



# Smart4Energy

Visualizzazione status di apparati  
industriali tramite applicativo mobile

> carbon7\_  
team





PB

# Il Carbon7team



**Adnan Latif Gazi (3° anno)**

**Leonardo Speranzon (3° anno)**

**Matteo Noro (3° anno)**

**Damiano D'Amico (4° anno)**

**Marco Odinotte (4° anno)**

# Completamento del prodotto

**100%**

PROGETTAZIONE

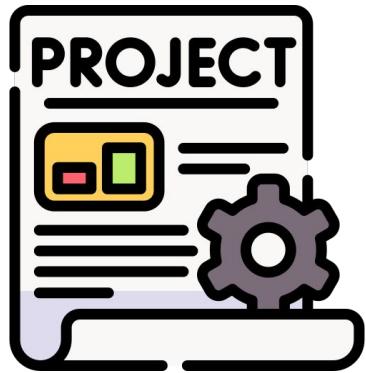
**89%**

CODIFICA

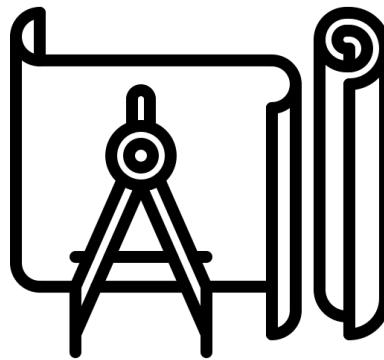
**55%**

VERIFICA

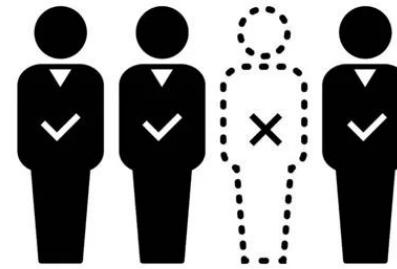
# Auto-valutazione della PB tecnica



MANCANZA DI UN APPROFONDIMENTO TECNICO



MANCANZA DI UNA RESA VISIVA DELL'ARCHITETTURA

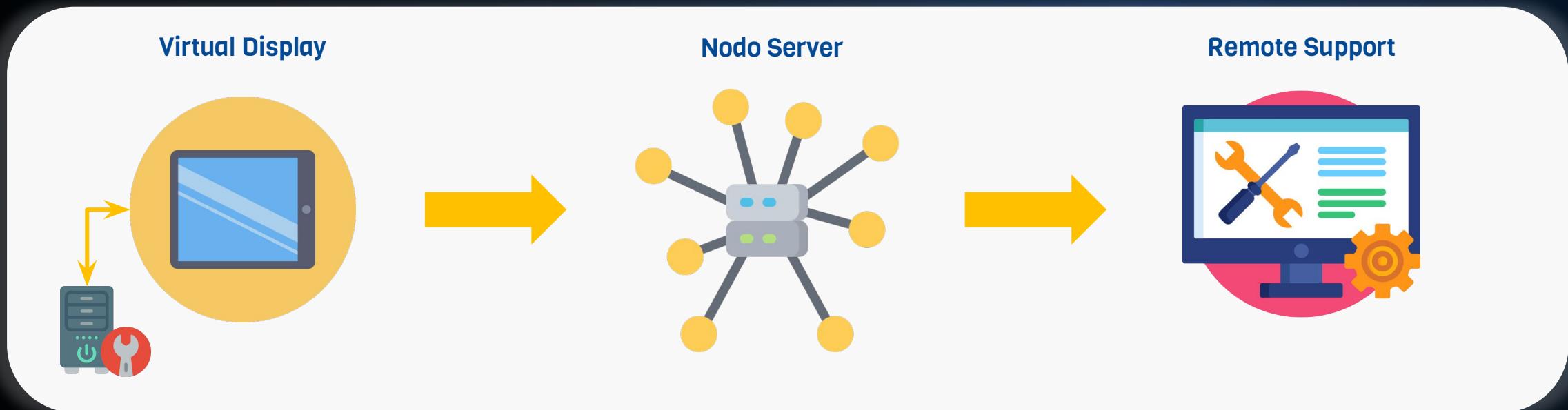


IL GRUPPO NON ERA PRONTO A COPRIRE LA PARTE DI UN MEMBRO NON PRESENTATO



# PRODOTTO

# Funzionamento Generale

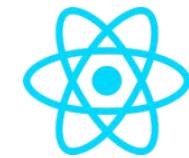


# Front End

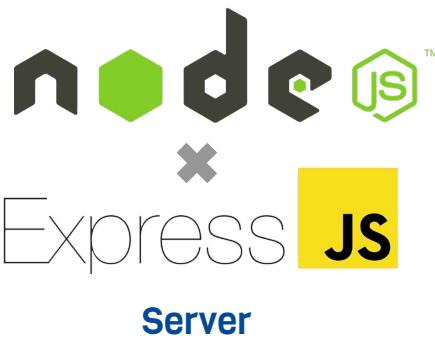
Virtual Display



