

# SALI

## Sistema de Apoio a Lar de Idosos

Grupo 38

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Luís Guerra nº43755

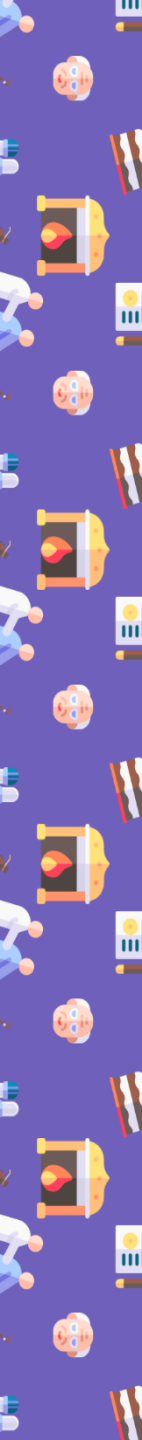
Prof. Nuno Leite



Eng.º. João Antunes

xpandit

# *Sinopse*

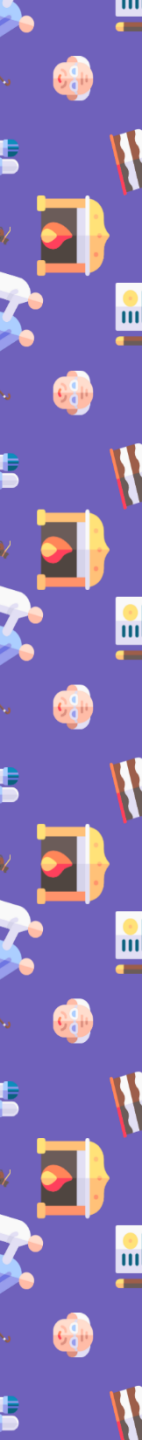


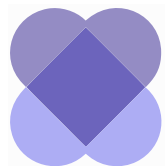


# O que é? Para que serve?

- Plataforma de gestão, em **tempo real**, de todas as ocorrências
- Alertas em caso de **não conformidade**
- Redução do **tempo de resposta** a problemas

# *Enquadramento do Problema*

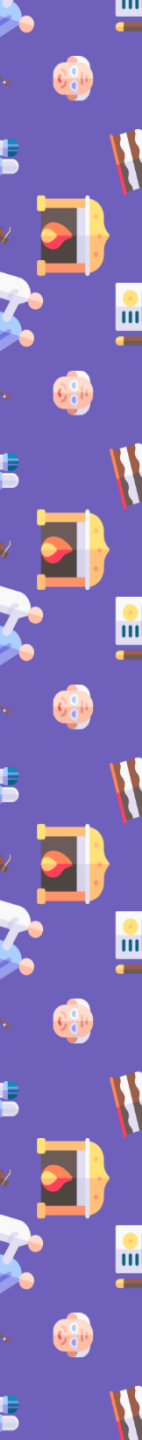




# Como surgiu? Quem podemos ajudar?

- Os lares de idosos usam, em geral, métodos manuais e pouco eficazes
- Com a situação pandémica atual, essas deficiências dificultaram ainda mais o dia-a-dia das instituições
- O SALI permite monitorizar o estado do lar remotamente
- O SALI permite dividir responsabilidades

