

Java projects

Pong

Technologies

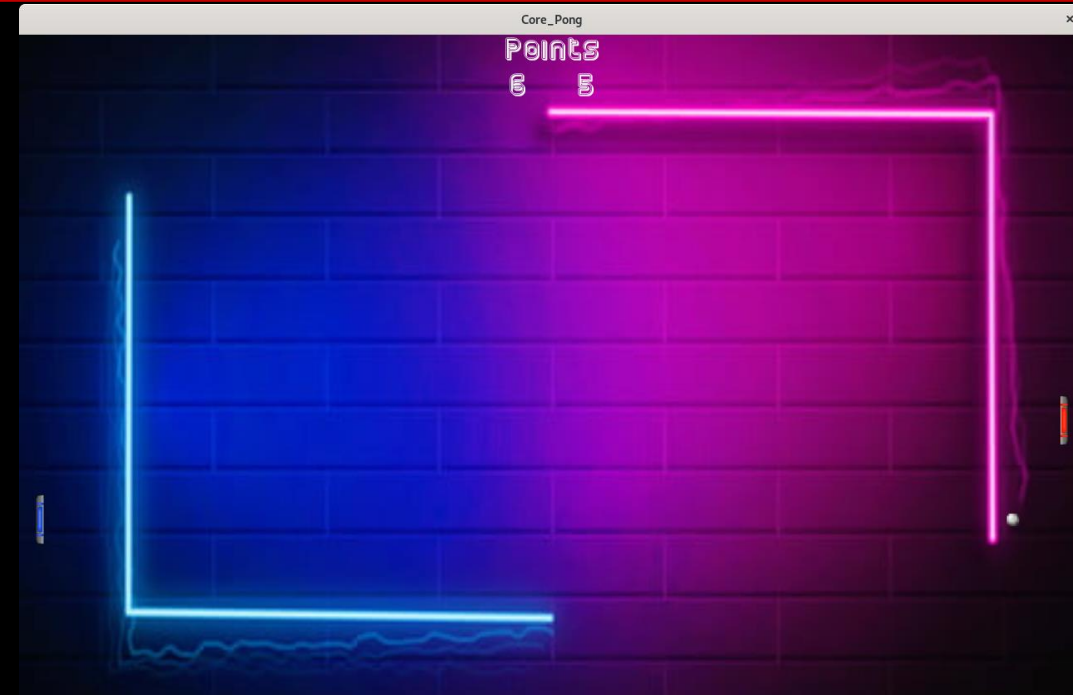


Specifications

- Remake the game «pong »
- Add custom game mode like a mode with obstacles.
- Make menu to navigate between all game modes.

Skills

- Learn to code with processing without use objects.
- Complete all specifications in a limited time.
- Learn java programming.



Final project : playing normal game mode.

