



Sistema de apoio à criação da Distribuição do Serviço Docente - Milestone 3

Projeto em Informática

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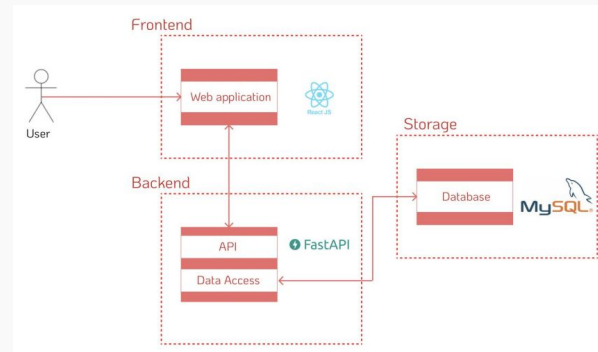


QUICK RECAP

To sum up:

- We had previously shown things like our mock-up, domain module, and system architecture;
- Now we are going to show our progress so far, as well as what is left to be done and what can be improved;

The screenshot displays a web application interface with a top navigation bar containing tabs: DSD, Sabáticas, Contactos, Alterar Siglas, and Definições. Below the navigation bar, there are two main sections, each with a search bar and a grid of data. The left section is titled 'Filtros' and the right section is titled 'Filtros' with a search bar. The grids contain various data points, including names, dates, and status indicators. On the right side of the interface, there is a sidebar with a user profile and a list of items.



WORK DEVELOPED

Frontend

- Cells sorted by color and capacity (TP, P, T, ...);
- Information from the API;
- Detailed information of uc and teachers;
-

ACE	Aplicacionais para ciencias e engenharia	NBC 80	2 50	CCB	
ACA	Arquitectura de computadores avançada	JCP 80			
ARA	Arquitectura de redes avançadas	ICO 80	2	ARN	2 25
AC1	Arquitetura de computadores i	IOU 80	2 25	JLA	

WORK DEVELOPED

Backend

- Creation of data tables, as well as the population with relevant data (based on the DSD from the previous year)
- Queries, UDFs and views to allow for the organization of data

+ Opções

uc_acronym	uc_name	component	class_hours	availability_percent	prof_acronym	prof_name
AA	ALGORITMOS AVANÇADOS	T	2	100	LFA	Luis Filipe Mesquita Nero Moreira Alves
AA	ALGORITMOS AVANÇADOS	T	2	50	PC	Pedro Miguel da Silva Cabral
AMS	ANÁLISE E MODELAÇÃO DE SISTEMAS	P	2	25	AP	Armando José Formoso de Pinho
AMS	ANÁLISE E MODELAÇÃO DE SISTEMAS	P	2	100	AGC	António Guilherme Rocha Campos
ACE	APLICACIONAIS PARA CIÊNCIAS E ENGENHARIA	T	2	25	JM	Joaquim João Estrela Ribeiro Silvestre Madeira
ACE	APLICACIONAIS PARA CIÊNCIAS E ENGENHARIA	T	2	50	CCB	Carlos Alberto da Costa Bastos
ARA	ARQUITECTURA DE REDES AVANÇADAS	P	2	100	JFR	José Rodrigues Ferreira da Rocha
ARA	ARQUITECTURA DE REDES AVANÇADAS	T	2	100	ARN	António José Ribeiro Neves
ARA	ARQUITECTURA DE REDES AVANÇADAS	P	2	25	ML	Mário José Neves de Lima
AC1	ARQUITETURA DE COMPUTADORES I	P	2	50	APS	Adão Paulo Soares da Silva
AC1	ARQUITETURA DE COMPUTADORES I	P	2	25	JLA	José Luis Costa Pinto Azevedo
CBD	COMPLEMENTOS DE BASES DE DADOS	P	2	25	EVM	Ernesto Fernando Ventura Martins
CV	COMPUTAÇÃO VISUAL	T	2	25	AG	Atílio Manuel da Silva Gameiro
E	ELECTRÓNICA	T	2	25	JLC	José Luis Vieira Cura
E	ELECTRÓNICA	P	2	50	JAF	José Alberto Gouveia Fonseca
EP	ELECTRÓNICA DE POTÊNCIA	T	2	50	ARB	António Rui de Oliveira e Silva Borges
EP	ELECTRÓNICA DE POTÊNCIA	P	2	25	FMS	Filipe Miguel Teixeira Pereira da Silva
E1	ELECTRÓNICA I	T	2	100	IOU	Ioulia Sklarova
E1	ELECTRÓNICA I	P	2	50	PG	Pétia Georgieva Georgieva

```
{
  "assigned_classes": [
    {
      "uc_acronym": "AA",
      "uc_name": "ALGORITMOS AVANÇADOS",
      "component": "T",
      "class_hours": 2,
      "availability_percent": 100,
      "prof_acronym": "LFA",
      "prof_name": "Luis Filipe Mesquita Nero Moreira Alves"
    },
    {
      "uc_acronym": "AA",
      "uc_name": "ALGORITMOS AVANÇADOS",
      "component": "T",
      "class_hours": 2,
      "availability_percent": 50,
      "prof_acronym": "PC",
      "prof_name": "Pedro Miguel da Silva Cabral"
    },
    {
      "uc_acronym": "AMS",
      "uc_name": "ANÁLISE E MODELAÇÃO DE SISTEMAS",
      "component": "P",
      "class_hours": 2,
      "availability_percent": 25,
      "prof_acronym": "AP",

