



Smart4Energy

Visualizzazione status di apparati
industriali tramite applicativo mobile

> carbon7_
team



Il gruppo Carbon7



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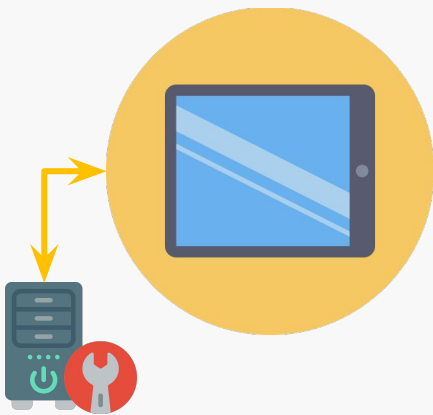
Matteo Noro (3° anno)

Damiano D'Amico (4° anno)

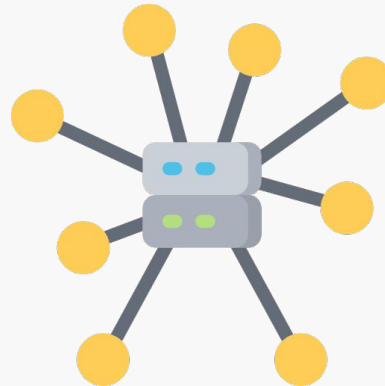
Marco Odinotte (4° anno)

Funzionamento Generale

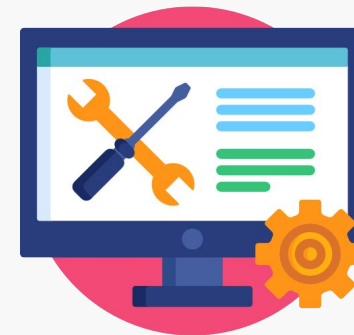
Virtual Display



Nodo Server



Remote Support

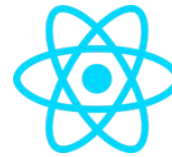


Front End

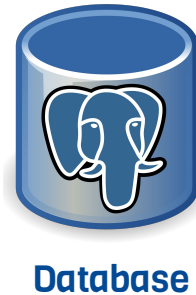
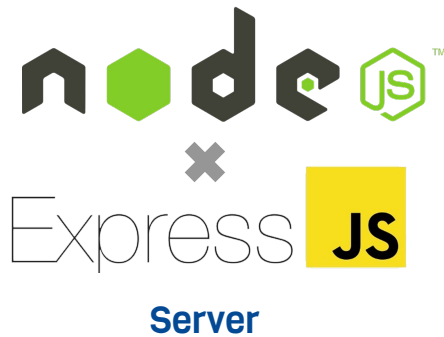
Virtual Display



