



# Sistema de apoio à criação da Distribuição do Serviço Docente

Projeto em Informática

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# CONTEXT

- The DSD is a very complex task
- The information required in the process is spread apart and hard to access
- Sometimes there is a need to cooperate with DSDers of other departments (who are they? How can I contact them?)
- We aim to make the whole process faster, simpler, easier...

## Project Coordinators



José Vieira



Tomás Oliveira

# PROBLEM

## Overloaded Teachers

By keeping track of worked hours in the DSD platform we can compensate teachers who were overloaded in previous years

## Hard To Obtain Data

There is no available tool that retrieves all the necessary data to make the DSD

## How To Manipulate Data

Working with a database makes sure all the data is easily updated, but may cause latency



# GOALS

## Main Objective

Create a platform where DSD is performed.

## Balanced Distribution

Allow the hours assigned to each teacher to be linearly distributed

## Graphic interface

Development of a graphical interface for building the DSD

## Wish list

Tool to view each teacher's wish list, in which they indicate their teaching preferences.

## Teachers History

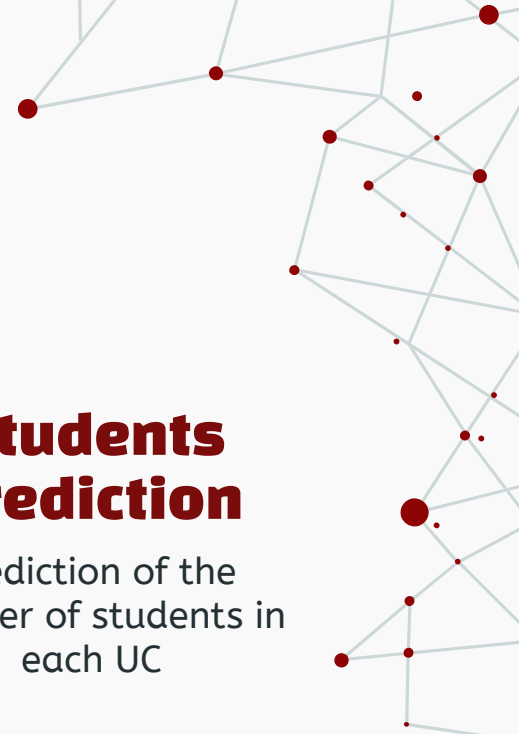
Ability to see past data in order to have a better deciding method

## Students Prediction

Prediction of the number of students in each UC

## Teachers Status

Display of the teacher status in order to see if you can assign him/her or not





# TASKS

## Understanding the Problem

Familiarization with the DSD problem, what is it, how it works

## Frontend

Frontend development for the platform to be created

## Backend


How to get data and use it

## Architecture Definition

Architecture designation of how the application framework will work

## Json vs Database

Latency must be minimal and information must always be accessible



# EXPECTED RESULTS

## A Platform That Is Designated For Power Users

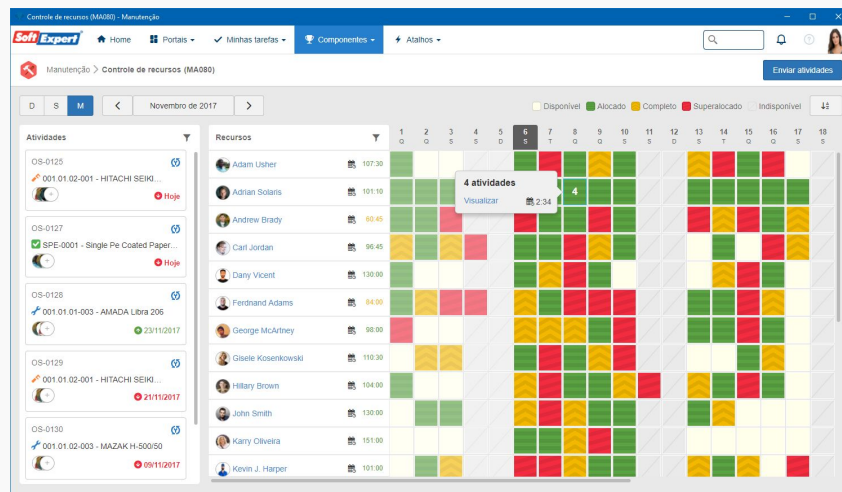
- Fast response while interacting with the system
- Single-click actions
- View all information in one place
- Give control to the user

A dark gray rounded square icon with a thin white border and a subtle drop shadow. Inside the square, the text ">sudo" is written in a white, monospaced font, representing a terminal prompt and the superuser command.

>sudo

# RELATED WORK

Resource allocation is a very common problem among many different areas. As such, there are already many software solutions available to the public from where we can learn, analyze and get inspiration from.







# COMMUNICATION PLAN

## GitHub

- Online repository with all code
- Frequently updated

## Discord

- Daily meetings
- Pair Programming

## ZenHub

- Task Distribution

## Website

- Available at <https://pi-group-03.netlify.app/>



# AGILE

## **Working software over documentation**

- Working software is more important than comprehensive documentation in a fast and ever-changing work environment

## **Continuous development**

- Break down the software delivery process into stages where each stage is made of different tasks which can be carried out in parallel

## **Continuous Integration**

- Frequent short meetings with stakeholders to keep everyone updated
- Shorter release cycles where code is immediately integrated after task completion