Lowatem

Technologies

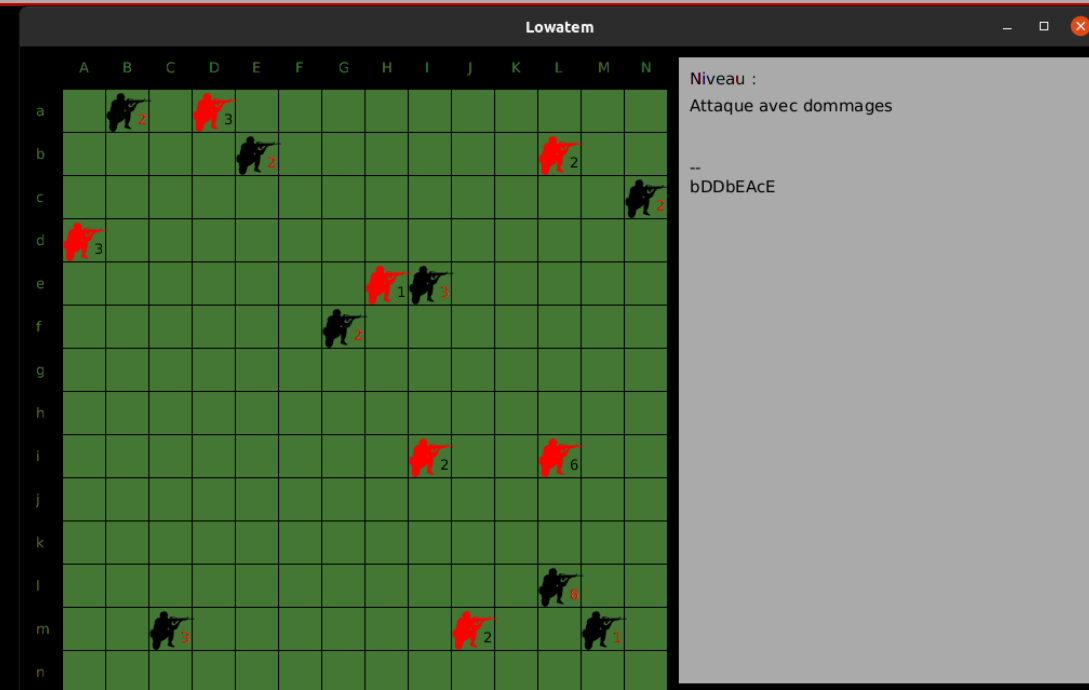


Specifications

- Develop with java on an existing project.
- Implement rules step by step for a board game.
- Make unit test for each new rule

Skills

- Learn java programming with object concept
- Write coherent tests
- Use git
- Code's comprehension



The game with many rules develop

AI Lowatem

Technologies

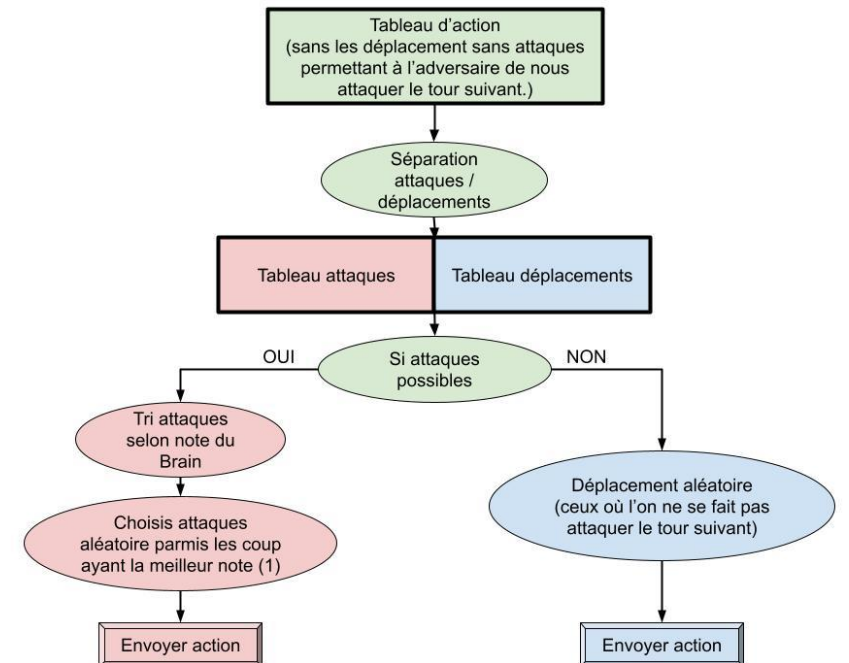


Specifications

- Program two AI which can play against other IA for the Lowatem game. (an other project)
- The AI have to play in a limited time (2 sec)
- The two AI can't use the same strategy

Skills

- Team work
- Java developement
- Code refractoring
- Learn to use git with multiple users



Decisional tree of the Ai

Processing game

Technologies



Skills

- Develop a game to teach processing's simple concept
- The « players » have to debug the code
- The code may be easy to understand