Remote Support



Back End e Server



Automazione dello sviluppo



Gradle per lo sviluppo del Virtual
Display

Libreria a supporto

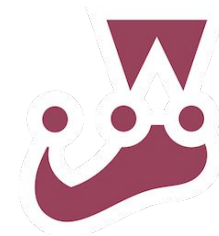


**Functional Reactive Programming
Pattern Observer in React**

Testing



Testing su Kotlin
Virtual Display



Testing su React
Remote Support

Gestione Sviluppo



Internal communication



Repository

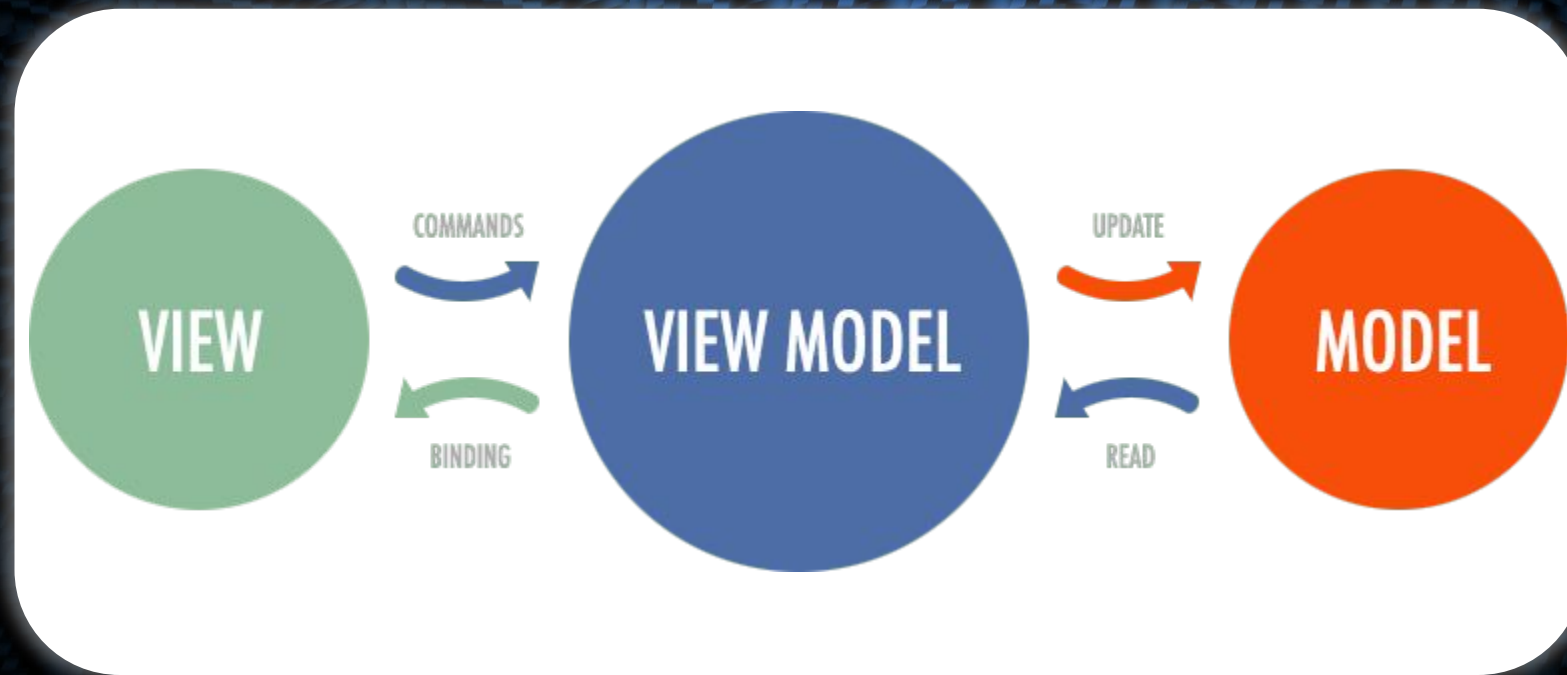


Package Manager

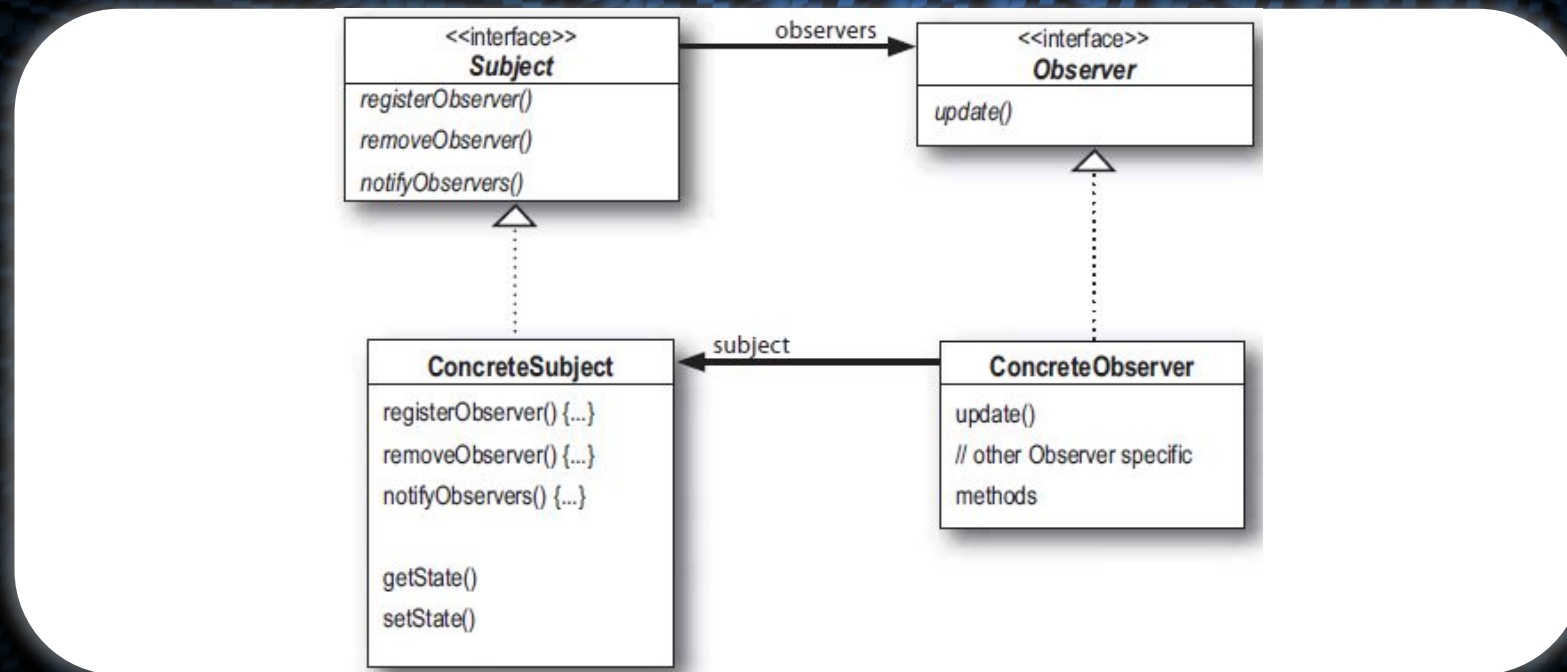


IDE

Design Pattern Virtual Display - MVVM



Design Pattern Remote Support - Observer



Avvio

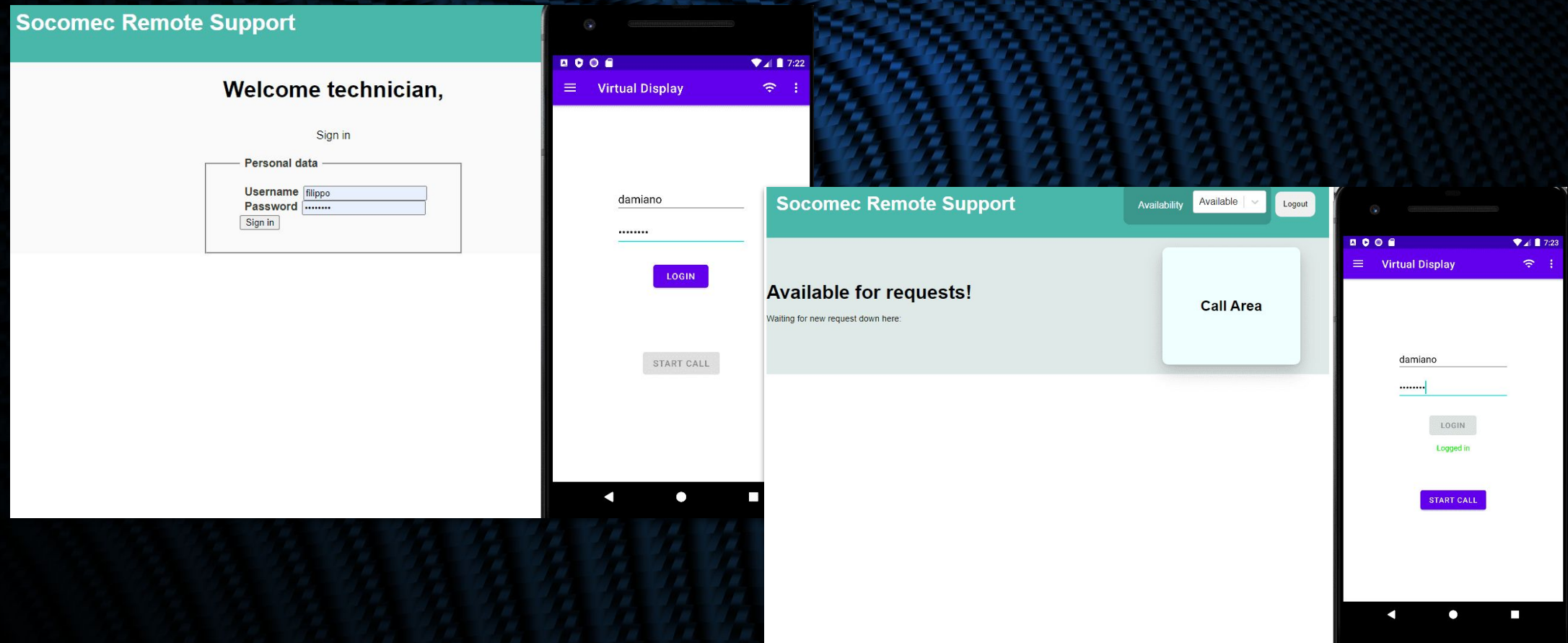
Emulatore ModBus: `./ModbusSlave.exe -d . --dump`