# *Finalidade e Objetivos*





# Administrador



**Sali**

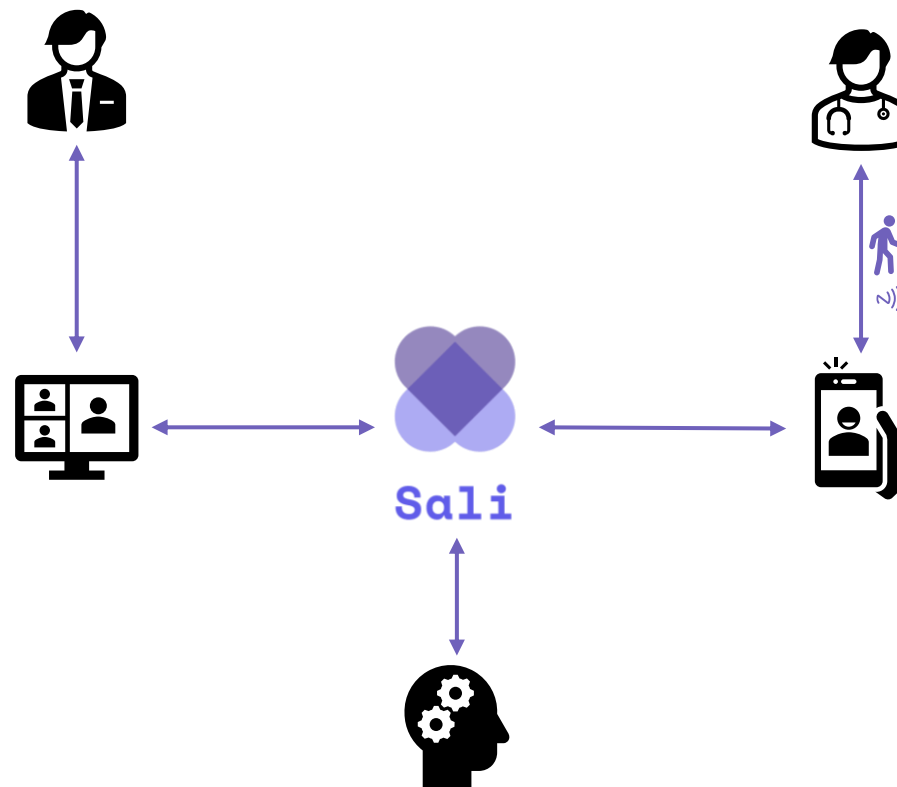
- Criação de planos de **tarefas personalizados** por utente
- Relatório de **incidentes**



## Funcionário

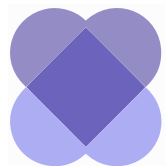


- Automatizar o registo informático da **realização de tarefas**
- Confirmação de identidade dos utentes via **pulseiras NFC**
- Diagnóstico **automático de doenças**