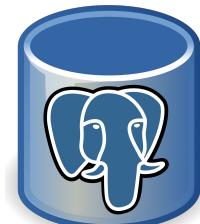
Remote Support



# Back End e Server



Server



Database



**HEROKU**

Piattaforma cloud  
per App



P2P Connection



# Automazione dello sviluppo



# Libreria a supporto

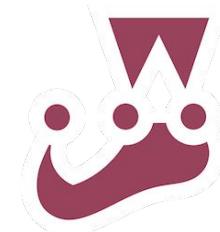


Functional Reactive Programming  
Pattern Observer in React

# Testing

**JUnit**

Testing su Kotlin  
Virtual Display



Testing su React  
Remote Support

# Gestione Sviluppo



Internal communication



Repository

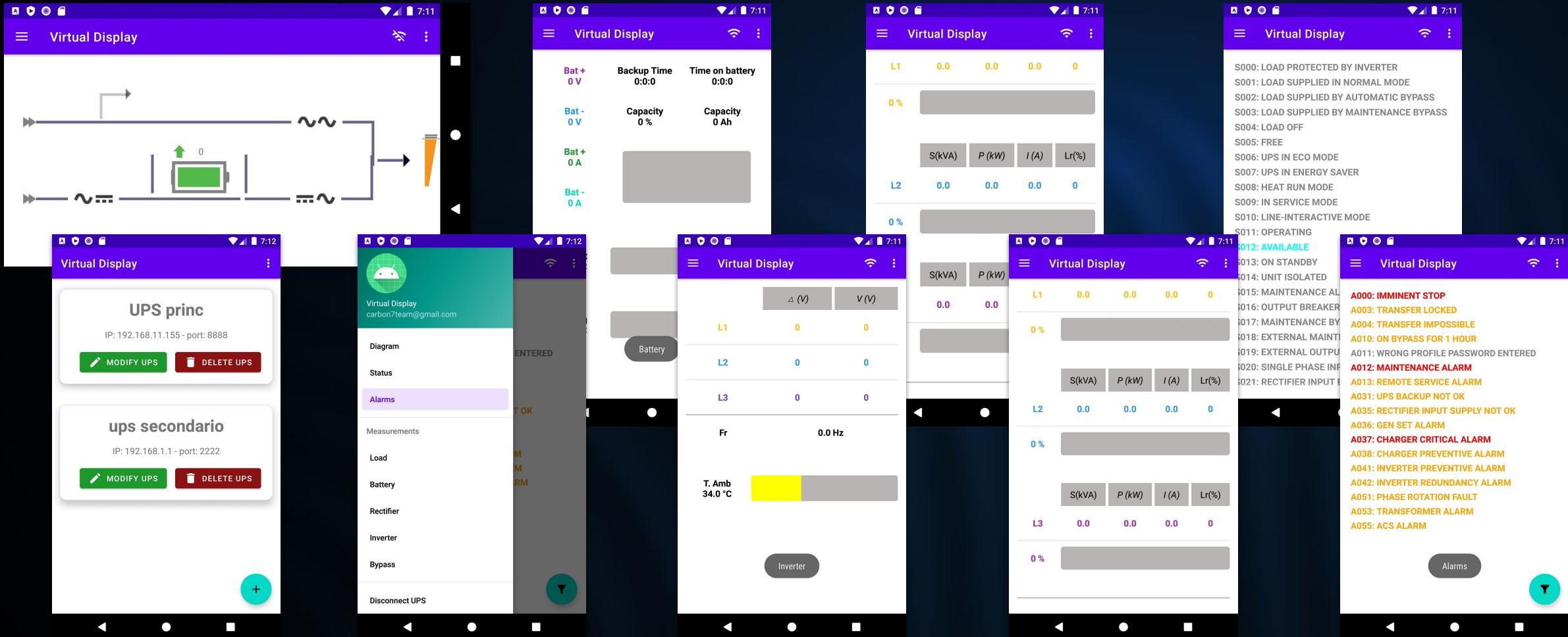


Package Manager

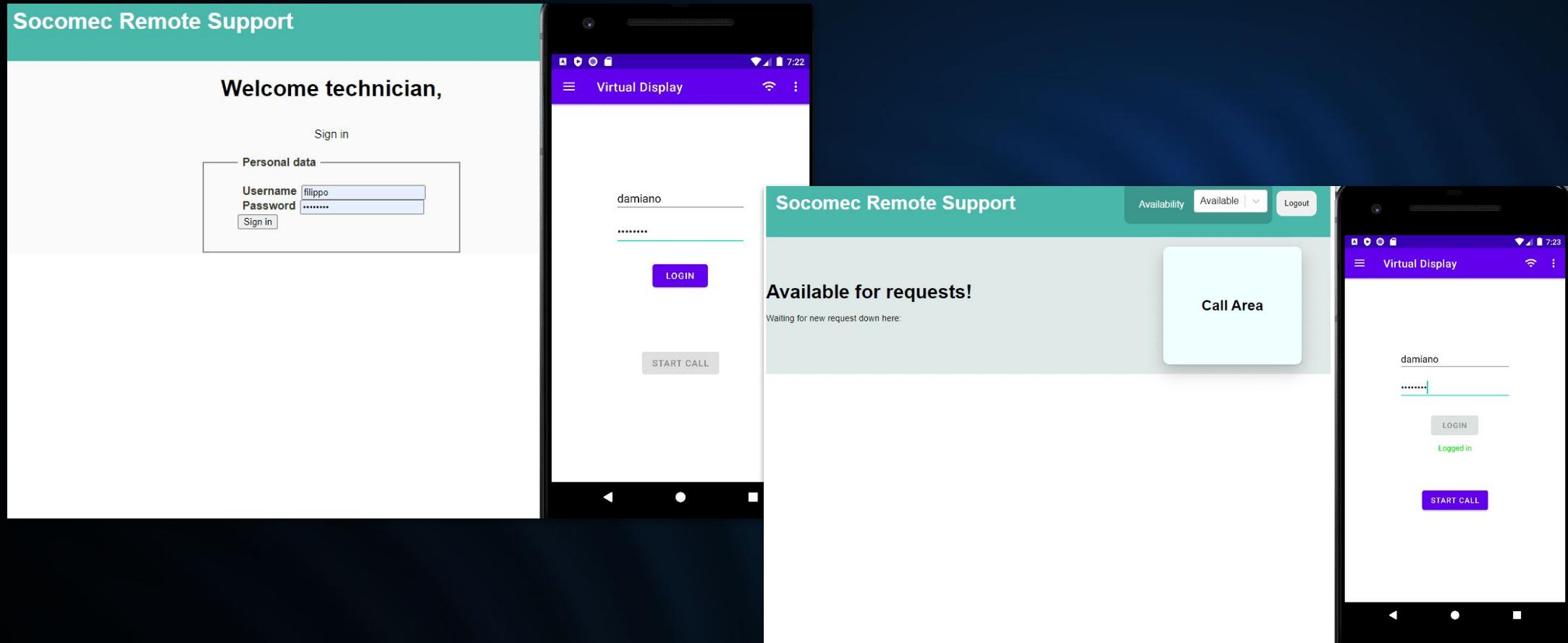


IDE

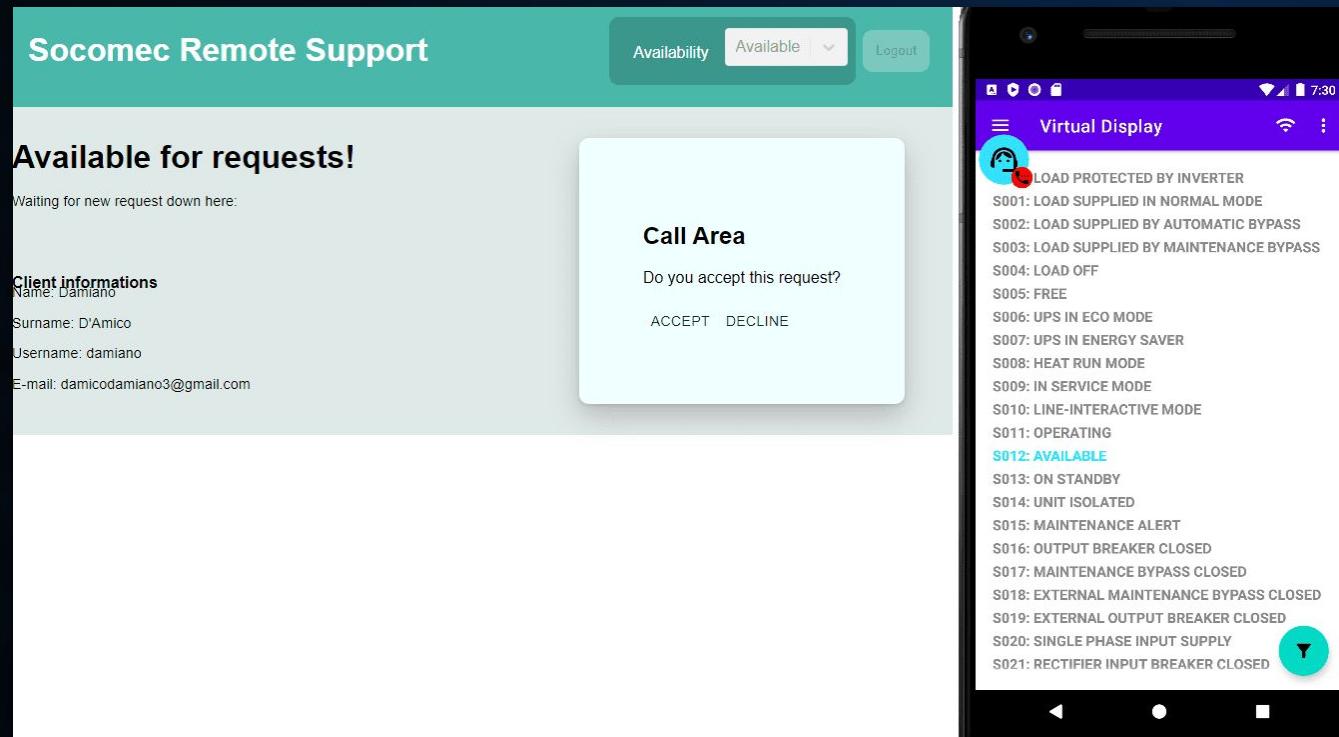
# Virtual Display



# Login



# Assistenza Tecnica



# Assistenza Tecnica (2)

The image displays two views of a Socomec UPS monitoring system. On the left, a smartphone screen shows a 'Virtual Display' interface with a purple header. It lists various status codes and their meanings, such as S000: LOAD PROTECTED BY