- Procesing developpement
- Team management
- Git usage with 4 people

The game without bug running



Inversed Kinematics Challenge

Technologies



Skills

- Learn and understand the inversed kinematics
- Make a simulation of inversed kinematics

- Processing developement
- Maths (vectors and inversed kinematics formula)
- Self-learning

InversedKinematics



The simulation running with a body who follow the red dot and the other following the mouse

Perlin noise Challenge

Technologies



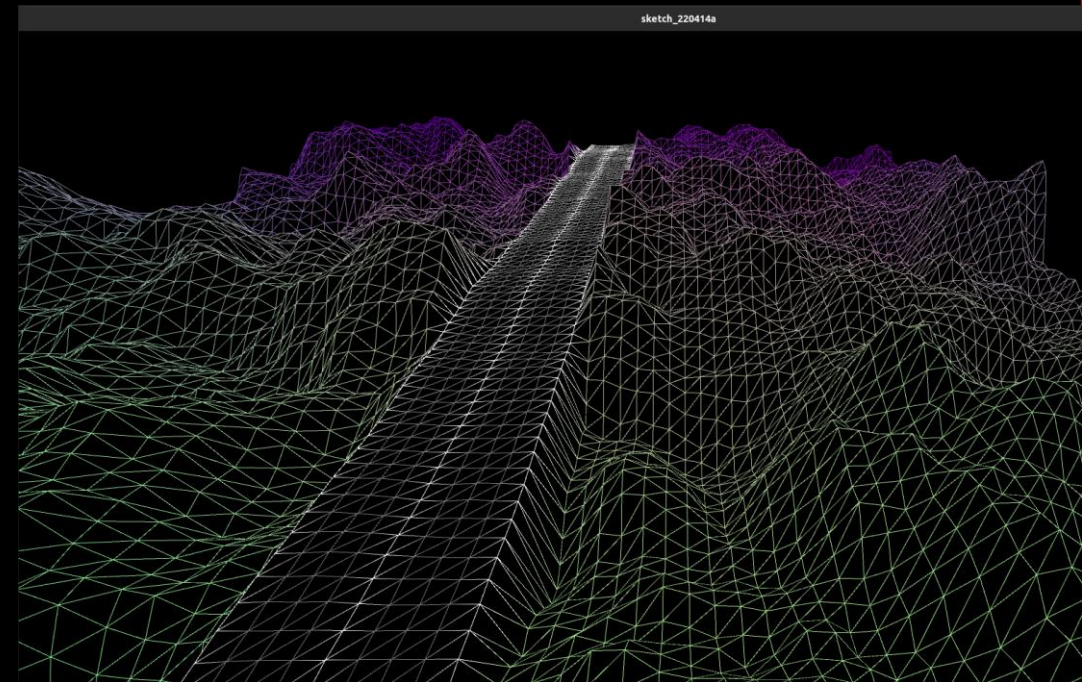
Specifications

- Learn and understand the Perlin noise function
- Apply this formula in 2 dimensions for procedural terrain generation
- Simulate a procedural terrain generation

Skills

- Processing development
- Maths (Perlin noise usage and matrices)
- Self-learning