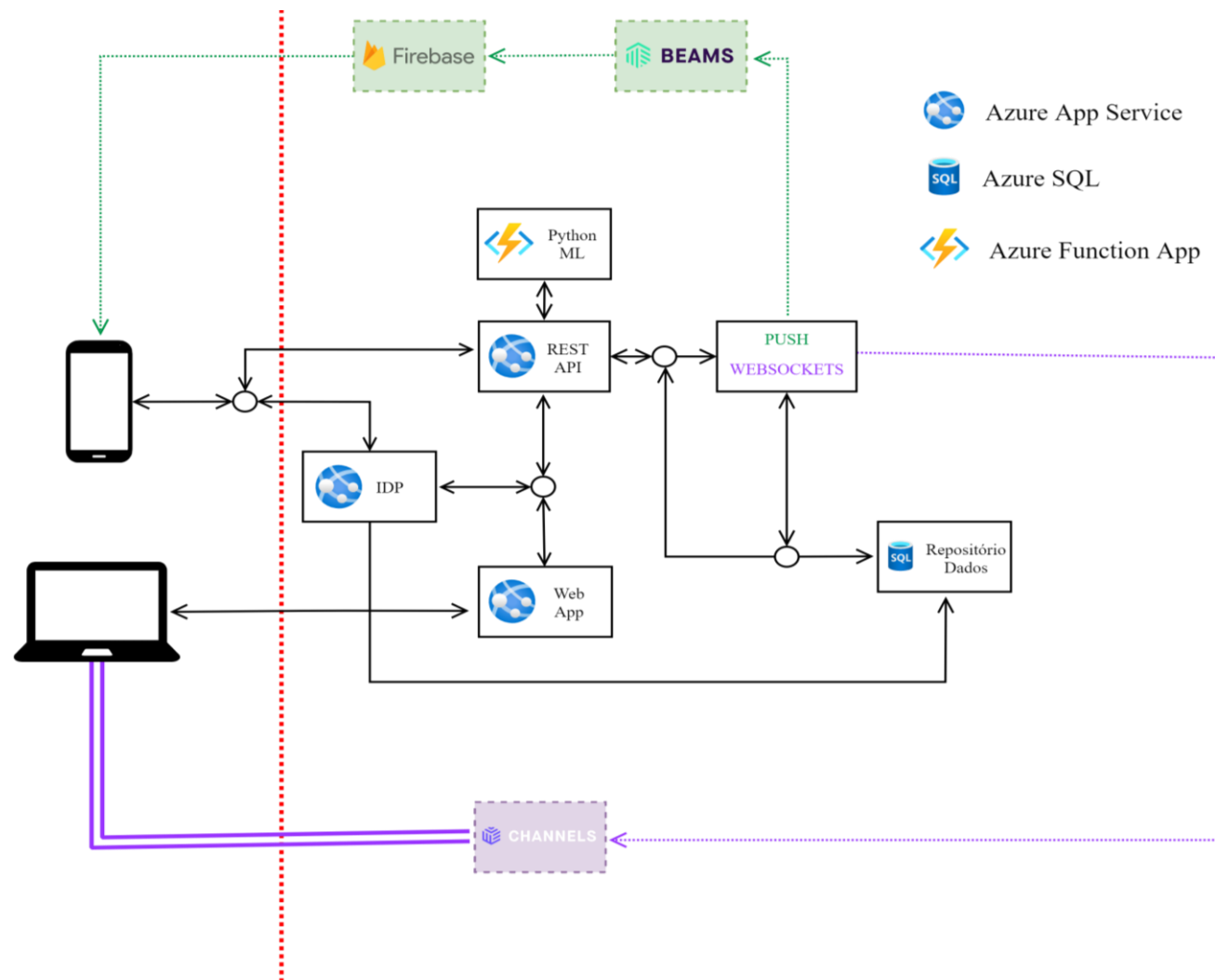


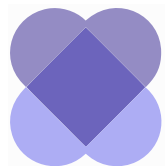


# Abordagem

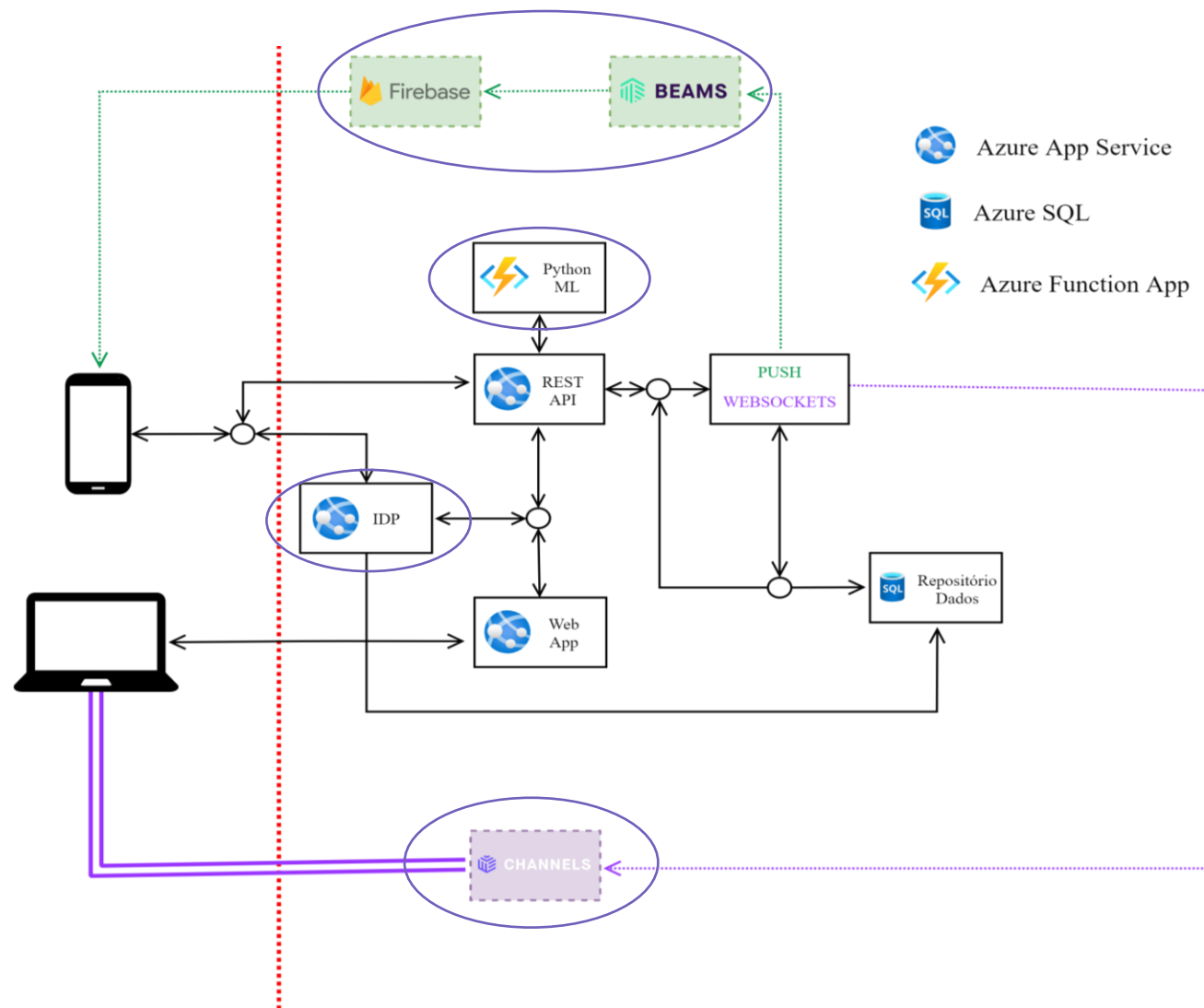


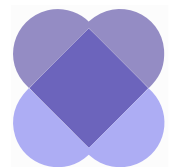
# Arquitetura



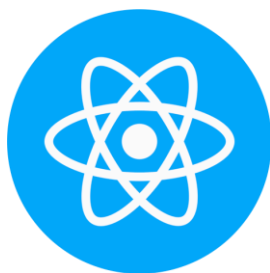