INVERTER, S004: LOAD OFF, and S012: AVAILABLE. On the right, a larger web-based dashboard titled 'Socomec Remote Support' shows three main sections: 'Alarms', 'Measurements', and 'States'. The 'Alarms' section lists several active alarms, including A010: ON BYPASS FOR 1 HOUR, A031: UPS BACKUP NOT OK, A051: PHASE ROTATION FAULT, A053: TRANSFORMER ALARM, and A055: ACS ALARM. The 'Measurements' section lists various measurements with values, such as M015: 34, M016: 0, M017: 0, etc. The 'States' section lists current system states like S012: AVAILABLE, S030: AUTO-TEST PROCEDURE IN PROGRESS, and S031: ALARM ACKNOWLEDGEMENT REQUESTED. At the top right of the dashboard, there are buttons for 'Availability' (set to 'Available'), 'Logout', and a microphone icon.

S000: LOAD PROTECTED BY INVERTER  
S004: LOAD OFF  
S005: FREE  
S006: UPS IN ECO MODE  
S007: UPS IN ENERGY SAVER  
S008: HEAT RUN MODE  
S009: IN SERVICE MODE  
S010: LINE-INTERACTIVE MODE  
S011: OPERATING  
**S012: AVAILABLE**  
S013: ON STANDBY  
S014: UNIT ISOLATED  
S015: MAINTENANCE ALERT  
S016: OUTPUT BREAKER CLOSED  
S017: MAINTENANCE BYPASS CLOSED  
S018: EXTERNAL MAINTENANCE BYPASS CLOSED  
S019: EXTERNAL OUTPUT BREAKER CLOSED  
S020: SINGLE PHASE INPUT SUPPLY  
S021: RECTIFIER INPUT BREAKER CLOSED  
S022: BYPASS INPUT BREAKER CLOSED  
S023: GEN SET ON  
S024: BUS BAR 1 CLOSED  
S025: BUS BAR 2 CLOSED  
S026: AUTOMATIC START IN PROGRESS

**Socomec Remote Support**

Availability Available Logout

**Alarms**

Apply Filters: Warnings

- A010: ON BYPASS FOR 1 HOUR
- A031: UPS BACKUP NOT OK
- A051: PHASE ROTATION FAULT
- A053: TRANSFORMER ALARM
- A055: ACS ALARM

**Measurements**

Apply Filters: Battery

- M015: 34
- M016: 0
- M017: 0
- M018: 0
- M019: 0
- M020: 0
- M021: 0
- M022: 0
- M023: 0
- M024: 0
- M025: 0
- M026: 0
- M027: 0
- M028: 0
- M029: 0
- M030: 0
- M031: 0