The simulation of the procedural terrain generation



WEB projects

Animated JS canva challenge

Technologies

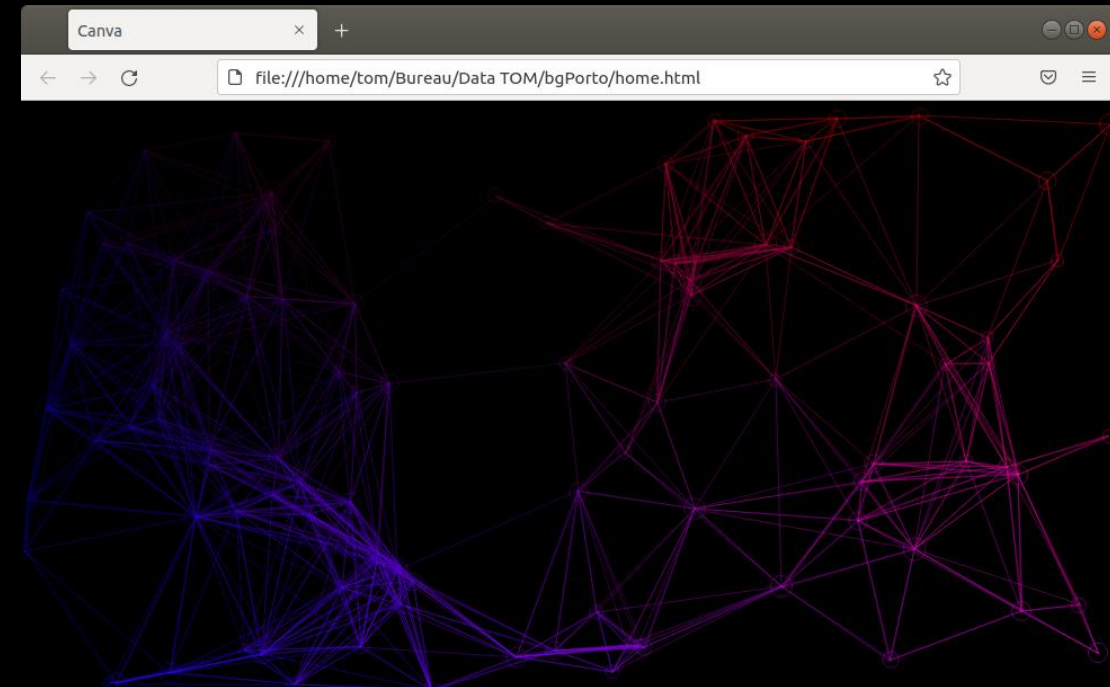


Specifications

- Learn to adapt a processing code in Java Script
- Make an animated canva for a website background

Skills

- Processing developement
- Java Script developement and learning
- Self-learning



The animated canva running on a website.

Portfolio

Technologies



Skills

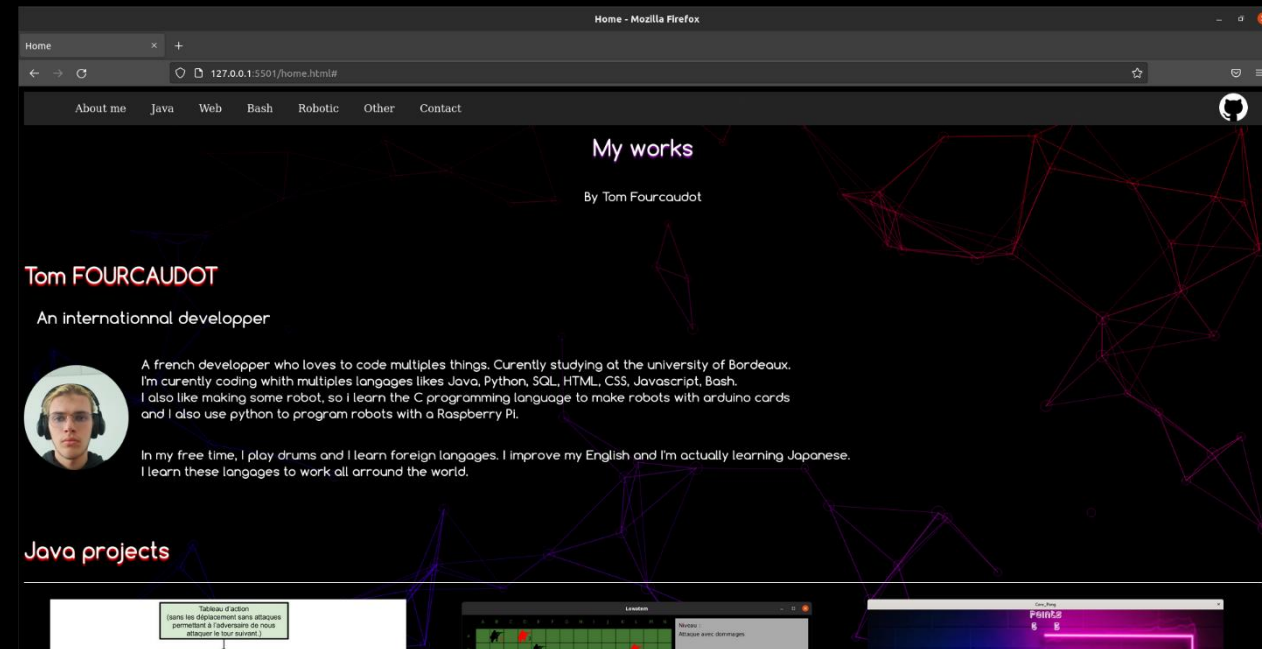
- Web design
- Web developement
- Flex learning
- Creativity