# Arquitetura





# Tecnologias



React  
React Native



.Net Core



Identity  
Server

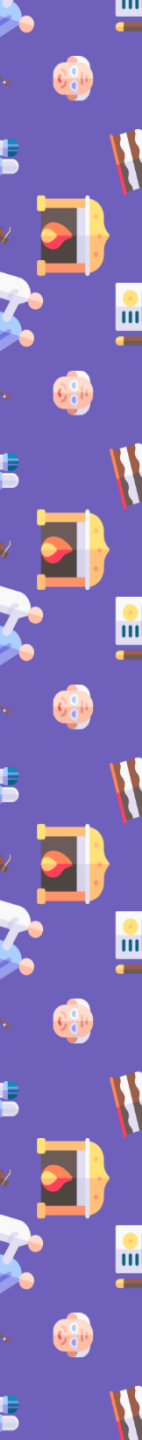


Python

## Resultados



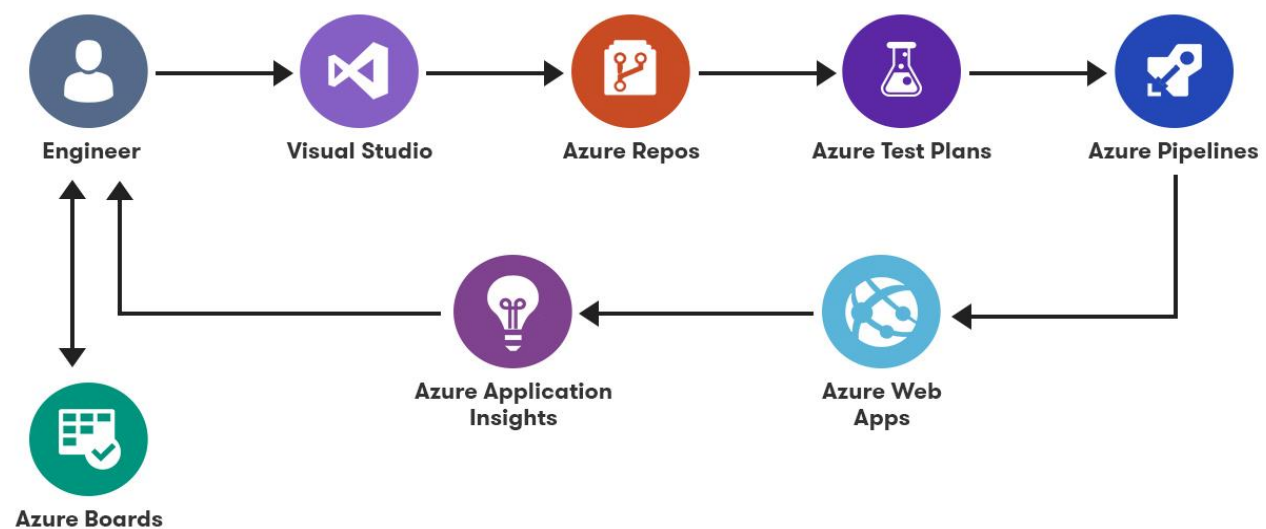
*Resultados* - O que já está implementado?