**States**

Apply Filters: Active

- S012: AVAILABLE
- S030: AUTO-TEST PROCEDURE IN PROGRESS
- S031: ALARM ACKNOWLEDGEMENT REQUESTED

**Call Area**

On call

Connection UPS: Not connected

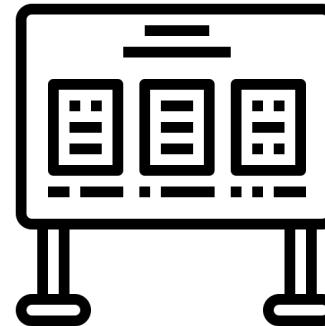
Data received: OK

HANG UP

# Miglioramenti nel way of working



REVISIONE AD OGNI  
MODIFICA DI UN  
DOCUMENTO

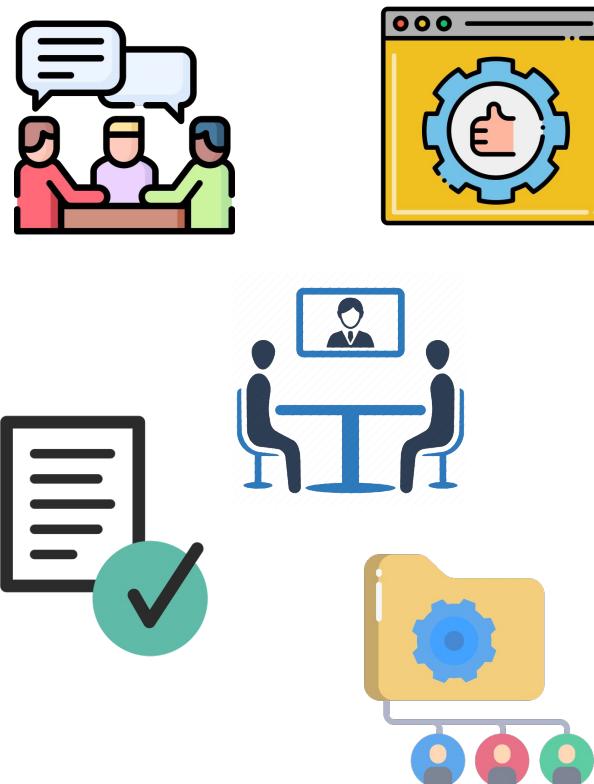


GESTIONA  
ASINCRONA DEL  
