

Video Modifier

Specifications

- Code a program capable of applying graphical changes on a video, like color modifying
- Also works with GIFs or single images
- Fast

Final Result

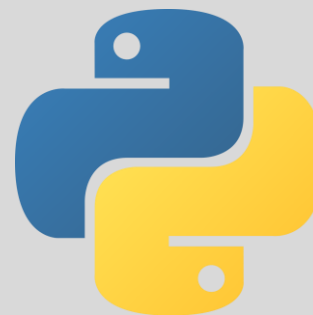
- WIP project, currently only works for videos, and is very slow. I might re-code the project in another language



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Technologies and notions used

- Python
- Pillow
- OpenCV



Acquired Skills

- Adaptation to new Python libraries
- Optimization

Virtual Machine Set Up

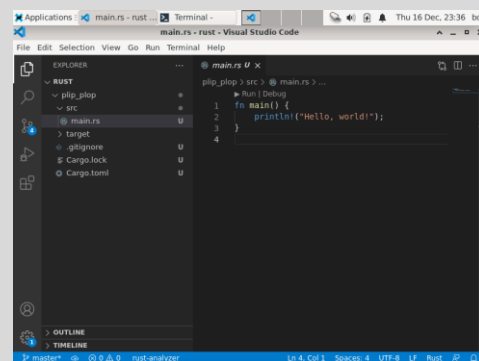
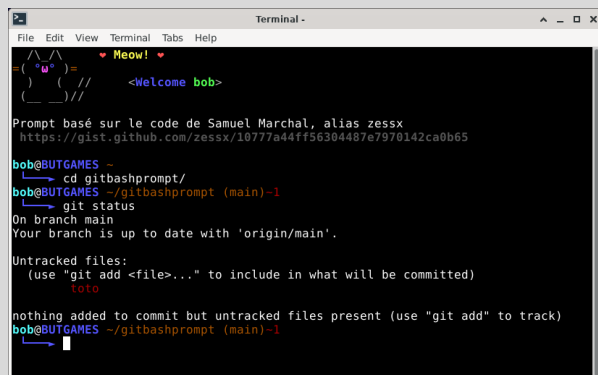
Specifications

- Create an environment to code in Rust on Linux with VMware
- Have Rust, Git and Visual Studio Code installed
- Informative bash prompt to work with Git



Final Result

- A Debian 11 Rust programming environment to work in teams
- Different permissions for different users



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Technologies and notions used

- VMware Workstation Player



Acquired Skills

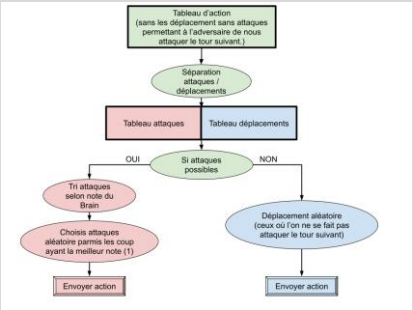
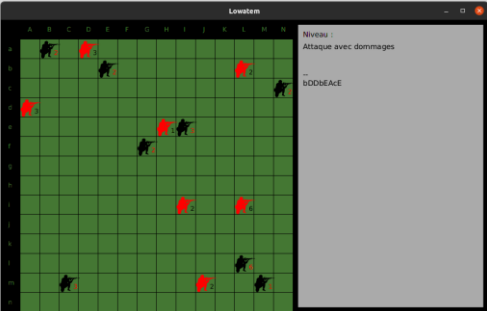
- Respect of the specifications
- Usage of multiple Operating Systems
- Experience with teamwork

Specifications

- Code the different rules for how the game works
- Code two different AIs to play the game with two different strategies

Final Result

- A chess-like type of game, here about soldiers
- One AI playing the “best” move it can, based on calculations made on a spreadsheet
- One AI based on the Minimax algorithm



Technologies and notions used

- Java
- LibreOffice Calc



Acquired Skills

- More problem solving capabilities
- Brainstorming with other people to find understand better complex concepts