```

WORK DEVELOPED API

GET / Read Root



GET /v1/classes/ Get Classes



GET /v1/departments/ Get Departments



GET /v1/professors/ Get Professors



GET /v1/dsders/ Get Dsders



GET /v1/courses/ Get Courses



GET /v1/ucs/ Get Ucs



GET /v1/wishlists/ Get Wishlists



GET /v1/assigned_classes/ Get Assigned Classes



TASK DISTRIBUTION

- **Interface**

- **Análise de requisitos**

- Apresentação gráfica (esboço da interface) [JT+AG 2d] ✓
 - Funcionalidades [PM+EF 2d] ✓

- **Implementação em React**

- Aprender React [TODOS 3d] ✓
 - Definir estrutura de pastas e layout da homepage [TODOS 1d] ✓
 - Programar Interface [PM+EF 10d] 🔄

- **Testar a interface com utilizadores**

- Testar com colegas/Profs. do Deti/Profs. outros depts. [TODOS 2

- **API**

- Conexão aos containers da interface e BD [JT 1h] ✓
 - Métodos get/post/... [JT+AG 3d] 🔄
 - parâmetros opcionais [JT+AG 3d] 🔄

- **Base de Dados**

- DDL [JT+AG 1d] ✓
 - DML (script) [JT+AG 3h] ✓
 - Queries/UDFs/Views [JT+AG 3d] 🔄

- **Deployment**

- Docker Containers [JT 2d] ✓
 - Configurar VM Azure [JT 2h]

- **Gestão do projeto**

- Atribuir tarefas [JT]
 - Criar milestones [JT]
 - listar dependências de tarefas + Gantt Chart [JT 1d] ✓

- **Relatório e documentação**

- Elaboração [AG+PM+EF 4d]

DOCKERS

- For reasons of ease of development, debugging and for being the recommended method in the official docker documentation, we decided to create a dedicated container for each service.
- Regarding performance losses in this approach, docker is extremely efficient because, unlike traditional VMs, it only creates an isolated filesystem and uses the host OS kernel.

