password Manager

<https://github.com/Faboid/PswManager>

- Designed a multi-step process to secure stored passwords.
- Implemented a finite state machine to handle data encryption.
- Provided support for storing encrypted passwords in text files, JSON, and SQLite databases.
- Built a reflection-based process to expedite the development of new console commands, utilizing metadata attributes in model classes to validate parameters.
- Devised a transaction-like safe procedure to update the master key.

## Education

---

**High School – 2018**

High School Diploma