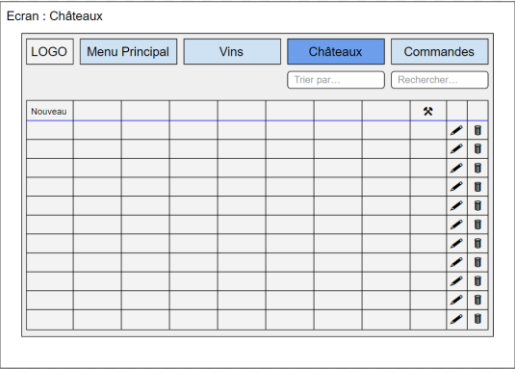
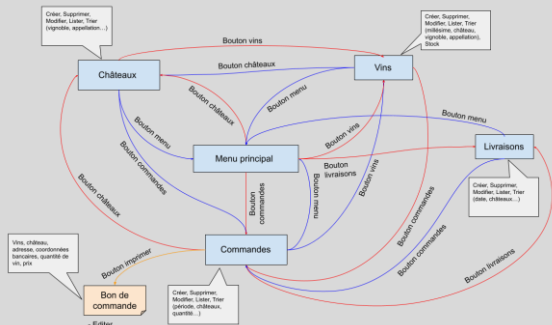
Database Creation

Specifications

- Create a database to store information relating to wine buying and reselling
- Create a mock-up of a software that would use this database

Final Result

- A functional database for a Bordeaux selling company
- A mock-up of the software that could be used to interact with the database



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Technologies and notions used

- Microsoft SQL Server
- SQL Server Management Studio



Acquired Skills

- Creation of a database in a real-life setting
- Experience with creating mock-ups
- Experience with teamwork

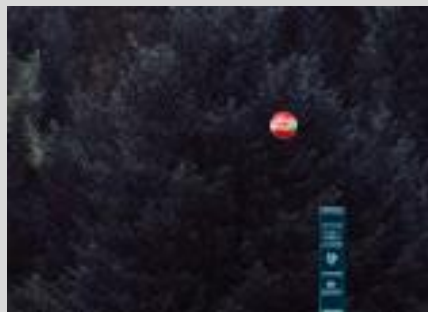
Pong

Specifications

- Make a Pong type of game, playable in two player mode.
- Game variations with four balls, obstacles.

Final Result

- Pong in a kind of forest



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Technologies and notions used

- Processing (Java) programming
- Creation of graphics



Acquired Skills

- Initiation to programming with Processing/Java
- Progress with quality of code

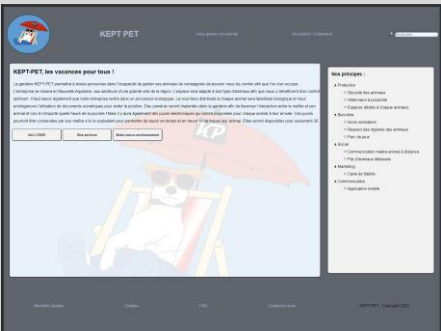
Creation of website for a fictive company

Specifications

- Create a website for a company, with everything a “professional” website should have
- Have a “Persona”, a potential client the website should correspond to

Final Result

- A website for a pet daycare, corresponding to a certain view of what clients might want



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Technologies and notions used

- HTML, CSS
- Visual Studio Code

HTML



CSS



Acquired Skills

- Better understanding of how HTML and CSS work
- Experience with teamwork

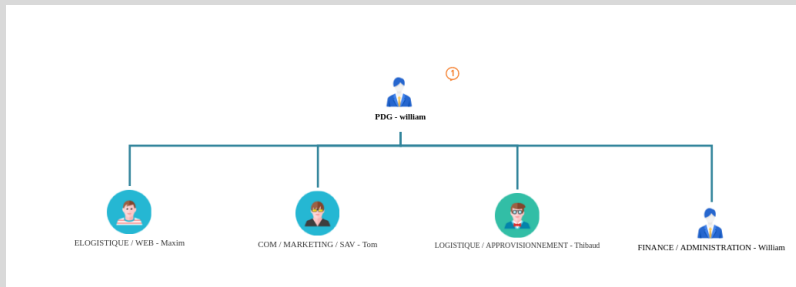
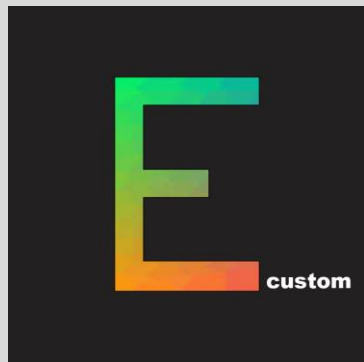
Creation of a fictive company

Specifications

- Create some kind of start-up related to IT
- Define its structure, strategy, etc

Final Result

- A company for ordering online material for workspace and gaming related activities
- Its strategy, and a detailed SWOT analysis of it



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Technologies and notions used

- Legal knowledge

Acquired Skills

- Deeper understanding of what a company is, and what it does
- Experience with teamwork