LAVORO TRAMITE  
PROJECT-BOARD



MIGLIORE UTILIZZO  
DELLE REPO E DEGLI  
STRUMENTI OFFERTI  
DA GITHUB

# Auto-valutazione



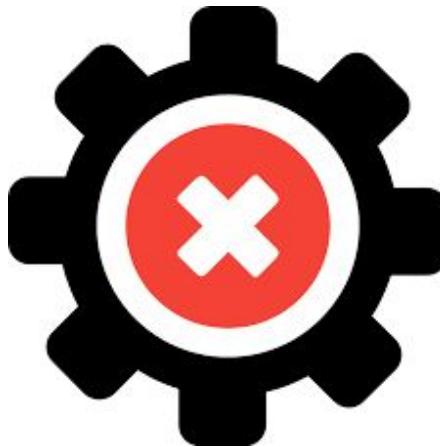
ANDAMENTO  
CALANTE



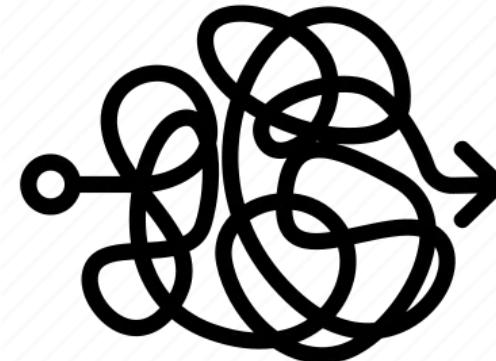
# Difficoltà residue



PESO ECCESSIVO  
DEL LAVORO



MALFUNZIONAMENTO  
ALL'INTERNO DEL  
GRUPPO

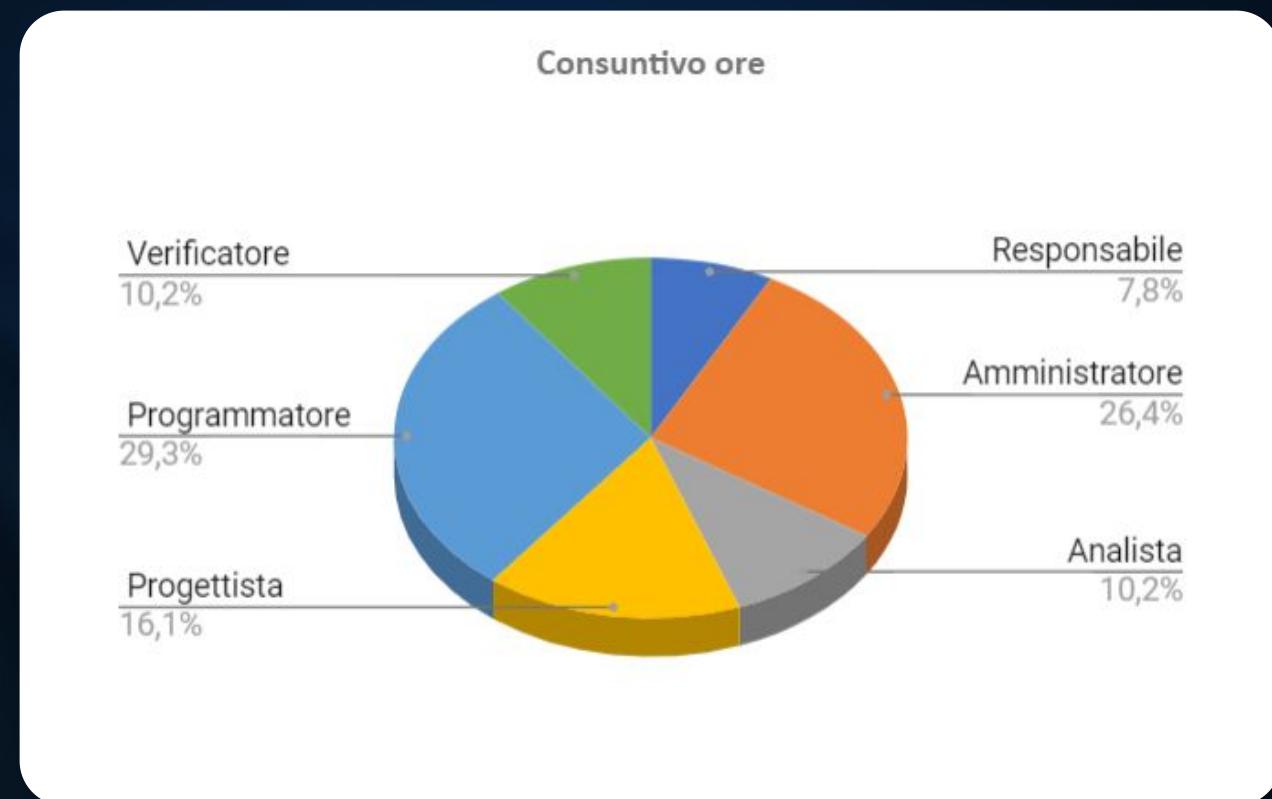
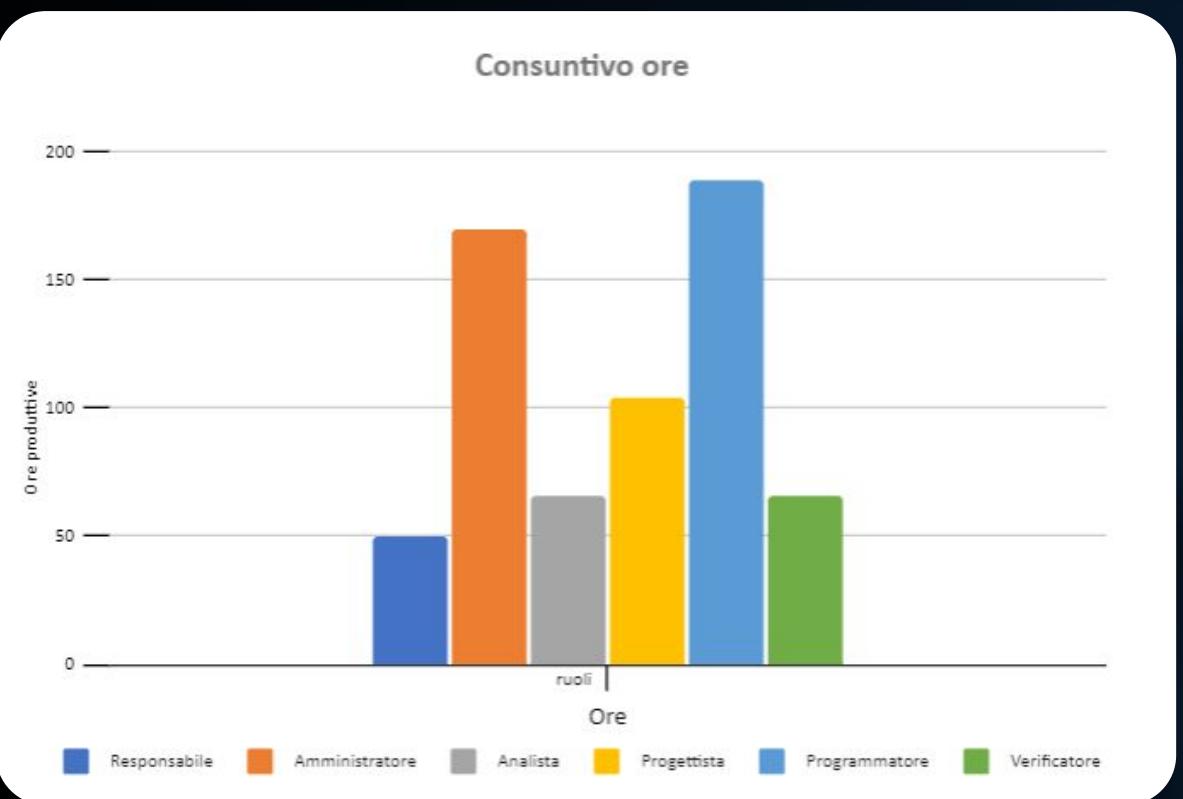