Specifications

- Develop a website to present my projects
- Make RetEX for each projects
- Make a contact section
- The website have to be responsive

Curently improving it...

The website the 15/04/2022



Website creation for company

Technologies

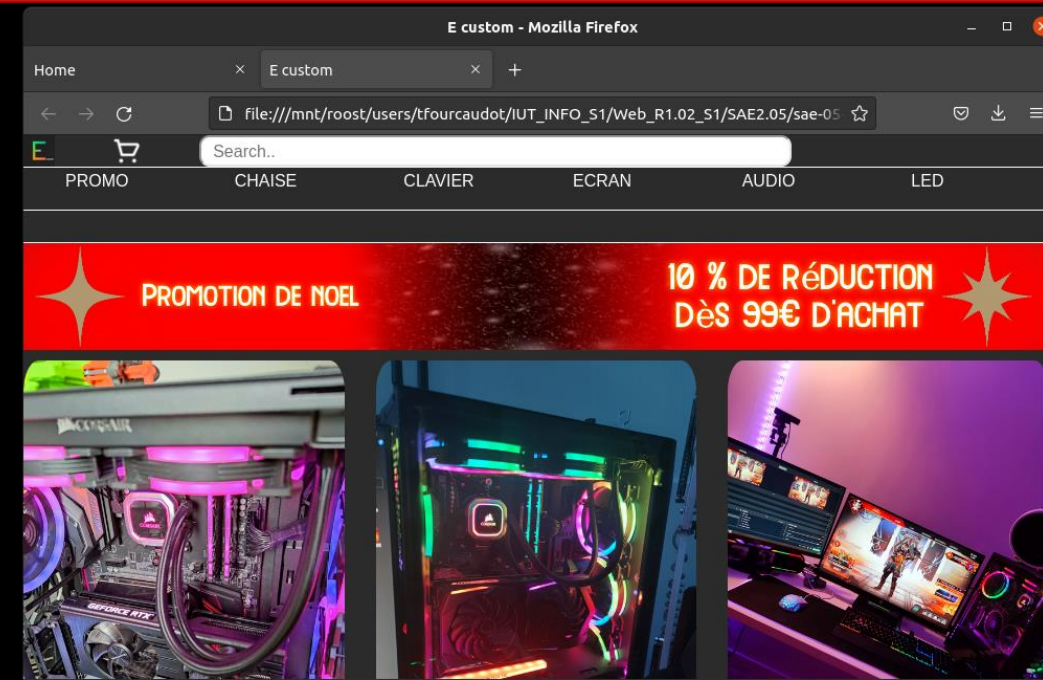


Specifications

- Develop a website for a company that I created
- The website have to respect the web design's rules
- The website should be responsive