## Sistema CI/CD

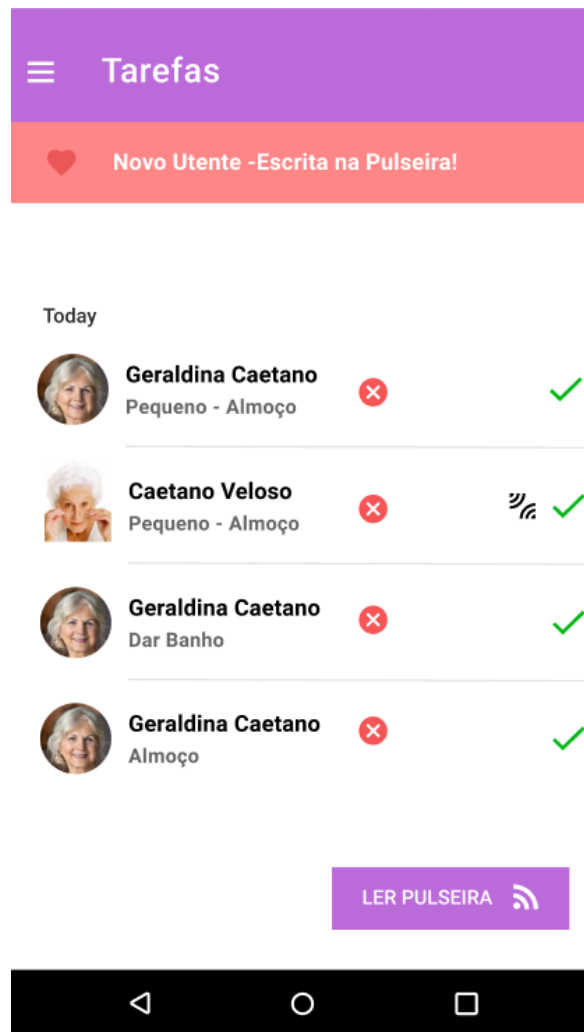
- Pipelines de **Build** e **Deploy**
- Execução de **testes** e geração de **relatório**
- Criação tarefas usando *Azure Boards*



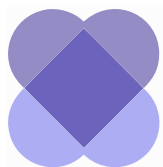


# Aplicação Móvel

- Mockups dos ecrãs
- Diagrama de navegação
- Organização de dados
- Funcionalidades necessárias







# Aplicação Web

- Mockups dos ecrãs
- Diagrama de navegação
- Organização de dados
- Funcionalidades necessárias

**SALI** Home Logs Admin Terminar sessão

Utentes Funcionários Quartos

Logs

New Edit Delete Search:

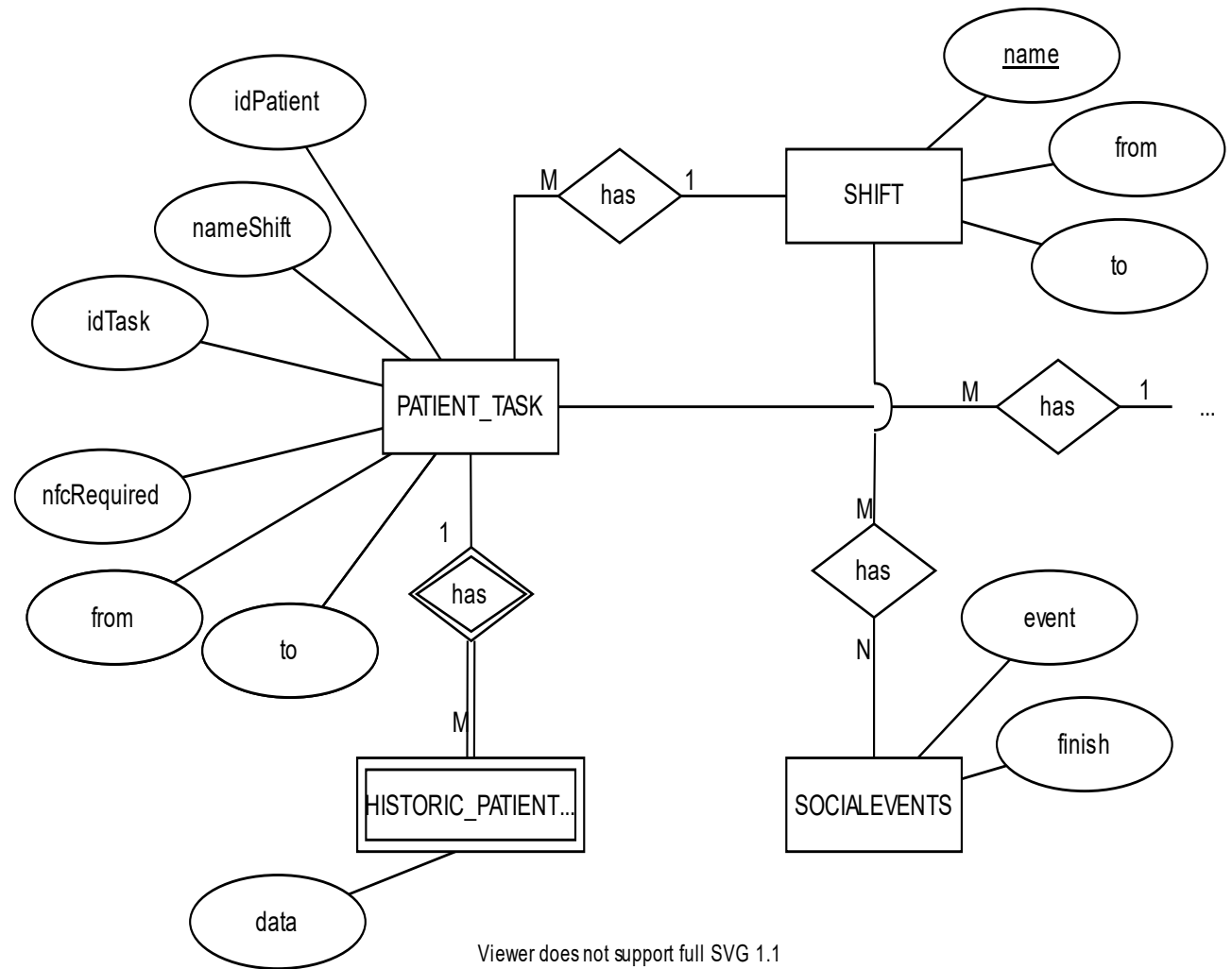
Tipo	Data/Hora	Nome Utente	Nome Funcionário	Tipo Funcionário	Estado novo/ incidencia
Estado	16:23	Helena Bettencourt	Jorge Maleiro	Auxiliar	Tomar lanche
Estado	16:14	João André	Jorge Maleiro	Auxiliar	Tomar lanche
Estado	16:13	Fernando Concórdio	Hugo Cardoso	Auxiliar	Toma lanche
Estado	16:10	Maria Carla	Hugo Espinha	Auxiliar	Tomar medicação
Estado	16:05	Daniel Patricio	Gonçalo Cardoso	Auxiliar	Acordar
Incidência	15:45	Tiago Pereira	Marta Rodrigues	Enfermeiro	dor na perna
Estado	14:05	Matiide Anjos	André Martins	Auxiliar	Sesta
Estado	13:34	Eusébio Lima	André Martins	Auxiliar	Tomar Almoço
Incidência	13:05	Óscar Cardoso	Amália Guerra	Auxiliar	vomitou
Estado	12:37	Geraldina Caetano	Diogo Gonçalves	Auxiliar	Tomar Almoço

Showing 1 to 10 of 11 entries 1 row selected Previous 1 2 Next



# Modelo de Dados

- Definição de entidades, atributos e relações
- Criação modelo entidade associação
- Criação modelo relacional





# Python AI

- Solução **infraestrutura**
- Exportação **modelo treinado**
- Integração **Azure Function App**



```
# Symptoms: vomiting, headache, nausea, diarrhoea, mild-fever
```

```
data = [0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,1.,0.,0.,0.,0.,0.,0.,0.,0.,0.,  
        0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,1.,0.,0.,1.,0.,0.,0.,0.,0.,1.,1.,  
        0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,  
        0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,  
        0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,  
        0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,  
        0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,0.,  
        0.,0.,0.,0.,0.,0.]
```