DISORGANIZZAZIONE,  
COMPLESSITÀ E  
PROBLEMI

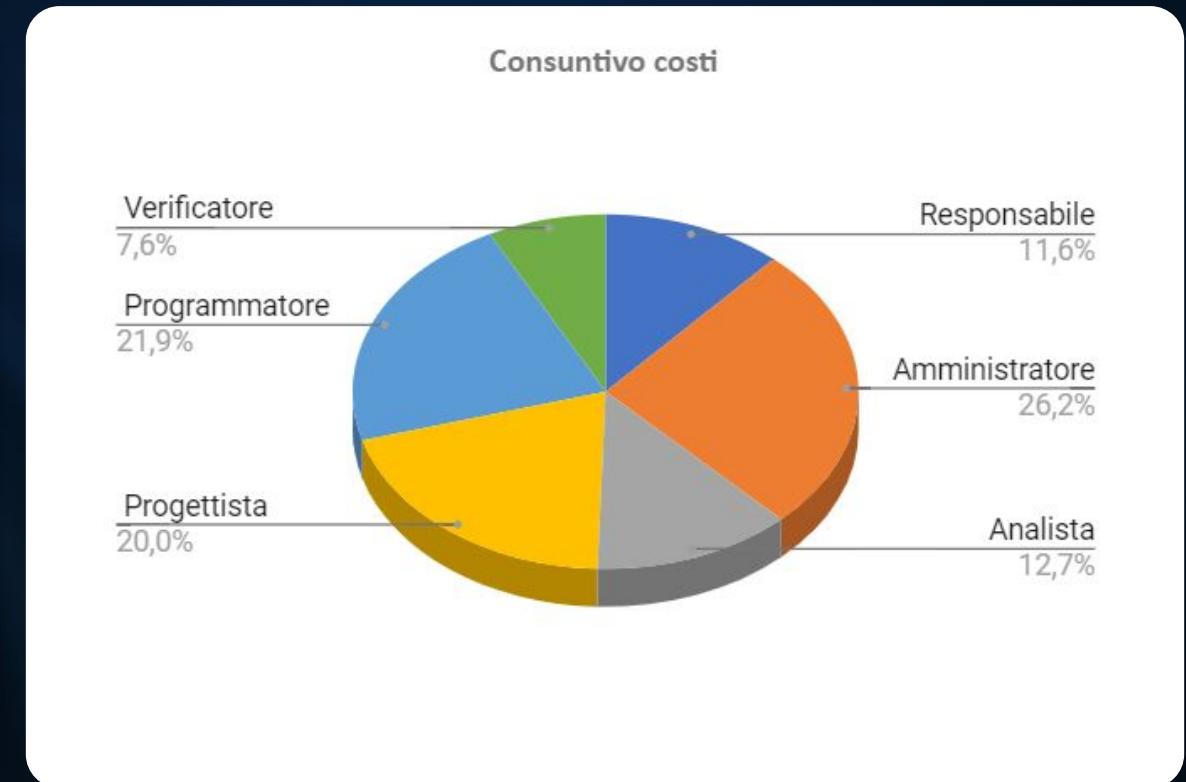
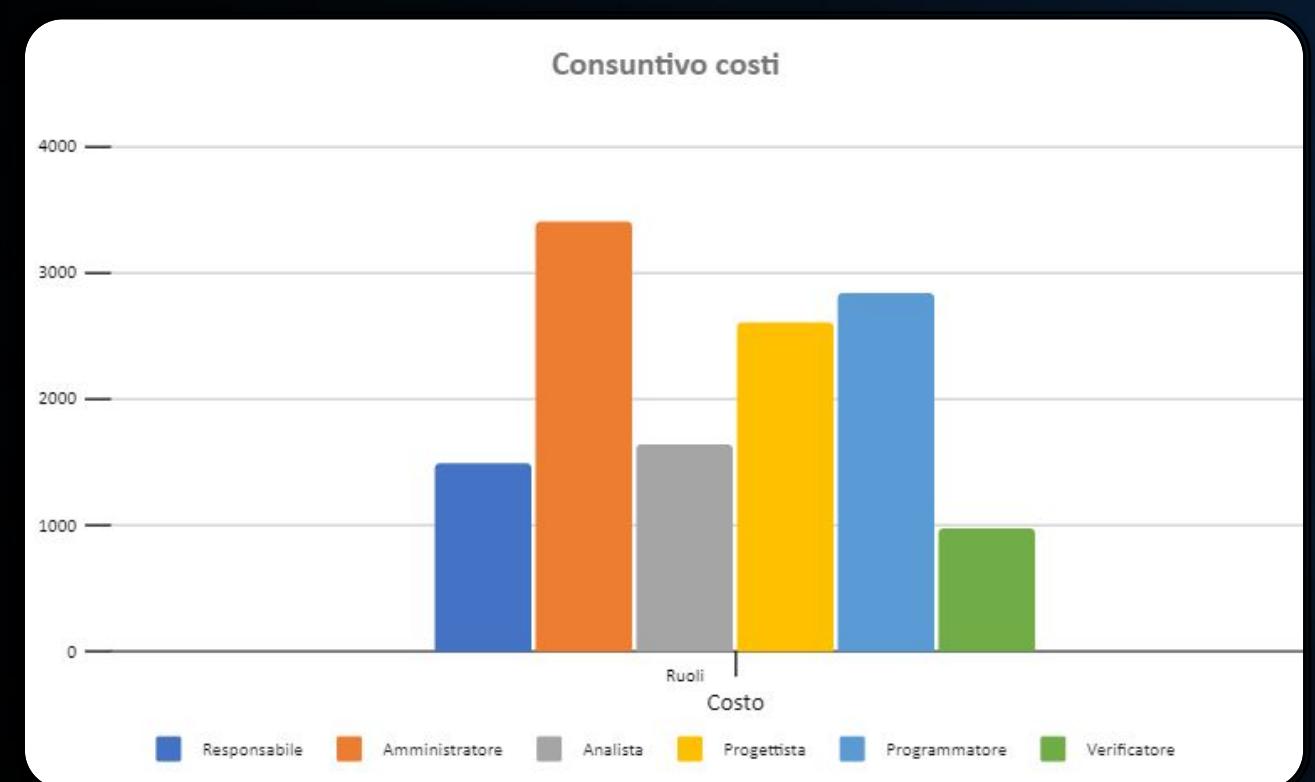
# Consuntivo rendicontato

Ruolo	Ore	Costo
<b>Responsabile</b>	50 (-8)	1500 (-210 €)
<b>Amministratore</b>	160 (+14)	3400 (+200 €)
<b>Analista</b>	66 (+5)	1650 (+125 €)
<b>Progettista</b>	104 (+11)	2600 (+150 €)
<b>Programmatore</b>	189 (+11)	2835.5 (+60 €)
<b>Verificatore</b>	65.5 (+1)	982.5 (+135 €)
<b>Consuntivo totale</b>	644.5 (+34)	12967.5 (+160 €)