Skills

- Web design
- Web developement
- Creativity
- Bootstrap learning



The website open on a computer

Frontend developement for web application

Technologies



Specifications

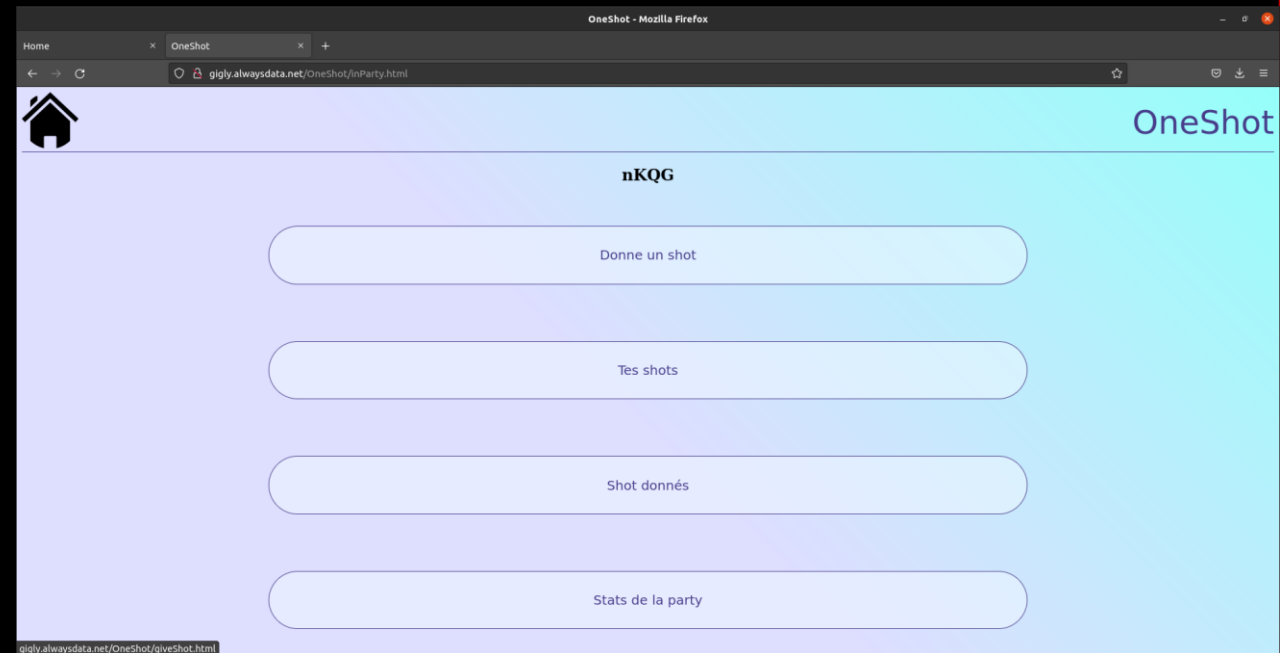
- Develop a web interface for a backend program who send queries to a database
- Have to be responsive
- Simple to use
- Have to be done in a very limited time (2 days).

Curently improving it...

Skills

- Web design
- Web developement
- Flex positionnement

*The "in party" page,
open on a computer*



Linux projects

Virtual Machine Creation

Technologies



vmware®

Specifications

- Install a virtual machine for developers
- Install some application to code
- Setup a nightly rust environnement
- Build a custom terminal prompt, with git informations

Skills

- Team management
- Follow strict specifications
- Learn OS installation
- Learn bash langages and basics linux commands

The custom terminal, running on the virtual machine.

```
/bin/bash
/bin/bash 80x24

  /\_/\      ♥ Meow! ♥
=(  °ω° )=
 )  (  //    <Welcome bob>
(  _  )//

Prompt basé sur le code de Samuel Marchal, alias zessx
https://gitlab-ce.iut.u-bordeaux.fr/rgiot/hello.sae4.but1.iut.git

bob@BUTGAMES ~
└─> cd hello.sae4.but1.iut/
bob@BUTGAMES ~/hello.sae4.but1.iut (master)~1
└─> git status
Sur la branche master
Votre branche est à jour avec 'origin/master'.

Fichiers non suivis:
  (utilisez "git add <fichier>..." pour inclure dans ce qui sera validé)
  test/

aucune modification ajoutée à la validation mais des fichiers non suivis sont pr
ésents (utilisez "git add" pour les suivre)
bob@BUTGAMES ~/hello.sae4.but1.iut (master)~1
└─> 
```