Virtual Display: *Run from Android Studio*

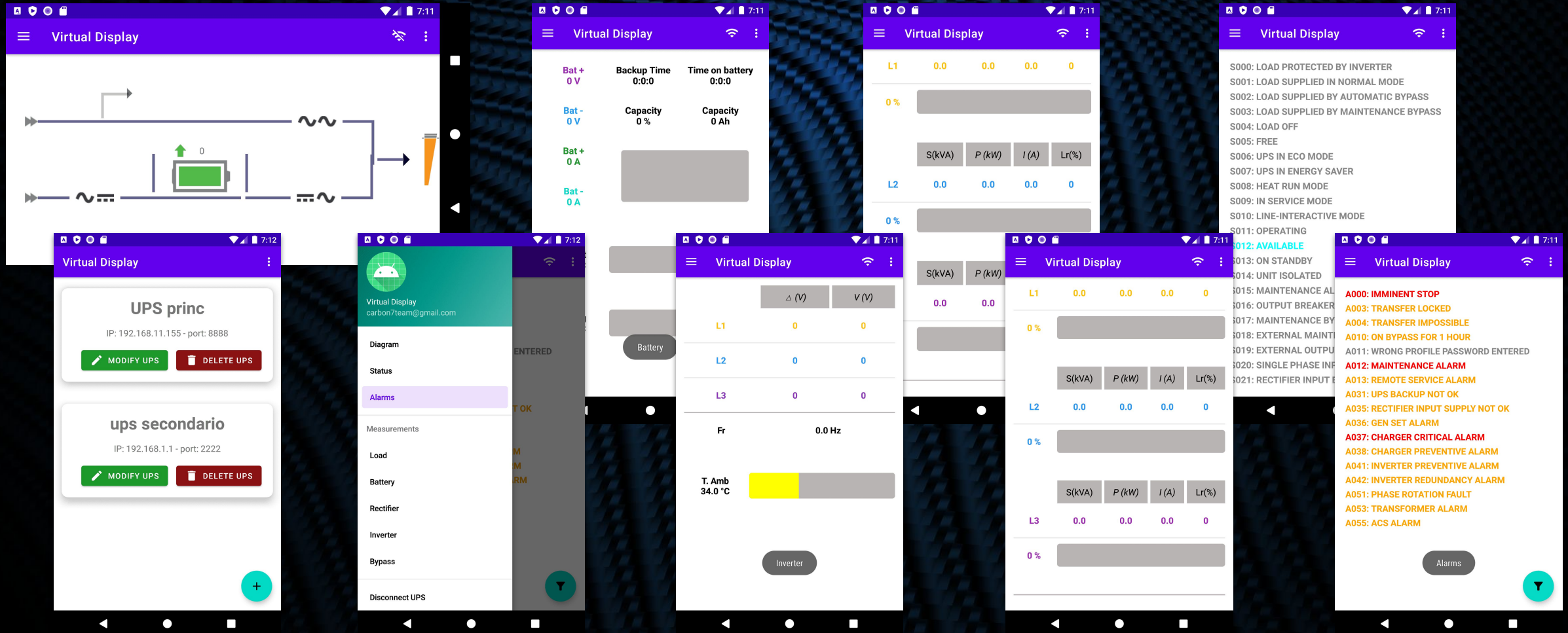
Remote Support: `npm start`

Server: `node .\index.js`

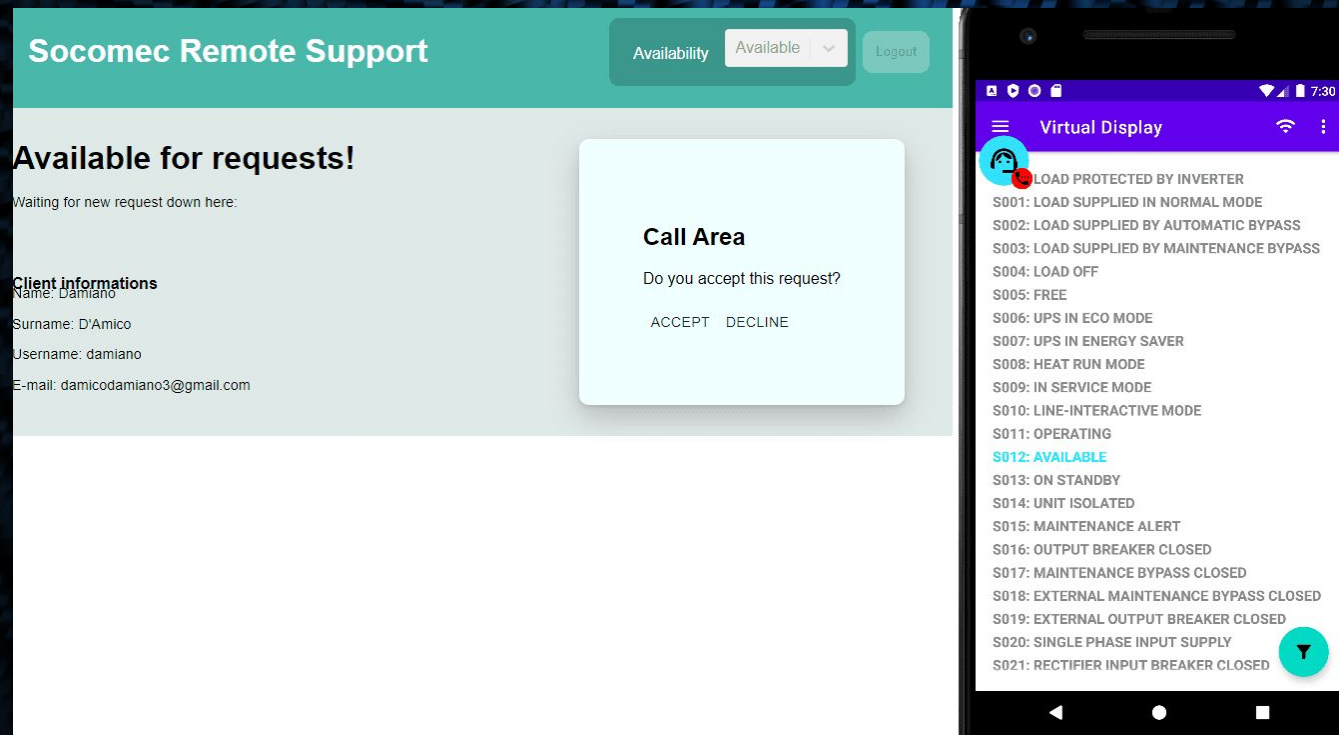
Login



Virtual Display



Assistenza Tecnica



Assistenza Tecnica (2)

The image displays the Socomec Remote Support interface, which includes a mobile application and a web dashboard.

Mobile App (Virtual Display):

- Header: Virtual Display
- Status: S000: LOAD PROTECTED BY INVERTER
- Actions: Unmute, End Call
- Log: 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

Web Dashboard (Socomec Remote Support):

- Header: Availability: Available, Logout
- Alarms:**
 - Apply Filters: Warnings
 - Log: 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
 - Log: 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
 - Log: S012: AVAILABLE, S030: AUTO-TEST PROCEDURE IN PROGRESS, S031: ALARM ACKNOWLEDGEMENT REQUESTED
- Call Area:**
 - Status: On call
 - Connection UPS: Not connected
 - Data received: OK
 - Buttons: Speaker, HANG UP

Grazie per l'attenzione

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```
> carbon7_  
team
```