# Consuntivo rendicontato ore

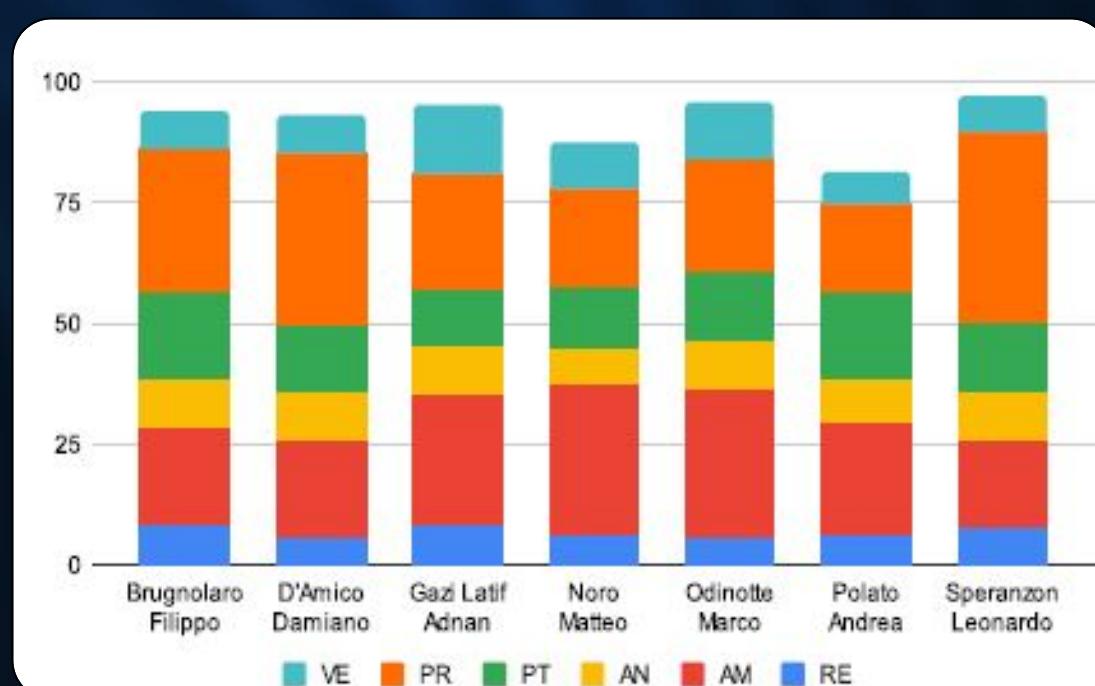


# Consuntivo rendicontato costi



# Dettaglio rendicontato

Nominativo	RE	AM	AN	PT	PR	VE	Tot.
Brugnolaro Filippo	8.5 (+0.5)	20 (+2)	10 (+1)	18 (+4)	29.5 (+3)	8 (+1.5)	94 (+12)
D'Amico Damiano	6 (-2)	20 (-2)	10	14 (+1)	35.5 (+6)	7.5 (-1)	93 (+6)
Gazi Latif Adnan	8.5 (-2.5)	27 (+1)	10 (+3)	12	23.5 (-2)	14.5 (+2.5)	95.5 (+3)
Noro Matteo	6.5 (-1.5)	31.5 (+4.5)	7	13 (+2)	20 (-3)	9.5 (-2.5)	87.5 (+1)
Odinotte Marco	6	30.5 (+2.5)	10	14.5 (+1)	23 (+3)	12 (-2)	96 (+4.5)
Polato Andrea	6.5 (-1.5)	23 (+3)	9	18	18.5	6.5 (+1)	81.5 (+2.5)
Speranzon Leonardo	8 (-2)	18 (-1)	10 (+1)	14.5 (+3)	39 (+4)	7.5	97 (+5)
<b>Totale ore ruolo</b>	<b>50 (-8)</b>	<b>170 (+14)</b>	<b>66 (+5)</b>	<b>104 (+11)</b>	<b>189 (+11)</b>	<b>65.5 (+1)</b>	<b>644.5 (+34)</b>
<b>Totale costi ruolo</b>	<b>1500 (-240€)</b>	<b>3400 (+280€)</b>	<b>1650 (+125€)</b>	<b>2600 (+275€)</b>	<b>28355 (+165€)</b>	<b>982.5 (+15€)</b>	<b>12967.5 (+620€)</b>



# Preventivo a finire

Fase	Preventivo		Consuntivo	
	Ore	Costo	Ore	Costo
RTB	268	5660 €	283	5820 €
PB	342.5	6687.5 €	361.5	7147.5 €
CA	30	926.5 €	-	-
<b>Totale</b>	<b>674.5</b>	<b>13894 €</b>	<b>-</b>	<b>-</b>

# Piano d'azione previsto



# Competenze guadagnate



HARD SKILLS



ESPERIENZA



SOFT SKILLS



# Grazie per l'attenzione

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[www.github.com/Carbon7team](https://www.github.com/Carbon7team)

> **carbon7\_**  
team