Sistema de apoio à criação da Distribuição do Serviço Docente

Projeto em Informática

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CONTEXT

In all universities, the elaboration of the DSD is a problem of great complexity that requires quick access to relevant information and that should allow changing the distribution of classes by the different professors in an intuitive and informative way

PROBLEM

Overloaded Teachers

Currently, the DSD has many flaws, leading to overloaded teachers

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

Wish list

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

Students Prediction

Prediction of the number of students in each UC

Graphic interface

Development of a graphical interface for building the DSD

Teachers History

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

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

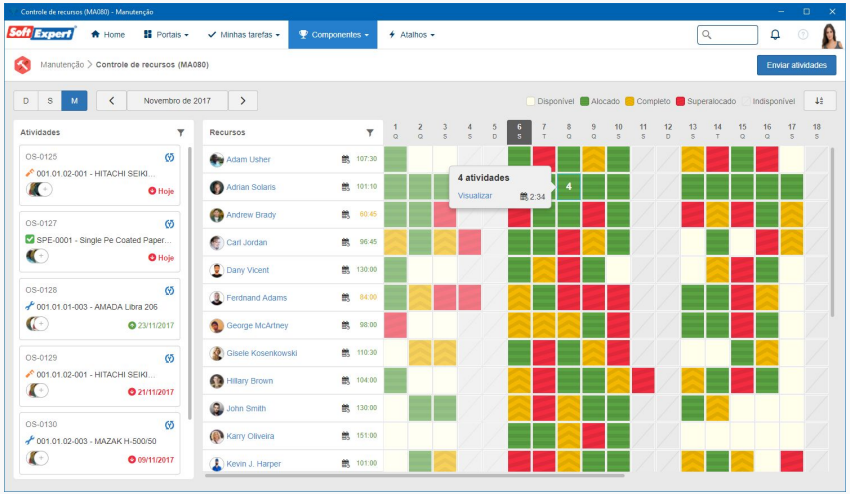
EXPECTED RESULTS

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

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