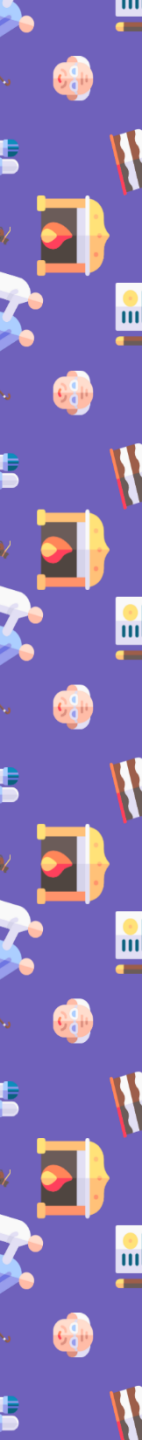
```
t_data = torch.tensor(data)
```

```
input = t_data  
model.predict_single(input, labels)
```

```
# Results:
```

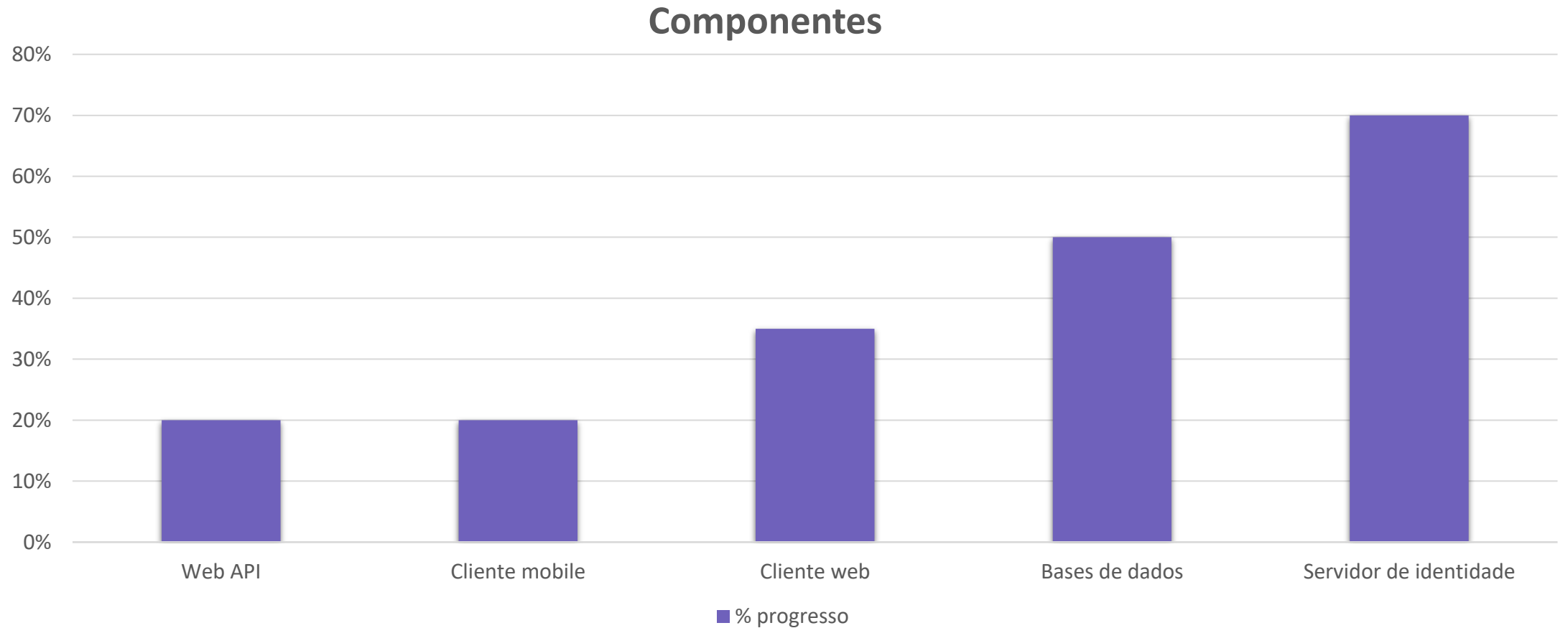
```
[(10, 'Common Cold', 0.8436324000358582),  
 (24, 'Hyperthyroidism', 0.8469444513320923),  
 (26, 'Hypothyroidism', 0.8195878863334656),  
 (36, 'Tuberculosis', 0.8554738163948059)]
```

*Resultados* - O que falta implementar?