Animated desktop background linux

Technologies



Specifications

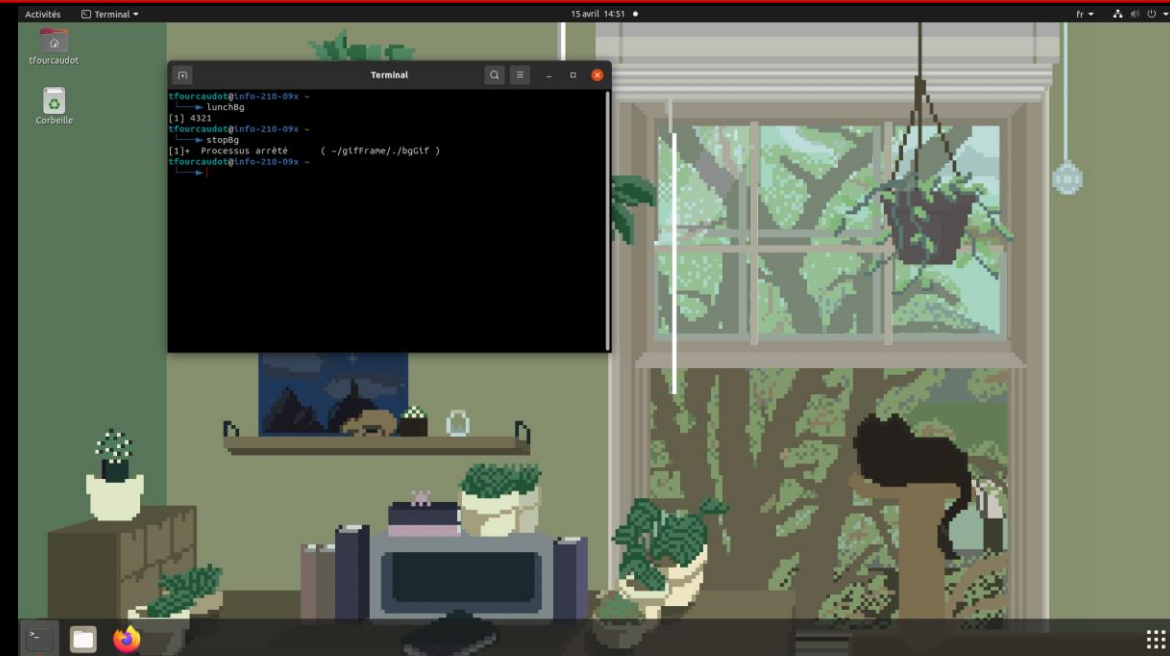
- Make a animated background for linux environnement
- Use gif
- With a terminal, we can stop the animation, restart the animation

Skills

- Bash script
- Alias commands

Curently improving it...