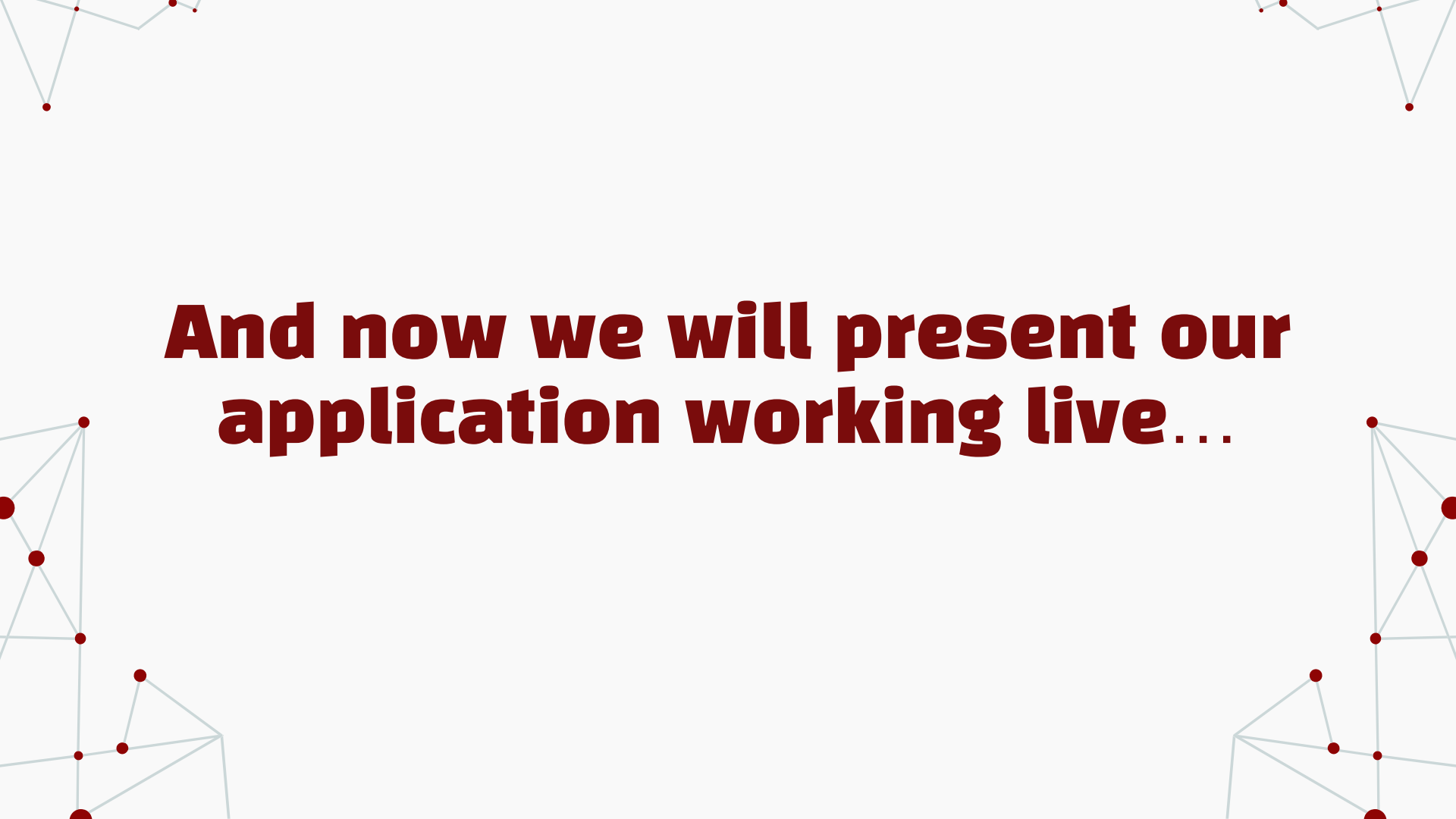
```
root@36fe9eff1255:/backend/api# ping 172.18.0.4
PING 172.18.0.4 (172.18.0.4) 56(84) bytes of data.
64 bytes from 172.18.0.4: icmp_seq=1 ttl=64 time=0.067 ms
64 bytes from 172.18.0.4: icmp_seq=2 ttl=64 time=0.058 ms
64 bytes from 172.18.0.4: icmp_seq=3 ttl=64 time=0.057 ms
64 bytes from 172.18.0.4: icmp_seq=4 ttl=64 time=0.077 ms
64 bytes from 172.18.0.4: icmp_seq=5 ttl=64 time=0.044 ms
64 bytes from 172.18.0.4: icmp_seq=6 ttl=64 time=0.045 ms
```


CALENDAR PROGRESSION

MILESTONE 1	MILESTONE 2	MILESTONE 3	MILESTONE 4
22/03/2022	05/04/2022	03/05/2022	21/06/2022
✓	✓	✓	⌚
Context & Calendar Lifecycle Objectives & Website	Project Architecture & Requirements Analysis	Product development & Initial prototype	Complete development of all functionalities & Technical Report
			Product release & Some fixes

Already done to today's date:

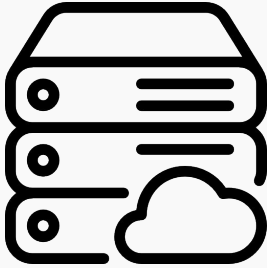
- Started development of Interface;
- DB implementation;
- Docker containers
- API development;



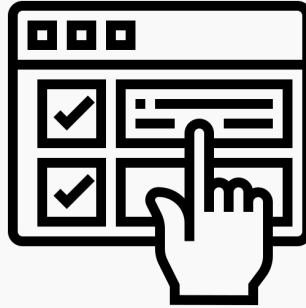
**And now we will present our
application working live...**

NEXT STEPS

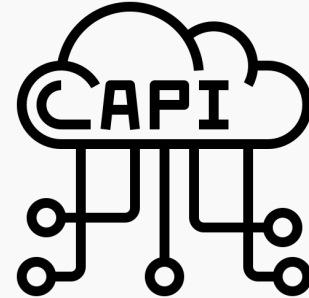
What is left to do:



Configure Azure VM



Finish Interface and
export DSD



Implement new
API methods