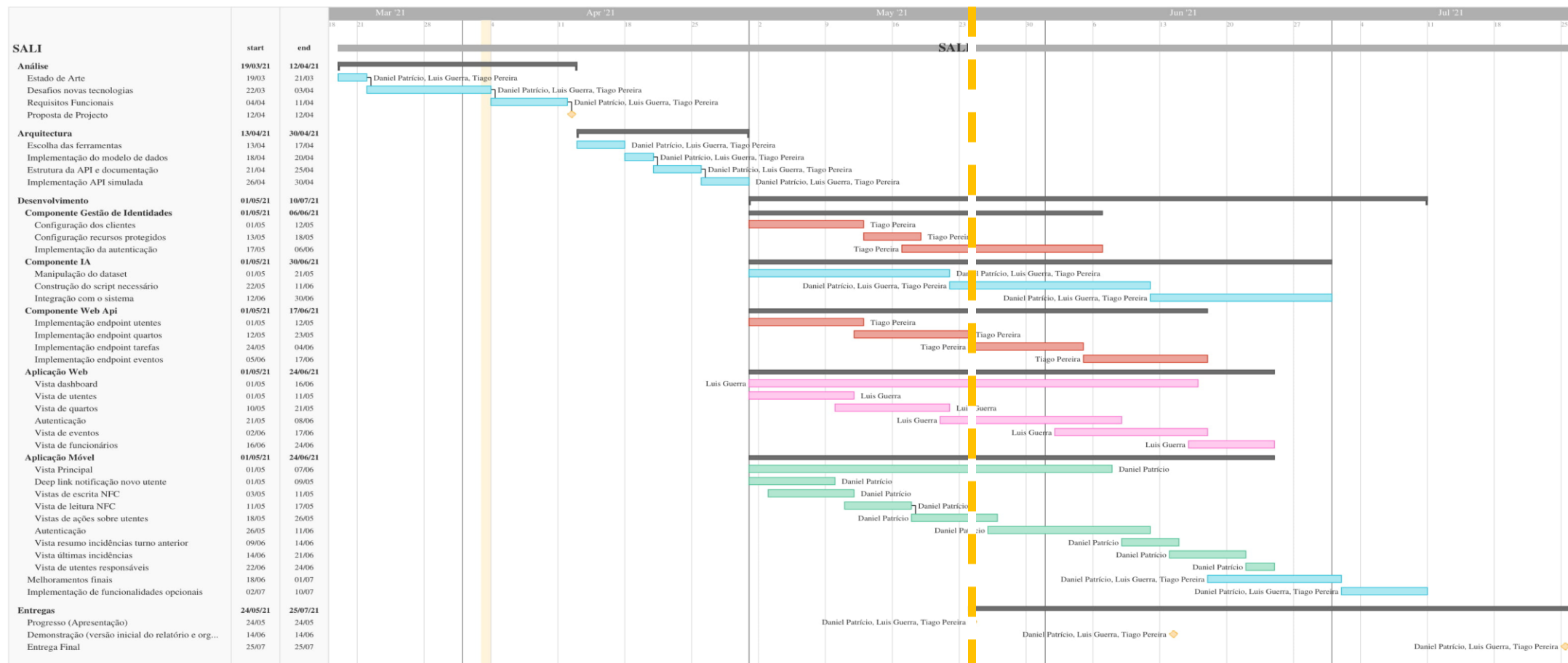


# Análise conclusão componentes

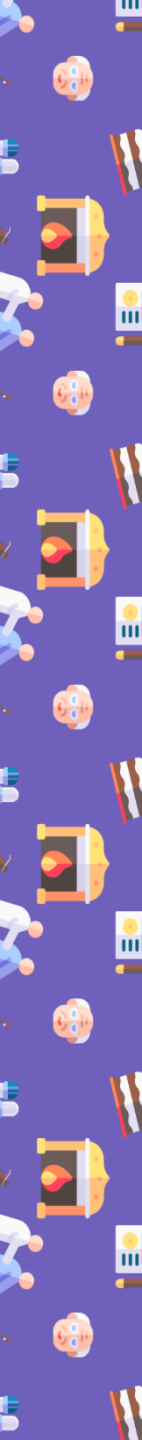




# Diagrama *Gantt*



# *Conclusões*





# Até agora, o que aprendemos?

- Como criar e organizar um **projeto de software de raiz**
- Como trabalhar em **vários componentes do sistema**
- Trabalhar em **equipa** e com **orientadores**
- Novas tecnologias



*Perguntas?*