*The animated background control
With the terminal*



Robotics projects

Robotique hand control by human hand

Technologies

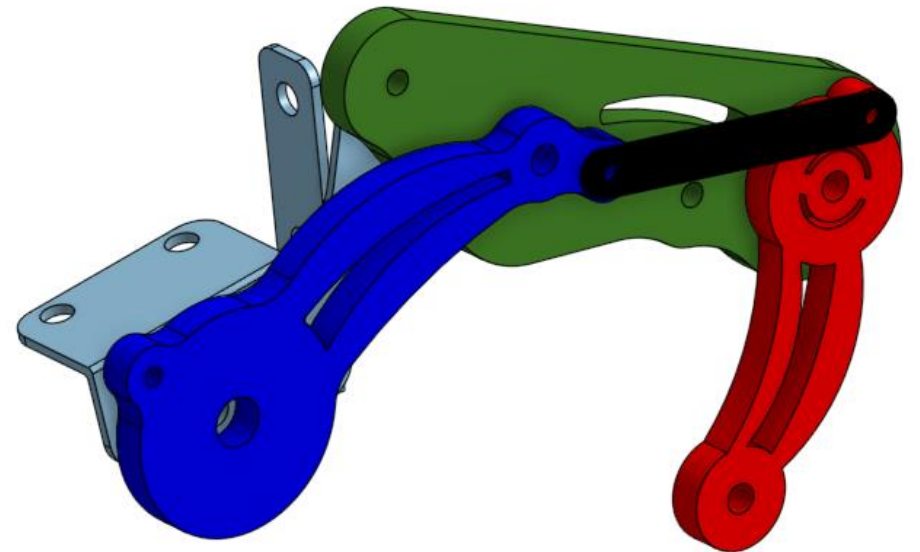


Specifications

- Make a robotic hand with servo motors
- Have to be controlled with human body (contraction signals)
- Use an arduino card to control it

Skills

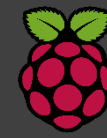
- 3D model conception
- Mechanics
- Electronics
- Arduino programing
- Team management



The 3D model of a finger

Holonomic robot

Technologies



Specifications

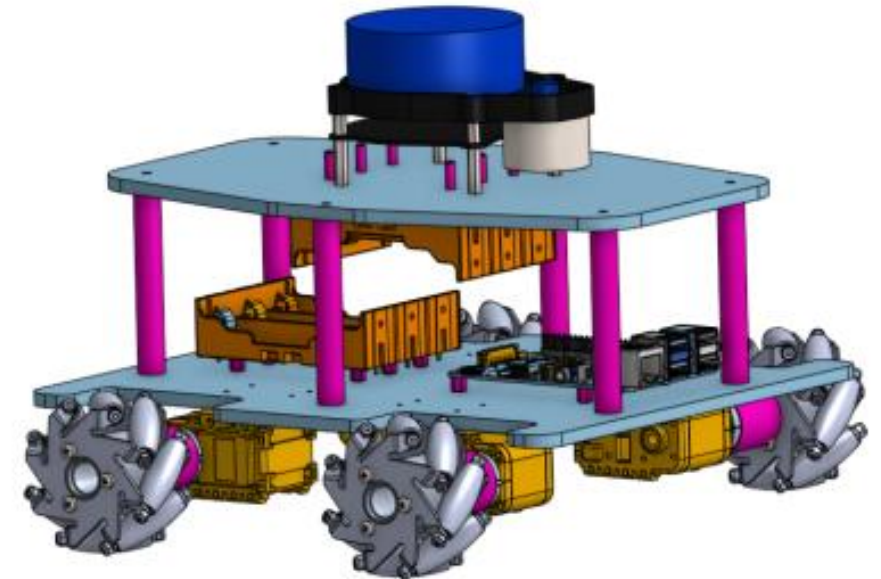
- Build an holonomic robot from scratch
- Can exit an unknown maze by itself
- Use lidar

Skills

- 3D model conception
- Mechanics
- Electronics
- Raspberry card programing
- Python algorithms

Curently improving it...

The 3D model of the robot



Others projects

Database creation

Technologies



Specifications

- Create a database from scratch
- Imagine the interface of the application who will use the database

Skills

- SQL queries
- MCD creation
- Creativity



GRAVE & CIE

Suppression
d'information

Modification
de donnée

Ajout d'information

Recherche par critère

Commandes

The main window of the app

Company creation

Technologies

Specifications

- Create a company who respect France's rules
- Make a PESTEL analysis
- Make a SWOT analysis

Skills

- Company rules knowledge
- Company strategy
- Team management

Logo of the company



custom